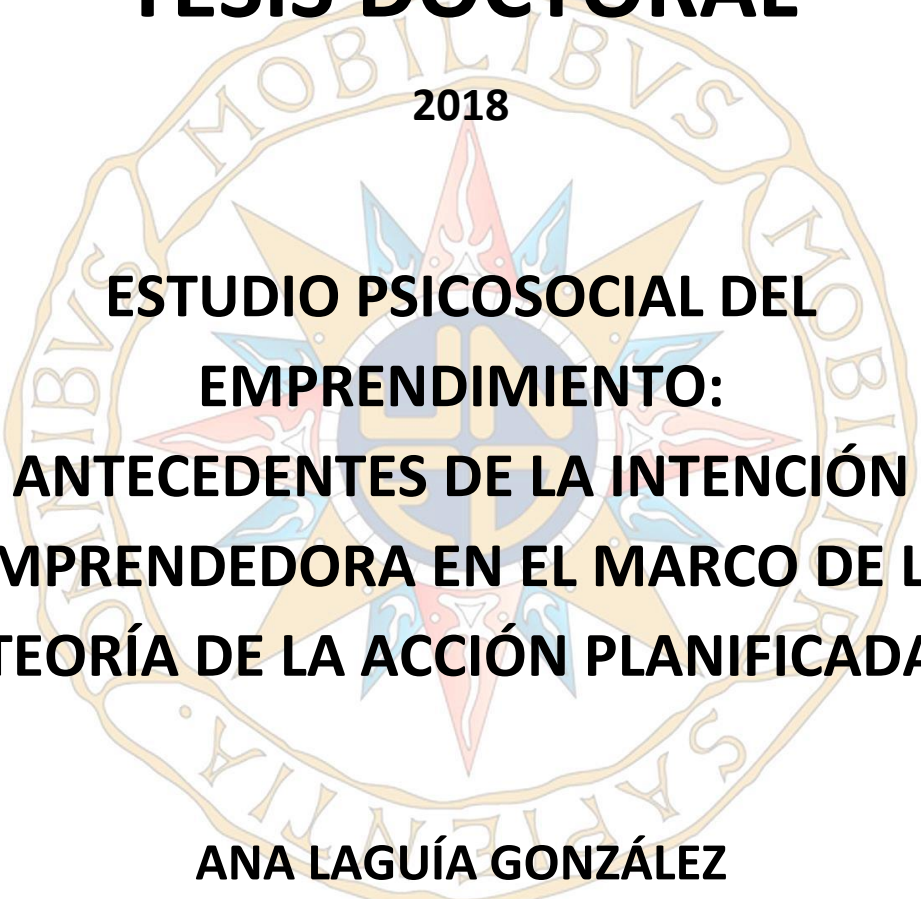


# **TESIS DOCTORAL**

2018



**ESTUDIO PSICOSOCIAL DEL  
EMPENDIMIENTO:  
ANTECEDENTES DE LA INTENCIÓN  
EMPRENDEDORA EN EL MARCO DE LA  
TEORÍA DE LA ACCIÓN PLANIFICADA**

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**PROGRAMA DE DOCTORADO EN  
PSICOLOGÍA DE LA SALUD**

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UNIVERSIDAD NACIONAL DE EDUCACIÓN A DISTANCIA**

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To my favorite (serial) entrepreneur in the world. And to our children.



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## Lista de símbolos, abreviaturas y siglas

## List of symbols, abbreviations, and acronyms

AFC / CFA	Análisis Factorial Confirmatorio	Confirmatory Factor Analysis
AFE / EFA	Análisis Factorial Exploratorio	Exploratory Factor Analysis
ANOVA	Análisis de la Varianza	Analysis of Variance
AVE	Varianza Media Extraída	Average Extracted Variance
CFI	Índice de Ajuste Comparativo	Comparative Fit Index
CTA - PLS	Análisis Confirmatorio de Tétradas	Confirmatory Tetrad Analysis
CIE / EIQ	Cuestionario de Intención Emprendedora	Entrepreneurial Intention Questionnaire
CCP / PBC	Control Conductual Percibido	Perceived Behavioral Control
CPPC	Escala de Potencial Creativo y Creatividad Practicada	Creative Potential and Practiced Creativity scale
GL / DF	Grados de Libertad	Degrees of Freedom
ELM	Modelo de la Probabilidad de Elaboración	Elaboration Likelihood Model
ETR	Escala "Emprendimiento: Tarea y Relación"	Entrepreneurial Task and Relationship scale
IE / EI	Intención Emprendedora	Entrepreneurial Intention
GEM	-	Global Entrepreneurship Monitor
GUESSS	-	Global University Entrepreneurial Spirit Students' Survey
IC / CI	Intervalo de Confianza	Confidence Interval
MEE / MEE	Modelo del Evento Emprendedor	Model of the Entrepreneurial Event
NNFI	Índice de Ajuste no Normalizado	Non-normed Fit Index

NS / SN	Norma Subjetiva	Subjective Norms
ONG / NGO	Organización no Gubernamental	Non-governmental Organization
PLS	Técnica de Mínimos Cuadrados Parciales	Partial Least Squares Technique
RMSEA	Error Cuadrático Medio de Aproximación	Root Mean Square Error of Approximation
SEM	Modelado de Ecuaciones Estructurales	Structural Equation Modeling
TAP / TPB	Teoría de la Acción Planificada	Theory of Planned Behavior
TEA	Tasa de Actividad Emprendedora	Total Early-stage Entrepreneurship Activity
TLI	Índice de Tucker-Lewis	Tucker Lewis Index
VAF	Varianza Explicada	Variance Accounted For
VIF	Factor de Inflación de la Varianza	Variance Inflation Factor

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**Resumen**

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**Abstract**





## Introduction

Entrepreneurship has a recognized impact on economic growth, innovation, and employment (Acs, Audretsch, Braunerhjelm, & Carlsson, 2012; Carree & Thurik, 2010; OECD, 2004). Therefore, different institutions are involved in boosting entrepreneurial intention and career choice (for instance, European Commission, 2013). In fact, the European Union has even proposed entrepreneurship as one of the key competences for lifelong learning (European Commission/EACEA/Eurydice, 2016). Despite these considerations, early-stage entrepreneurial activity in Europe is at the lowest average regional rate compared to North America (Singer, Herrington, & Menipaz, 2018). This is particularly relevant in Spain, where the majority of the business structure is made up of small and medium-sized enterprises (SMEs) and self-employees (Subdirección General de Apoyo a la PYME, 2018), and unemployment (15.2%) and youth unemployment rates (33.6%) are among the highest in Europe (Eurostat, 2018).

However, becoming an entrepreneur is not a one-time event, but rather a process composed of different stages (for a review, see Moriano, 2005): before the launch of the new business (pre-launch phase), the launch period of the new business (launch phase), and the subsequent development of the business (post-launch phase). Within this process, this doctoral Thesis focuses on the study of entrepreneurial intention as an antecedent to entrepreneurial behavior.

In the research on entrepreneurial behavior, entrepreneurial intention (pre-launch phase) is the most studied antecedent of business creation (e.g., Krueger, 2009; Liñán & Fayolle, 2015). Intentions are the best predictor of any type of planned behavior, “particularly when that behavior is rare, hard to observe, or involves unpredictable time lags” (Krueger, Reilly, & Carsrud, 2000, p. 411). Thus, creating a business entails a series of requirements that make it possible to consider it as a type of planned behavior where the intentions models are

appropriate (Lortie & Castogiovanni, 2015). The theory of planned behavior (TPB; Ajzen, 1991), widely used to predict different types of behavioral intentions in a broad range of areas (see meta-analyses and systematic reviews by Armitage & Conner, 2001; Fleming, Watson, Patouris, Bartholomew, & Zizzo, 2017; McDermott et al., 2015; McEachan, Conner, Taylor, & Lawton, 2011), constitutes the most used model in the study of entrepreneurial intention (Liñán & Fayolle, 2015; Lortie & Castogiovanni, 2015). This theory posits that behavioral intention depends on the influence of three components: (a) attitudes toward the behavior, (b) subjective norms, and (c) perceived behavioral control, what has been termed the sufficiency hypothesis, whereas other background factors, such as personality and broad life values, demographic variables (education, age, gender, income, etc.), and exposure to media and other sources of information may indirectly influence entrepreneurial intention through one or more of these components (Ajzen, 2011).

Entrepreneurial intention has been analyzed within the theoretical framework of the TPB in very different countries, for example: Spain (Engle et al., 2010; Liñán & Chen, 2009; Liñán, Nabi, & Krueger, 2013; Moriano, 2005; Moriano, Gorgievski, Laguna, Stephan, & Zarafshani, 2012); the United States (Autio, Keeley, Klofsten, Parker, & Hay, 2001; Engle et al., 2010); Finland (Autio et al., 2001; Engle et al., 2010); Germany (Engle et al., 2010; Moriano et al., 2012); Sweden (Autio et al., 2001; Engle et al., 2010); Poland, the Netherlands, India, and Irán (Moriano et al., 2012); China, Costa Rica, Egypt, France, Bangladesh, Ghana, and Russia (Engle et al., 2010); Portugal (Oliveira, Vieira, Laguía, Moriano, & Soares, 2016), or Colombia (Laguía, Moriano, Molero, & Gámez, 2017). For a systematic review of research on entrepreneurial intention, see Liñán and Fayolle (2015). Extant literature in this area highlights the importance of the TPB in the study of entrepreneurial intention, considering not only economic factors, but also psychological and social factors (Krueger et al., 2000).

Although research on entrepreneurial intention has multiplied worldwide since the first studies in the 1980s and the application of the TPB to this field in the 1990s, there is currently a call for scholars to rethink the future of research on entrepreneurial intention (Fayolle & Liñán,

2014). A good summary of these concerns is this title of a book chapter by Krueger (2009): “Entrepreneurial intentions are dead: Long live entrepreneurial intentions.” While Liñán and Fayolle (2015) offer a systematic review of the literature on entrepreneurial intention, finding a lack of systemization and categorization of research, both Omorede, Thorgren, and Wincent (2015) and Gorgievski and Stephan (2016) have recently published reviews of entrepreneurship psychology in particular, highlighting the relevance of this topic. According to Liñán and Fayolle (2015), “...an increase in the overall number of papers in the field, which has especially accelerated in the last few years. This means that, far from being an outdated area of research, its interest is rapidly increasing” (p. 913). Liñán and Fayolle (2015) identified six categories in the literature: (a) the core entrepreneurial intention model as well as theoretical and methodological issues; (b) the influence of personal-level variables; (c) the interrelationship between entrepreneurship education and the entrepreneurial intention of participants; (d) the role of context and institutions in the configuration of entrepreneurial intention; (e) the entrepreneurial process and the intention – behavior link; and (f) new research areas. Additionally, Fayolle and Liñán (2014) suggested measures to fill the gaps within each of these categories. In this regard, this Thesis aims to respond to this call by analyzing, within the theoretical framework of the TPB, the influence of a series of interrelated psychosocial antecedents on entrepreneurial intention in Spain: university environment, entrepreneurial environment (entrepreneurial role models in the extended family and friends), perceived risk of becoming an entrepreneur, self-perceived creativity, the media, and gender stereotypes. The selection of these factors has been guided by the need to explore them in the context of Spain. The objective behind the in-depth analysis of these aspects that influence entrepreneurial intention of different groups is to identify which factors are most relevant to launching future specific initiatives that have a more focused impact on those aspects that favor the development of entrepreneurial intention.

It is necessary to mention that there is a gender gap both for businesses in the initial stages (nascent businesses or businesses that have not been in operation for more than 42 months)

and especially in established businesses (those that have survived in the market for more than 42 months; Singer et al., 2018), as well as regarding entrepreneurial intention (Haus, Steinmetz, Isidor, & Kabst, 2013; Maes, Leroy, & Sels, 2014; Moriano, 2005; Zampetakis, Bakatsaki, Litos, Kafetsios, & Moustakis, 2017; Zhang, Duysters, & Cloodt, 2014). Thus, the number of female entrepreneurs is lower than the number of male entrepreneurs in most countries, and women indicate a lower intention to pursue a career as an entrepreneur compared to men. This contrasts with the proposal of entrepreneurship as a possible career option for women in the face of the problems women encounter in the traditional labor market (Heilman & Chen, 2003). Nonetheless, professions are gendered, and so is entrepreneurship (Ahl, 2006). The descriptions of entrepreneur's activities have traditionally been masculine (Bird & Brush, 2002), and entrepreneurs are perceived to have predominantly masculine characteristics (Gupta, Turban, Wasti, & Sikdar, 2009), which could influence the lower interest women seem to indicate toward entrepreneurship in various studies.

The psychosocial antecedents considered in this Thesis have been explored in recent studies (e.g., Hancock, Pérez-Quintana, & Hormiga, 2014; Swail, Down, & Kautonen, 2014; Zampetakis, Gotsi, Andriopoulos, & Moustakis, 2011), although not in an integrated way or in general with respect to the Spanish context. Therefore, this Thesis seeks, first, to contribute to the current international research in the area of entrepreneurship psychology, expanding the model proposed by the TPB and empirically testing an extended model and, second, to specifically address in Spain the study of various relevant variables in entrepreneurship in order to improve entrepreneurship education. The inclusion of the aforementioned variables as distal antecedents in the model posited by the TPB also allows testing of the sufficiency hypothesis that is established by this theory; that is, that the influence of the distal antecedents is mediated by the three components of the TPB (i.e., attitudes, subjective norms, and perceived behavioral control). In so doing, a quantitative approach is proposed through the realization of five studies with independent samples and using questionnaires to collect data.

Regarding the sample, a distinction is made between university students (Studies 1 and 2) and the general population (Studies 3, 4, and 5).

Practical as well as theoretical implications are derived from the present Thesis, since a better knowledge and understanding of the aspects that lead to different groups to decide to pursue a career as entrepreneurs may contribute to a more adequate design of the entrepreneurship education programs being promoted in many universities and by other types of institutions. As Krueger et al. (2000) suggested, promoting entrepreneurial intention is not only desirable but also feasible. Therefore, the current question in research in this area is not whether one can teach entrepreneurship, given that research has provided much evidence that confirms this, but what should be taught and how (Kuratko, 2005). Some studies indicate that the personal characteristics and abilities of entrepreneurs can be influenced by such programs and that they favor entrepreneurship as a career option as well as more positive attitudes toward entrepreneurship (Liñán & Chen, 2009; Packham, Jones, Miller, Pickernell, & Thomas, 2010; Peterman & Kennedy, 2003).

This Thesis is organized into seven chapters. First, Chapter I gives an introduction and includes objectives, brief description of the studies accomplished, and the general structure of the Thesis. In Chapter 2, devoted to the theoretical and methodological framework, entrepreneurial intention is presented as the main antecedent of entrepreneurial behavior and the TPB is described as the theoretical framework in this Thesis. Next, five empirical studies are developed: Chapter 3 – University environment and entrepreneurial intention: The mediating role of the components of the TPB (Study 1); Chapter 4 – A psychosocial study of self-perceived creativity and entrepreneurial intention in a sample of university students (Study 2); Chapter 5 – Perceived representation of entrepreneurship in the mass media and entrepreneurial intention (Study 3); and Chapter 6 – “Think entrepreneur – Think male”: The influence of gender stereotypes on entrepreneurial intention (Study 4 – Influence of activation of a successful female entrepreneur role model on entrepreneurial intention, and Study 5 -

Self-perceived task and relationship orientation and entrepreneurial intention). These chapters contain the specific objectives, hypotheses, methods (participants, measures, procedures, and data analyses), results, and discussion for each study. The last chapter (Chapter 7) presents the conclusions and proposals to extend the work of this Thesis. After references, appendices provide additional data and materials.

### **Theoretical and methodological framework**

First, Chapter 2 presents the concept of entrepreneurship as used in this Thesis and some data about entrepreneurship in Spain. In general, interest in entrepreneurship is lower in Spain than in other countries. But what is more worrisome is that this interest has decreased in recent years. There also exists a gender gap in entrepreneurial behavior and entrepreneurial intention. Particular attention is then given to exploring entrepreneurial intention in university students, who comprise the participant groups in Studies 1 and 2. Participants educational level, on the one hand, can favor the acquisition of skills and competences (for example, related to management) that increase the probability of becoming an entrepreneur (van der Sluis, van Praag, & Vijverberg, 2008). However, it also can decrease this likelihood because a higher education enables more opportunities in the traditional labor market working as an employee.

Second, the study of entrepreneurial intention is put into context. The most studied antecedent of entrepreneurial behavior, understood as the creation of a new business, is entrepreneurial intention (for a review, see Liñán & Fayolle, 2015). Entrepreneurial intention refers to the decision that leads a person to create a new business (Krueger, 2009). Since the first studies in the 1980s, publications on entrepreneurial intention have multiplied. The construct of intentional behavior helps explain and model why a large proportion of entrepreneurs decide to start a business long before they explore opportunities to do so (Krueger et al., 2000). According to Krueger et al., the study of intention is useful, on the one hand, for understanding what aspects trigger the search for opportunities and the various sources of ideas for business

and, as well, how they end up becoming real businesses. On the other hand, the study of intention has practical implications for the educational environment. It also can inform to potential entrepreneurs and public policymakers. Next, the main models that have been proposed to explain entrepreneurial intention are described: the model of entrepreneurial intentionality (Bird, 1988) and its extension by Boyd and Vozikis (1994), the model of the entrepreneurial event (MEE; Shapero, 1975; Shapero & Sokol, 1982), and the theory of planned behavior (TPB; Ajzen, 1991). In the study of entrepreneurial intention, two lines of research have mainly been followed. The first has emerged in the field of entrepreneurship (and corresponds to the first two models), and the second comes from Social Psychology and the study of behavior in general, in its application to entrepreneurship, where the TPB is placed. This second line constitutes the framework in which the studies of this Thesis are framed.

The TPB emerges in the area of Social Psychology as an extension of the theory of reasoned action (Ajzen & Fishbein, 1980) and proposes that people act according to their intention and perception of control over their behavior. As posited in this theory, only three antecedents directly influence the intention to perform a behavior: (a) attitudes toward the behavior, (b) subjective norms, and (c) perceived behavioral control, while other variables are expected to influence intention and behavior indirectly through these three most proximal determinants of intention (Ajzen, 2011). The theory of reasoned action only considers the first two components, attitudes and subjective norms. Thus, the TPB constitutes a more complete model by incorporating perceived behavioral control. Moreover, it is important to emphasize that behavioral control influences behavior both directly as well as mediated through behavioral intention. Specifically in the area of entrepreneurship, the attitude toward entrepreneurship refers to the degree to which a person assesses entrepreneurial behavior in a favorable or unfavorable manner. Subjective norms include the most social part of the model and reflect the perceived social pressure to create or not create a new business. Finally, perceived behavioral control refers to the ease or difficulty a person may feel they have in becoming an entrepreneur and brings together aspects related to controllability and self-efficacy.

In the 1990s, Kolvereid started the empirical study of entrepreneurial intention by applying the TPB in a questionnaire aimed at a sample of university students (Kolvereid, 1996). Numerous studies have followed this approach in different countries, such as Norway (Kolvereid & Moen, 1997), Russia (Tkachev & Kolvereid, 1999), Spain (Liñán & Chen, 2009; Moriano, 2005), France (Fayolle, Gailly, & Lassas-Clerc, 2006a), Ukraine (Solesvik, Westhead, Kolvereid, & Matlay, 2012), Belgium (Maes et al., 2014), Germany (Obschonka, Silbereisen, Cantner, & Goethner, 2015), Portugal (Oliveira, Moriano, Laguía, & Soares, 2015), or Greece (Zampetakis et al., 2017), with samples of students, but also with the general population or specific groups, for instance, in the scientific area (Obschonka et al., 2015; Rodríguez Batalla, 2015), as well as cross-cultural studies (Autio et al., 2001; Engle et al., 2010; Iakovleva, Kolvereid, & Stephan, 2011; Liñán & Chen, 2009; Liñán et al., 2013; Moriano et al., 2012; Souitaris, Zerbinati, & Al-Laham, 2007).

The large number of studies on entrepreneurial intention confirms the applicability of intention models in entrepreneurship. The systematic review carried out by Liñán and Fayolle (2015) shows that the TPB is the most used model in this field, followed by the entrepreneurial event model. The TPB is also the model that has received stronger empirical support to predict entrepreneurial intention (Liñán & Fayolle, 2015; Lortie & Castogiovanni, 2015) and, as well, behaviors related to the creation of new businesses (Kautonen, van Gelderen, & Matthias, 2015; Kautonen, van Gelderen, & Tornikoski, 2013). Additionally, the TPB has been applied to the study of growth expectations in new businesses (Kolvereid & Isaksen, 2017). Thus, in this Thesis the TPB has been selected as the theoretical framework to accomplish the various research studies.

Finally, Chapter 2 presents the methodological framework of this Thesis. The characteristics of the participant groups are summarized along with general information about materials, procedure, and data analyses as are common for several of the studies. In particular, this final section includes a review of different measures developed to assess entrepreneurial intention and the antecedents according to the TPB (attitudes, subjective norms, and self-efficacy), as

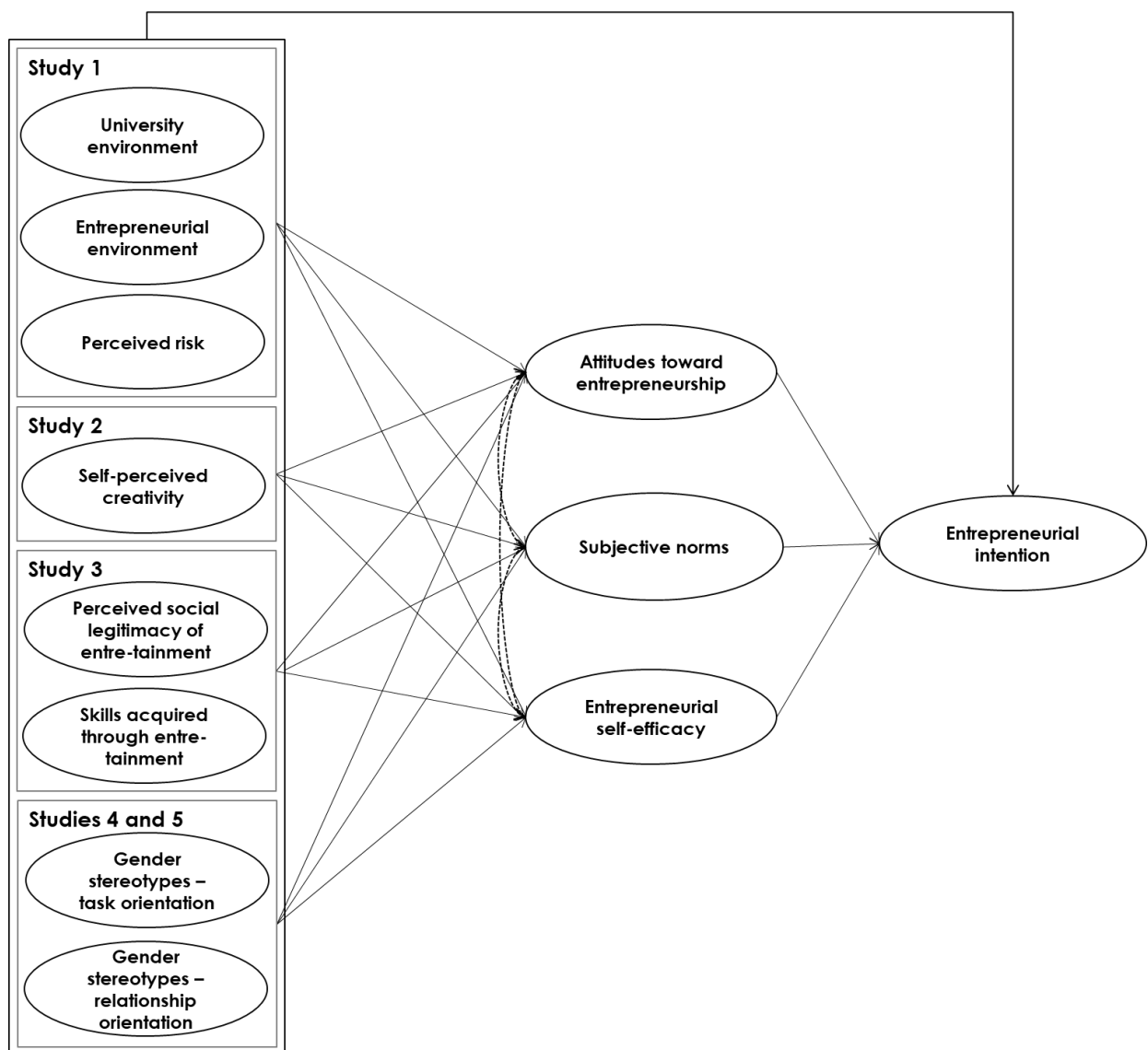


well as the scales selected and used in the studies of this Thesis. In Study 1, the questionnaire of the international research project GUESSS (Global University Entrepreneurial Spirit Students' Survey) is used. This instrument is based on the work of Liñán and Chen (2009) and has been widely used in several countries. However, it does not measure behavioral, normative, or control beliefs. Moreover, it exhibits a high correlation between attitudes and intention scales (for a review of some possible limitations of this questionnaire, see McNally, Martin, Honig, Bergmann, & Piperopoulos, 2016), which is higher than the correlation found with other measures based on Ajzen's instructions on how to construct a questionnaire (e.g., Kautonen, van Gelderen, et al., 2015; Moriano et al., 2012). Therefore, this questionnaire was replaced in the remaining studies of the Thesis (Studies 2, 3, 4, and 5) with the Entrepreneurial Intention Questionnaire (EIQ) developed by Moriano (2005) in Spain. The paper of validation of this questionnaire in different countries (Moriano et al., 2012) has been cited 219 times (consulted in Google Scholar). The selection of this questionnaire is guided by the fact that it has been developed in Spain and because of its relevance. This instrument is described in detail in Chapter 2.

### **Empirical studies**

This Thesis devotes a chapter for each of the five studies accomplished with independent samples (Chapter 6 includes Studies 4 and 5). Figure 1 shows an overview of these studies. In Studies 1 and 2, an expanded model based on the TPB was tested. This included some variables as distal antecedents of entrepreneurial intention: university environment, entrepreneurial environment, and perceived risk of becoming an entrepreneur (Study 1); and, self-perceived creativity as well as family and university support for creativity and taking a creativity course (Study 2). While Studies 1 and 2 limited the participants to university students, Studies 3, 4, and 5 comprise also employees and unemployed participants. Study 3 explored the influence on entrepreneurial intention and its antecedents (attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy) of social legitimacy

attached to entrepreneurship and the entrepreneurial skills that are perceived to be learned through the media. Studies 4 and 5 focused on gender stereotypes in entrepreneurship. Study 4 also examined gender-stereotypical perception of entrepreneurship. Then, Study 5 investigated how self-perceived task and relationship orientation influence entrepreneurial intention and its antecedents. Below, a summary of each study included in this Thesis is presented.



*Figure 1.* Theoretical model proposed in this Thesis.

***Study 1 – University environment and entrepreneurial intention: The mediating role of the components of the theory of planned behavior***

Entrepreneurship contributes to the generation of employment and economic development. Thus, it is important to promote entrepreneurial initiatives; in this regard, universities play an important role. The psychosocial perspective has much to offer in the study of the antecedents that lead a person to choose to become an entrepreneur with the TPB being the model most often used to predict entrepreneurial intention. Drawing on data gathered in Spain within the international research project GUESSS (*Global University Entrepreneurial Spirit Students' Survey*) with a sample of 9,753 students, the influence on entrepreneurial intention of the university environment, the entrepreneurial environment, and the perceived risk of becoming an entrepreneur are analyzed, both directly and through the three components of the TPB (attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy). The results revealed that the university environment is the antecedent with the greatest effect on entrepreneurial intention; consequently, it is recommended to promote entrepreneurship through initiatives and educational programs in the university environment.

***Study 2 – A psychosocial study of self-perceived creativity and entrepreneurial intention in a sample of university students***

Creativity is a commonly assumed characteristic of entrepreneurs. It is proposed to be a necessary, although not sufficient, prerequisite for entrepreneurship. This study aimed to deepen the understanding of the relationship between self-perceived creativity and entrepreneurial intention. To do so, a cross-sectional survey study was conducted among 559 university students. An expanded model based on the TPB was tested, which included self-perceived creativity as a distal antecedent of entrepreneurial intention. In addition, both the role of perceived family and university support for creativity in boosting self-perceived creativity were examined, as well as taking a creativity course. While some empirical evidence has indicated a direct link between (perceived) creativity and entrepreneurial intention, the TPB

posits that three antecedents (attitudes, subjective norms, and perceived behavioral control/self-efficacy) would be the only direct determinants of intention. All other factors are theorized to indirectly influence intention through one or more of these components. Entrepreneurial self-efficacy and positive attitudes did indeed mediate the self-perceived creativity – entrepreneurial intention link, but self-perceived creativity explained additional variance in entrepreneurial intention, beyond these TPB components. In addition, the results showed that family and university support for creativity, as well as taking a creativity course, were significant predictors of self-perceived creativity. It is therefore concluded that teaching creativity contents and practice are a useful way to enrich entrepreneurship programs.

### ***Study 3 – Perceived representation of entrepreneurship in the mass media and entrepreneurial intention***

The effect of the mass media on entrepreneurial intention has received little attention in Spain thus far. In addressing this gap, the present research, in a cross-sectional study among 320 participants, explores the influence on entrepreneurial intention of social legitimacy attached to entre-tainment (media that stage entrepreneurship for entertainment purposes) and the perceived skills learned by watching entre-tainment. Drawing on the TPB, this influence is tested both directly and indirectly through the three components posited by this theory, that is, attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy. The results of partial least squares structural modeling revealed that positive attitudes and entrepreneurial self-efficacy mediated the social legitimacy – entrepreneurial intention and skills – entrepreneurial intention relationships, although subjective norms were not significant. Thus, while previous empirical evidence has indicated a direct link between these variables and entrepreneurial intention, the study of social legitimacy and perceived skills may benefit from considering a robust theoretical framework such as the TPB. This study also offers practical implications. Television and radio programs and other formats can be included in entrepreneurship education. When these programs are broadcast to the general public, it is

advisable to test how they influence attitudes, subjective norms, and self-efficacy. Additionally, the mass media help to divulge a stereotype of the figure of the entrepreneur. Making more conscious to media producers of the potential biases they may be conveying can help turn to a more diverse image of entrepreneurs as role models for a wide audience.

***Studies 4 and 5 – “Think entrepreneur – Think male”: The influence of gender stereotypes on entrepreneurial intention***

*Study 4 – Influence of activation of a successful female entrepreneur role model on entrepreneurial intention*

This study explores gender stereotypes within entrepreneurship, which traditionally has been a male occupation and still attracts fewer women than men. It adapts the “think manager – think male” paradigm into the entrepreneurship context and tests it in a sample of 902 participants. First, gender-stereotypical perceptions of entrepreneurship are examined through the assessment on task and relationship orientation of three targets (successful entrepreneurs in general, successful female entrepreneurs, and successful male entrepreneurs). Second, this research explores whether activation of a successful female entrepreneur (through random assignation of participants to the successful female entrepreneurs condition) positively affects participants’ self-reported entrepreneurial intention, their attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy, as well as necessity vs. opportunity motivation. Third, target recall is investigated. The results revealed that entrepreneurs received higher scores on task orientation than relationship orientation in all conditions. The data also showed that female participants reported higher entrepreneurial intention, self-efficacy, and opportunity motivation when assigned to the successful female entrepreneurs condition. However, there was no effect of condition on male participants. Interestingly, when asked at the end of the questionnaire, most participants (both female and male) assigned to the male entrepreneurs condition recalled a person entrepreneur as well as most male participants

assigned to the female entrepreneurs condition. These findings may have practical implications for the design of entrepreneurship courses as well as for other educational and political initiatives aimed at fostering female entrepreneurship and avoiding negative or biased stereotypes.

*Study 5 - Self-perceived task and relationship orientation and entrepreneurial intention*

To complement Study 4, in Study 5 an independent sample of 1,147 non-entrepreneurs self-categorized themselves in the same 13 characteristics on task and relationship orientation. This study is aimed at exploring how self-perceived task and relationship orientation influence entrepreneurial intention and its antecedents (attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy). First, self-perceived task orientation had a significant influence on the intention to become an entrepreneur, as well as in the three antecedents, particularly in entrepreneurial self-efficacy. Perceiving that a person presents certain characteristics and behaviors (e.g., negotiation skills or ability to cope with stress) relates to higher entrepreneurial intention, more positive attitudes toward entrepreneurship, subjective norms, and greater entrepreneurial self-efficacy. Second, the link between self-perceived relationship orientation and intention did not achieve statistical significance. However, self-perceived relationship orientation positively related to attitudes and subjective norms. Thus, relationship orientation had an indirect impact on intention through these components. In contrast, perceiving a high relationship orientation (e.g., sensitive to the needs of their clients) does not appear to be related to entrepreneurial self-efficacy. While being female related to higher self-perceived relationship orientation, there were no differences between female and male participants in task orientation, attitudes, subjective norms, or entrepreneurial self-efficacy. Biological sex, as frequently measured in most studies, seems to be less relevant than gender identity or self-perceived task and relationship orientation. Overall, these results highlight the complex link between self-perceptions, biological sex, and entrepreneurial intention.

## **Conclusions**

Chapter 7 is aimed at discussing the main findings of the studies accomplished in this Thesis and their contribution to research on entrepreneurship, particularly on entrepreneurial intention. This Thesis was designed to analyze through five empirical studies to what extent some variables (family and university context and perceived risk – Study 1; self-perceived creativity – Study 2; the mass media – Study 3; and, gender stereotypes – Studies 4 and 5) influence a higher entrepreneurial intention in order to improve entrepreneurship education programs and interventions. Although other factors influencing entrepreneurship remain to be studied, this Thesis represents a step forward toward a better understanding of entrepreneurial intention in Spain.

In this Thesis, different variables that have been studied in other countries are analyzed in the context of Spain. Thus, this Thesis contributes to generalizing the results, giving support to these previous studies. On the other hand, it delves into the TPB as a reference framework in the study of entrepreneurial intention and the sufficiency of the variables proposed in this theory, suggesting an expansion of the model. Subjective norms appear to be the weakest component in the model, as is found in other studies. The findings of this Thesis raise a concern about the exhaustiveness of the scale used, tapping only three referent groups (i.e., closest family members -parents and siblings-, friends, and colleagues), and the appropriateness of including other important people for adult populations (e.g., spouse/partner or children) as well as other external factors (e.g., the role of the media).

The aim of this Thesis is not that everybody should become an entrepreneur or enroll in entrepreneurship courses. On the contrary, better information may discourage some people. In fact, entrepreneurship education has been found to decrease the level of entrepreneurial intention for some students at the end of the program (e.g., Fayolle, Gailly, & Lassas-Clerc, 2006b). However, entrepreneurship education can satisfy a fourfold objective. First, it is useful for those interested in becoming entrepreneurs to acquire or improve entrepreneurial skills and

competences, allowing them to be more successful when pursuing this career path. Second, it presents information and tools for those who for the time being are not interested in becoming entrepreneurs but who, through this education, can consider entrepreneurship as a viable and feasible future career option. Third, education provides a more acute vision of requisites and competences to become an entrepreneur, thus leading to a more conscious decision and avoiding misperceptions. Fourth, entrepreneurial skills and competences can also be useful when working as an employee, favoring intrapreneurship. Further, entrepreneurship is frequently used as a synonym of self-employment. However, it is important to distinguish independent self-employment/entrepreneurship from other forms of employment, such as dependent, involuntary, or false self-employment (Böheim & Muehlberger, 2006; Kautonen et al., 2010; Moore & Newsome, 2018; Navajas-Romero, López-Martín, & Ariza-Montes, 2017; Thörnquist, 2015; Williams & Horodnic, 2018). Indeed, there is a concern about how these other types of self-employees may lack labor protection (e.g., paid holidays, minimum wage levels, protection from dismissal), benefits from social security protection (e.g., unemployment insurance), and are often beyond trade union representation (Böheim & Muehlberger, 2006).

All studies present limitations that need consideration but which, in turn, pave opportunities for future research. Particular limitations are presented at the end of each study. In this section, main general limitations are presented along with corresponding future lines of research: (a) entrepreneurial intention is considered the best predictor of entrepreneurial behaviour; however, more longitudinal studies in this field are encouraged to investigate developments over time, such as the relationship between entrepreneurial intention and entrepreneurial behaviour and the intention – action gap; (b) cross-sectional studies do not enable inferences of causation; despite being based on a robust theoretical model, results must still be interpreted with caution; (c) as these studies rely on self-reports, social desirability cannot be ruled out as a possible explanation; (d) convenience samples are not representative of the Spanish population; although a total of 12,681 persons filled in the study questionnaires, results must be interpreted with caution; (e) the Entrepreneurial Intention Questionnaires used to measure



entrepreneurial intention as well as its proximal antecedents in accord with the TPB presented some limitations that are important to note; (f) reflective versus formative measurement models are associated with some advantages and disadvantages, and constrain to some extent the most appropriate statistical techniques to test the hypotheses; (g) the TPB is alive and well, and not ready to retire (Ajzen, 2015), though other theories and models have been proposed to deal with entrepreneurial intention; (h) the TPB attaches great relevance to attitudes and their influence on behavioral intention; other models in the field of Social Psychology (e.g., the Elaboration Likelihood Model) that focus on attitude change could be of utility to entrepreneurship education and should be explored in future studies; (i) this Thesis does not include the possibility of starting a business while still working as an employee and considers entrepreneurship and wage employment as separate options, though hybrid entrepreneurship is a buoyant line of research; (j) the samples in Studies 1 and 2 are comprised of university students while Studies 3, 4, and 5 consider the general population (17–75 years old); future studies should focus on another age group which is attracting increasing interest: the third age, that is, enterprising activity in persons over 50 years old; and (k) special attention is paid to future research on gender and entrepreneurship and the role of the media in promoting entrepreneurship.

Finally, practical implications are discussed for:

- a) Universities, which should pay attention to the courses and services offered to foster entrepreneurship. First, these courses and services should be available to all students, not just to business students. Further, courses and services could be of use for researchers, professors, lecturers, and other university staff who, in turn, can serve as entrepreneurship role models for students. Courses and services are good ways to deal with perceived risk by providing hands-on information and the possibility of learning by doing. Thus, they can alleviate the negative impact of perceived risk on future entrepreneurial behavior. Second, courses should include creativity contents and

practice to improve self-perceived creativity. University support for creativity, as well as taking a creativity course, were significant predictors of self-perceived creativity which, in turn, had a positive influence on entrepreneurial intention. In sum, universities have an important role in boosting the entrepreneurial mindsets among their community members.

- b) Families. Having role models in the family or close environment is also directly related to higher scores on entrepreneurial intention. Additionally, family support for creativity conveys a similar role to that of universities in fostering self-perceived creativity. Along with universities, family environment is crucial to transmitting positive attitudes toward entrepreneurship, providing social support, and facilitating tools and opportunities to strengthen self-efficacy and a sense of controllability to future potential entrepreneurs. Even if families are not particularly interested in boosting entrepreneurship, supporting creativity in any case is useful for developing future employees and intrapreneurs.
- c) The media. Study 3 highlighted the relevant role of the media in promoting entrepreneurial skills. This result opens the way for reviewing what messages are being conveyed and how to boost more efficiently entrepreneurial skills and social legitimacy. Qualitative studies such as that accomplished by Boyle and Kelly (2016) in the United Kingdom should be encouraged in Spain. As the media can perpetuate stereotypes by showing entrepreneurs are “young men,” more attention should be paid to the presentation of diverse types of entrepreneurs and businesses. Further, the inclusion of entre-tainment formats in entrepreneurship education could be useful for acquiring entrepreneurial skills.
- d) Entrepreneurship and gender. In those countries in which the dominant language’s structure incorporates sex-based systems and gender-differentiated pronouns, there exists a greater gender gap in entrepreneurial activity (Hechavarría, Terjesen,

Stenholm, Brännback, & Lång, 2018). Spanish is a grammatical gender language, and a wider use of gender-fair language could contribute to reducing stereotyping. Two principle strategies have been employed to make languages gender-fair (Sczesny, Formanowicz, & Moser, 2016): neutralization and feminization, or a combination of both. In this Thesis, the use of neutralization (person entrepreneur) resulted in resembling more male entrepreneurs than female entrepreneurs. On the contrary, feminization (explicitly mentioning female entrepreneurs) proved to increase entrepreneurial intention for female participants. I then recommend the media and entrepreneurship education programs to pay more attention to gender-fair language by using feminization, or a combination with neutralization (“emprendimiento”, entrepreneurship). Last, I strongly encourage including stereotypically feminine characteristics and female role models in entrepreneurship education and programs (e.g., books and case studies) to present entrepreneurship as a feasible career option for both women and men.



# Capítulo 1. **Introducción**

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## Chapter 1. **Introduction**



*Many of our parents had stable jobs throughout their careers. Now we're all entrepreneurial, whether we're starting projects or finding our role. And that's great. Our culture of entrepreneurship is how we create so much progress.*

*Now, an entrepreneurial culture thrives when it's easy to try lots of new ideas. Facebook wasn't the first thing I built. I also built games, chat systems, study tools and music players.*

*I'm not alone. JK Rowling got rejected 12 times before publishing Harry Potter. Even Beyonce had to make hundreds of songs to get Halo. The greatest successes come from having the freedom to fail.*

Mark Zuckerberg, fundador de Facebook<sup>1</sup>

## **1. INTRODUCCIÓN**

La actividad emprendedora tiene un impacto reconocido sobre el crecimiento económico, la innovación y el empleo (Acs et al., 2012; Carree y Thurik, 2010; OCDE, 2004; Wong, Ho y Autio, 2005), por lo que desde diversas instituciones se intenta fomentar el emprendimiento (por ejemplo, “Real Decreto-ley 4/2013, de 22 de febrero, de medidas de apoyo al emprendedor”; Comisión Europea, 2013). De hecho, la “Ley 14/2013, de 27 de septiembre, de apoyo a los emprendedores y su internacionalización” contempla el fomento de la cultura del emprendimiento en las enseñanzas primaria, secundaria y universitaria y la formación del profesorado en esta materia. Esto es particularmente relevante en España, donde la mayoría del tejido empresarial está constituido por pequeñas y medianas empresas (PYME) y autónomos (Subdirección General de Apoyo a la PYME, 2018), y las tasas de desempleo (15.2%) y desempleo juvenil (33.6%) se sitúan entre las más altas de Europa (Eurostat, 2018).

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<sup>1</sup> Discurso en la ceremonia de graduación en Harvard en mayo de 2017: <https://news.harvard.edu/gazette/story/2017/05/mark-zuckerbergs-speech-as-written-for-harvards-class-of-2017/>

Debido a la crisis económica de los últimos años, con la consiguiente reducción del número de empleos y de empresas, se ha acentuado el interés por el estudio del emprendimiento y la educación para el emprendimiento (por ejemplo, Salazar-Carvajal, Herrera-Sánchez, Rueda-Méndez y León-Rubio, 2014; Santos, Caetano, Spagnoli, Costa y Neumeyer, 2017). En el preámbulo de la “Ley 14/2013, de 27 de septiembre, de apoyo a los emprendedores y su internacionalización” antes mencionada se identifica que se han destruido casi 1.9 millones de empresas entre 2008 y 2012 en España, situación particularmente dramática en el caso del empresariado más joven (de 15 a 39 años). Así, se reconoce que esta situación justifica la necesidad de emprender reformas favorables al crecimiento y la reactivación económica. Uno de los principales problemas de la economía española señalados es precisamente la alta tasa de desempleo juvenil, debido a deficiencias en el modelo de relaciones laborales, pero también a la falta de iniciativa emprendedora. En este sentido, se plantea que una mayor iniciativa emprendedora en una situación de escasas oportunidades de trabajo por cuenta ajena habría favorecido mayores niveles de autoempleo y, entre otras propuestas, se incorporan medidas para la educación en emprendimiento. Las crisis económicas tienen un impacto negativo en la posibilidad de encontrar o mantener un empleo, pero también pueden impulsar a identificar y aprovechar oportunidades para salir de esa inestabilidad económica (Salazar-Carvajal et al., 2014).

Ahora bien, el interés por el estudio del emprendimiento no es solo reciente sino que tiene su origen ya a principios del siglo XX en el ámbito de las Ciencias Económicas con autores como Schumpeter (1934/1968), Knight (1921/1964) o von Mises (1949/1998) y, desde la Sociología, con Weber (1905/1930). En el campo de la Psicología es una línea de investigación que comienza en la década de los sesenta con el trabajo pionero de David C. McClelland al analizar cómo la motivación de logro en estudiantes de nivel universitario se relacionaba con sus ocupaciones 14 años después, encontrando que las personas graduadas con alta motivación de logro habían desarrollado su carrera profesional en el emprendimiento (McClelland, 1965). Numerosas investigaciones han sido realizadas sobre las principales



características psicológicas que distinguen a las personas emprendedoras (véanse, por ejemplo, los siguientes meta-análisis y revisiones: Frese y Gielnik, 2014; Rauch y Frese, 2007; Zhao, Seibert y Lumpkin, 2010). Entre estas características se han estudiado, por ejemplo, la autoeficacia, la motivación de logro, la personalidad proactiva, la autonomía, la tendencia a la innovación, la tolerancia al estrés, la tenacidad, la orientación a metas, la flexibilidad, la pasión por el trabajo, el locus de control, la propensión a asumir riesgos o las cinco grandes dimensiones de la personalidad (la apertura a la experiencia, la extraversión, el neuroticismo o inestabilidad emocional, la agradabilidad o amabilidad y la responsabilidad o consciencia).

Actualmente, tras las críticas teóricas y metodológicas al enfoque basado en las diferencias individuales entre personas emprendedoras y no emprendedoras (Gartner, 1989; Robinson, Stimpson, Huefner y Hunt, 1991; Shane y Venkataraman, 2000) y su limitada capacidad predictiva (Krueger et al., 2000), la aproximación cognitiva en el estudio del emprendimiento es la más extendida. Así, en una reciente revisión de la Psicología del Emprendimiento, Omorede et al. (2015) distinguen cinco áreas principales de investigación: personalidad, cognición, emoción, actitud e identidad, y señalan el importante crecimiento en el número de publicaciones en los últimos años, siendo la aproximación cognitiva la que concentra mayor interés actualmente.

Sin embargo, emprender no es un hecho puntual, sino que se considera un proceso compuesto por diferentes etapas (para una revisión véase Moriano, 2005): antes del lanzamiento de la nueva empresa (fase pre-lanzamiento), el período de lanzamiento de la nueva empresa (fase de lanzamiento) y el desarrollo posterior de la empresa (fase de post-lanzamiento). Dentro de este proceso (Figura 1.1), esta Tesis doctoral se centra en el estudio de la intención emprendedora como antecedente de la conducta emprendedora.

En la investigación sobre la conducta emprendedora, la intención emprendedora (fase pre-lanzamiento) es el antecedente más estudiado de la creación de empresas (por ejemplo, Krueger, 2009; Liñán y Fayolle, 2015). Se ha constatado que la intención resulta ser el mejor

predictor de cualquier tipo de conducta planificada, particularmente cuando esta conducta resulta poco común, difícil de observar y/o implica imprevisibles retrasos (Krueger et al., 2000). Así, crear una empresa conlleva una serie de requisitos que hacen que pueda considerarse un tipo de conducta planificada donde los modelos de intenciones resultan adecuados en el ámbito de la investigación (Lortie y Castogiovanni, 2015).

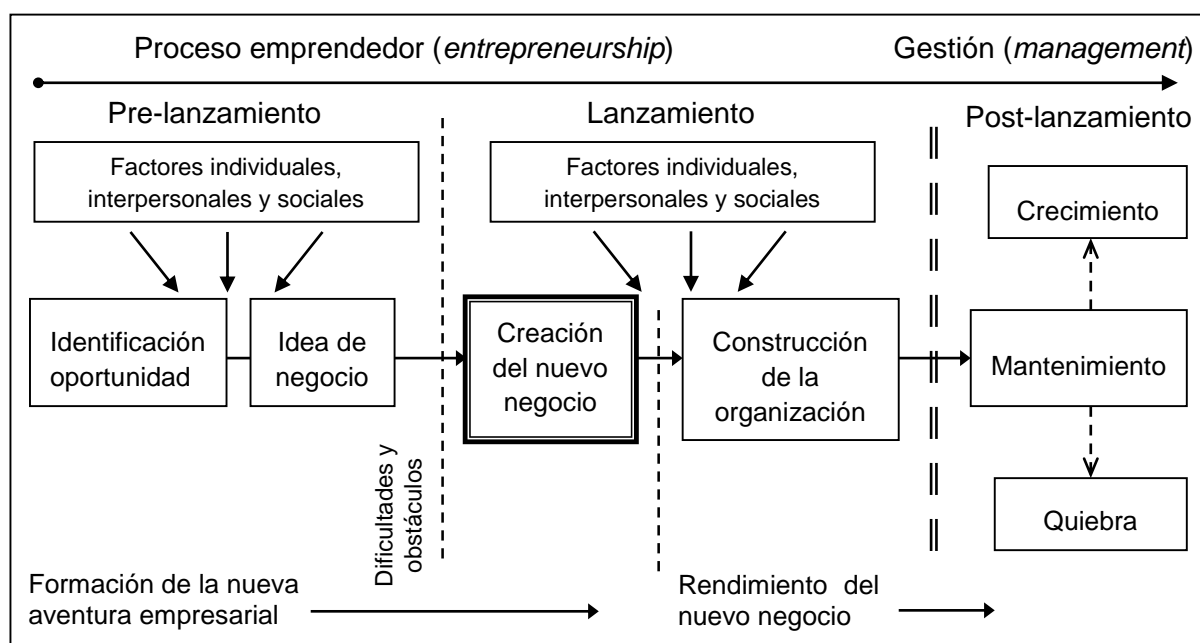


Figura 1.1. Etapas del proceso emprendedor.

Nota. Tomado de Moriano (2012). Elaborado a partir de Carton et al. (1998) y Baron (2002).

Desde una aproximación cognitiva, se plantea el estudio de la intención emprendedora como el análisis de la decisión voluntaria y consciente de emprender (Krueger et al., 2000). La teoría de la acción planificada (TAP; Ajzen, 1991, 2015), ampliamente utilizada en diversas áreas para predecir diferentes tipos de intenciones conductuales (Armitage y Conner, 2001; Fleming et al., 2017; McDermott et al., 2015; McEachan et al., 2011), constituye el modelo más utilizado en el estudio de la intención emprendedora (Liñán y Fayolle, 2015; Lortie y Castogiovanni, 2015). La teoría de la acción planificada propone que la intención depende de la influencia que tienen sobre ella tres componentes (Figura 1.2): (a) la actitud hacia la conducta, (b) la norma subjetiva, y (c) el control conductual percibido, mientras que otras variables se espera

que influyan en la intención y en la conducta de forma indirecta a través de estos tres determinantes más proximales de la intención (Ajzen, 2011).

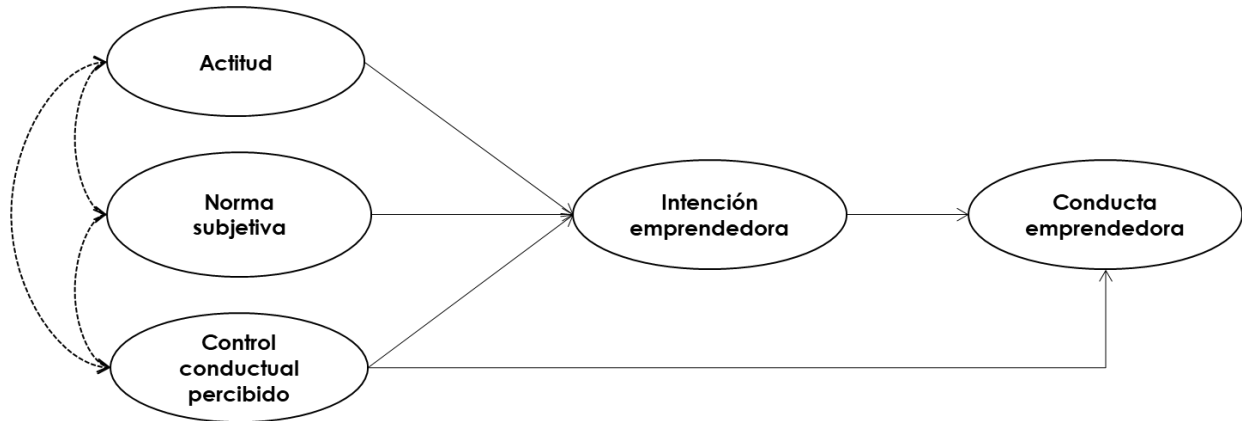


Figura 1.2. Teoría de la acción planificada (TAP; Ajzen, 1991).

Aunque la intención se forma a partir de las actitudes, la norma subjetiva y el control conductual percibido, cada uno de estos componentes puede tener diferente peso, variando su importancia según las conductas y las situaciones (Ajzen, 1991). Estudios previos sobre intención emprendedora ponen de manifiesto que la influencia de cada uno de los componentes del modelo varía entre investigaciones (Engle et al., 2010; Krueger et al., 2000; Moriano et al., 2012) y también en función de variables sociodemográficas como el sexo (Haus et al., 2013; Moriano, 2005; Oliveira et al., 2015). Asimismo, únicamente el control conductual percibido y la intención son considerados predictores directos de la conducta. Específicamente para la intención emprendedora, la varianza explicada a partir de los tres componentes varía según los estudios entre el 20% y el 65% (Autio et al., 2001; Kolvereid e Isaksen, 2006; Liñán y Chen, 2009; Liñán et al., 2013). Por otra parte, si se compara la intención laboral de estudiantes de nivel universitario de incorporarse a una empresa privada o a la Administración Pública con la intención de emprender, esta suele resultar menor (Moriano, 2005; Moriano, Gómez, Laguna y Roznowski, 2008).

La intención emprendedora ha sido estudiada desde el marco teórico de la teoría de la acción planificada en países muy distintos, por ejemplo: España (Engle et al., 2010; Liñán y Chen, 2009; Liñán et al., 2013; Moriano, 2005; Moriano et al., 2012); Estados Unidos (Autio et al., 2001; Engle et al., 2010); Finlandia (Autio et al., 2001; Engle et al., 2010); Alemania (Engle et al., 2010; Moriano et al., 2012); Suecia (Autio et al., 2001; Engle et al., 2010); Polonia, Países Bajos, India e Irán (Moriano et al., 2012); China, Costa Rica, Egipto, Francia, Bangladesh, Ghana y Rusia (Engle et al., 2010); Portugal (Oliveira et al., 2016) o Colombia (Laguía et al., 2017). Para una revisión sistemática sobre la investigación en intención emprendedora, véase Liñán y Fayolle (2015). La amplia investigación en esta área pone de manifiesto la importancia de la teoría de la acción planificada en el estudio de la intención emprendedora, contemplando no solo factores de tipo económico, sino también factores psicológicos y sociales (Krueger et al., 2000).

Aunque los estudios sobre la intención emprendedora se han multiplicado en todo el mundo desde los primeros estudios en la década de 1980 y la aplicación de la teoría de la acción planificada en este campo en la década de 1990, recientemente ha habido un llamamiento a repensar el futuro de la investigación sobre la intención emprendedora (Fayolle y Liñán, 2014). Un buen resumen de esta preocupación es este título de un capítulo de libro escrito por Krueger (2009): "Entrepreneurial intentions are dead: Long live entrepreneurial intentions". En este sentido, Liñán y Fayolle (2015) han realizado una revisión sistemática de la literatura sobre intención emprendedora, encontrando una falta de sistematización y categorización de la investigación, y tanto Omoredde et al. (2015) como Gorgievski y Stephan (2016) han publicado recientemente revisiones de la Psicología del Emprendimiento en particular, poniendo de manifiesto la relevancia de esta área. De acuerdo con Liñán y Fayolle (2015), lejos de ser un área agotada, el interés sobre este ámbito ha crecido, especialmente en los últimos años, con un incremento en el número de artículos publicados. Asimismo, Liñán y Fayolle (2015) identifican seis categorías en la literatura: (a) el núcleo central del modelo de intención emprendedora así como aspectos teóricos y metodológicos; (b) la influencia de

variables personales; (c) la interrelación entre la educación para el emprendimiento y la intención emprendedora de las personas participantes; (d) el papel del contexto y las instituciones en la configuración de la intención emprendedora; (e) el proceso emprendedor y la relación intención-conducta; y (f) nuevas áreas de investigación. En este contexto, la presente Tesis tiene como objetivo responder a este llamamiento mediante el análisis, dentro del marco teórico de la teoría de la acción planificada, de la influencia de una serie de antecedentes psicosociales interrelacionados sobre la intención emprendedora en España: el contexto universitario y familiar, el riesgo percibido en emprender, la creatividad percibida, los medios de comunicación y los estereotipos de género.

Es necesario destacar que existe una brecha de género tanto para las empresas en los estados iniciales (empresas nacientes o que no han estado en operación durante más de 42 meses) y, especialmente, en los negocios ya establecidos (negocios que han sobrevivido en el mercado durante más de 42 meses) (Singer et al., 2018), como en la intención emprendedora (Haus et al., 2013; Maes et al., 2014; Moriano, 2005; Zampetakis et al., 2017; Zhang et al., 2014). Así, el número de mujeres emprendedoras es menor que el número de hombres emprendedores en la mayoría de los países y las mujeres indican una menor intención de elegir una carrera profesional como emprendedoras frente a los hombres. Esto contrasta con la propuesta del emprendimiento como una posible opción de carrera frente a los problemas que las mujeres encuentran en el mercado de trabajo tradicional (Heilman y Chen, 2003). Entre estos problemas se encuentran el conflicto familia-trabajo, el techo de cristal, las peores oportunidades de promoción en comparación con los compañeros hombres o las menores opciones de aprovechar las ventajas de una mentoría y la participación en redes de contactos profesionales (*networking*). El atractivo del emprendimiento se puede ver como una forma de ajustar el estilo de vida a las propias necesidades, evitar los sesgos en los procesos de trabajo (selección o evaluación del rendimiento), o no tener una “escalera” que escalar ya que como fundadora se está en lo más alto con independencia del tamaño de

la empresa que se cree<sup>2</sup>. Sin embargo, las profesiones suelen tener una asociación de género y esto mismo ocurre con el emprendimiento. Las descripciones de las actividades en el emprendimiento han sido tradicionalmente masculinas y se percibe que las personas emprendedoras tienen predominantemente características masculinas, lo que podría influir en ese menor interés que parecen indicar las mujeres hacia el emprendimiento en distintos estudios.

## **2. OBJETIVOS, NOVEDAD E INTERÉS DE LA TESIS**

El objetivo general de esta Tesis es analizar, dentro del marco de la teoría de la acción planificada, la influencia de una serie de antecedentes psicosociales interrelacionados sobre la intención emprendedora en España (Figura 1.3): el contexto universitario y familiar, el riesgo percibido en emprender, la creatividad percibida, la influencia de los medios de comunicación y los estereotipos de género. El análisis en profundidad de estos aspectos que influyen en la intención emprendedora de diferentes colectivos se orienta a identificar qué factores son más relevantes para poner en marcha futuras iniciativas específicas que incidan de manera más focalizada en aquellos aspectos que favorecen el desarrollo de la intención emprendedora.

Los antecedentes psicosociales que se contemplan en esta Tesis han sido estudiados de forma exploratoria en estudios recientes (Hancock et al., 2014; Swail et al., 2014; Zampetakis et al., 2011), aunque no de forma integrada ni en general en el contexto de España. Por tanto, esta Tesis persigue contribuir a la investigación internacional más actual en esta área de Psicología del Emprendimiento, ampliando el modelo propuesto por la teoría de la acción planificada y sometiendo a prueba empíricamente un modelo extendido (véase Figura 1.3),

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<sup>2</sup> En el ámbito organizacional se emplea la metáfora de la escalera como ascenso en la carrera profesional. Incluso esta metáfora se lleva en ocasiones más allá, no sin cierta controversia, para indicar que mientras las mujeres suben andando, los hombres suben por las escaleras mecánicas con menos dificultad.

así como abordar específicamente el estudio de diversas variables relevantes en el emprendimiento con el fin de mejorar la educación emprendedora.

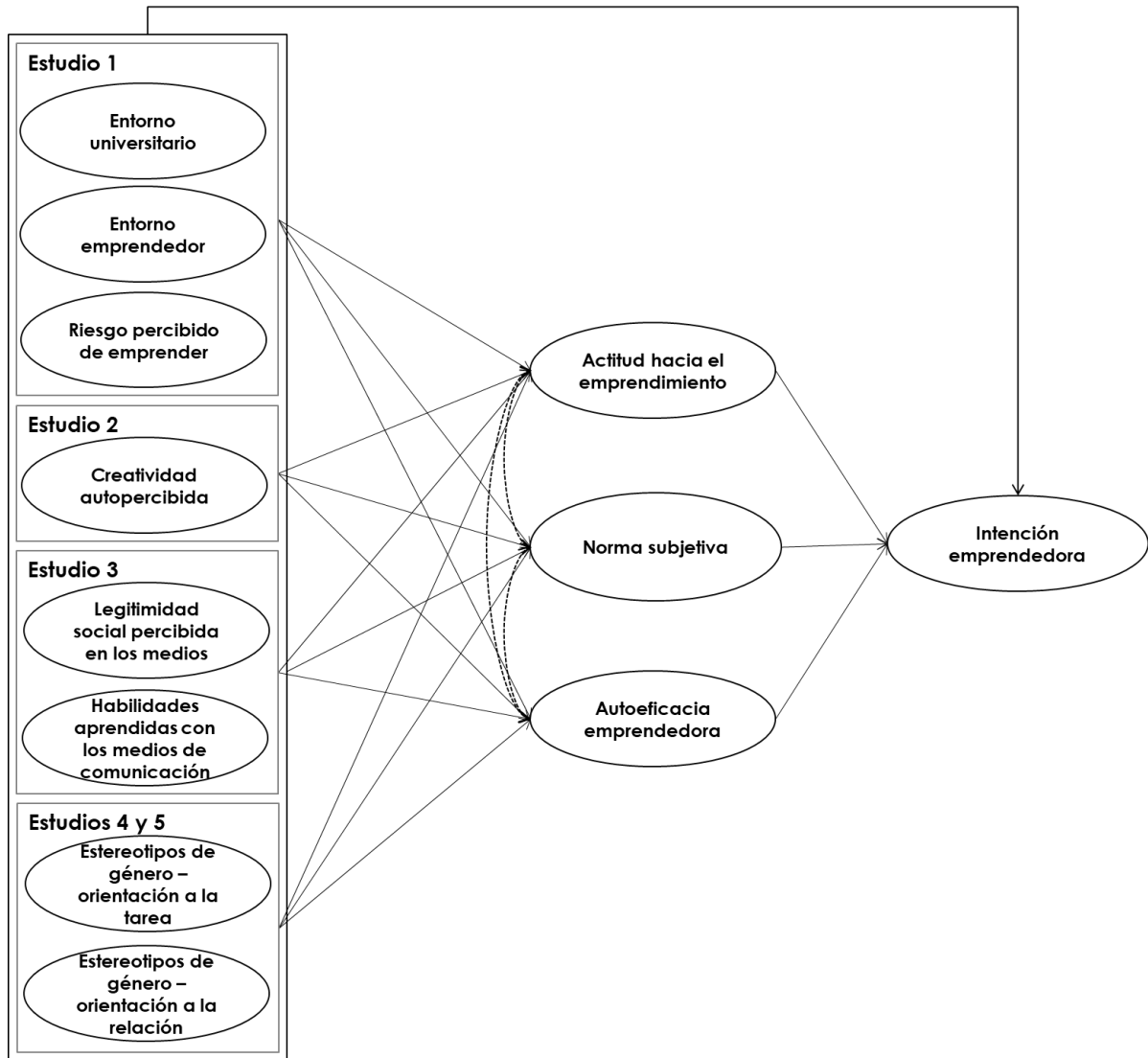


Figura 1.3. Modelo teórico propuesto en esta Tesis.

Para ello, se plantea una aproximación cuantitativa a través de la realización de cuatro estudios (el último se ha desglosado en dos estudios) con muestras independientes y empleando cuestionarios para la recogida de datos (Tabla 1.1). En cuanto a la muestra, se distingue entre estudiantes de nivel universitario (estudios 1 y 2) y población general (estudios 3, 4 y 5). En los primeros estudios, se hace especial énfasis en estudiantes de nivel

universitario, ya que el grupo de población con mayor tendencia a emprender en diferentes regiones del mundo es el segmento de 25 a 34 años, seguido del grupo de 35 a 44 años (Singer et al., 2018). En los estudios de intención emprendedora son habituales las muestras de estudiantes de nivel universitario (Autio et al., 2001; Krueger et al., 2000), dado que es un fenómeno que debe estudiarse antes de que ocurra. Asimismo, el número de años de educación se relaciona positivamente con el rendimiento de las empresas creadas (van der Sluis et al., 2008) y, por tanto, la población de profesionales con estudios superiores que crean su propia empresa es de especial interés.

Tabla 1.1

*Muestras de los estudios realizados en esta Tesis doctoral*

Estudio	Muestra estudiantes	Muestra no solo estudiantes
Estudio 1 - El entorno universitario y la intención emprendedora: el papel mediador de los componentes de la teoría de la acción planificada	9.753 estudiantes universitarios/as (59.9 % mujeres, $M_{\text{edad}} = 22.6$ , $DT = 4.4$ , 17 – 40 años)	
Estudio 2 - Estudio psicosocial de la creatividad percibida y la intención emprendedora en una muestra de estudiantes de nivel universitario	559 estudiantes universitarios/as (58.5 % mujeres, $M_{\text{edad}} = 24.4$ , $DT = 4.2$ , 18 – 40 años)	
Estudio 3 - Percepción de la representación del emprendimiento en los medios de comunicación e intención emprendedora		320 participantes (65.6 % mujeres, $M_{\text{edad}} = 32.3$ , $DT = 11.6$ , 19 – 75 años)
Estudio 4 - Influencia de la activación de un modelo de rol de mujer emprendedora de éxito en la intención emprendedora		902 participantes (55.9 % mujeres, $M_{\text{edad}} = 31.0$ , $DT = 6.9$ , 18 – 44 años)
Estudio 5 - Orientación a la tarea y a la relación autopercebidas e intención emprendedora		1.147 participantes (54.5 % mujeres, $M_{\text{edad}} = 35.6$ , $DT = 10.9$ , 18 – 64 años)



Algunas investigaciones se centran en titulaciones relacionadas con las Ciencias Económicas y Empresariales (Liñán y Chen, 2009; Liñán, Rodríguez-Cohard y Rueda-Cantuche, 2011) o en estudiantes de máster (Hamidi, Wennberg y Berglund, 2008; Salazar-Carvajal et al., 2014), aunque también hay estudios con estudiantes en los niveles educativos previos a la universidad (Ferreira, Raposo, Rodrigues, Dinis y do Paço, 2012) o que comparan la intención en estudiantes en diferentes etapas del sistema educativo (Moriano, 2005; Varamäki, Joensuu, Viljamaa y Tornikoski, 2012). En particular, Liñán y Chen (2006) justifican la adecuación de la elección de una muestra de estudiantes de nivel universitario de último año debido a que: (a) este tipo de muestra es común en la investigación empírica sobre intención emprendedora; (b) el alumnado de último año está próximo a formar parte del grupo de población con mayor tendencia a emprender, que es el segmento de 25 a 34 años con estudios universitarios; y, (c) al tener que afrontar en un futuro próximo su elección de carrera profesional, pueden responder a las preguntas de forma más consciente. Además, las edades y cualificaciones similares hacen que sean grupos homogéneos. Por tanto, en diversos estudios se emplean muestras de estudiantes que se encuentran cerca de graduarse (Krueger et al., 2000; Liñán y Chen, 2009; Liñán et al., 2011).

Por otra parte, en los estudios 3, 4 y 5 la muestra no se restringe a estudiantes. Estos estudios están orientados a complementar los dos primeros generalizando los resultados a la población general y se centran en la percepción de los medios de comunicación y los estereotipos de género en el emprendimiento. La inclusión de muestras de no solo estudiantes sino de personas ya trabajando por cuenta ajena o en otras situaciones ha estado motivada por la importancia del emprendimiento en distintas etapas de la carrera profesional. Por ejemplo, muchas personas próximas a la jubilación optan por diversas formas de empleo puente (*bridge employment*), como el trabajo a tiempo parcial o el emprendimiento, antes de la jubilación definitiva, y en esta línea empieza prestarse atención en la investigación internacional al emprendimiento en las últimas etapas de la carrera profesional (Kautonen, Hatak, Kibler y Wainwright, 2015; Kautonen, Tornikoski y Kibler, 2011; Singh y De Noble, 2003). Se espera

que el número de personas que deciden emprender en esta última etapa se incrementa en el futuro, tanto impulsadas por la oportunidad (cuentan con el conocimiento, los contactos y los recursos necesarios) como por necesidad (dificultad de encontrar un empleo por cuenta ajena). Por tanto, se ha considerado importante en esta Tesis incluir muestras más diversas que las formadas por estudiantes, aunque no se analiza específicamente la influencia de la edad sino que se incluye solo como variable control (para análisis específicos de la influencia de la edad, véase Laguía y Moriano, 2018a, 2018b). En la Tabla 1.1 se recoge un resumen de la muestra de cada estudio.

Esta Tesis busca contribuir a la investigación sobre intención emprendedora. En primer lugar, analizando la influencia de una serie de antecedentes distales sobre la intención. Los antecedentes distales estudiados son: el contexto universitario y familiar, el riesgo percibido en emprender, la creatividad, la influencia de los medios de comunicación y los estereotipos de género. La selección de estos factores ha estado guiada por la necesidad de explorar estos aspectos en el contexto de España. En segundo lugar, comprobando la hipótesis de suficiencia que se establece en el marco teórico de la teoría de la acción planificada; esto es, que la influencia de los antecedentes distales está mediada por los tres componentes de la teoría de la acción planificada (actitudes, norma subjetiva y control conductual percibido). En esta Tesis se ha intentado aplicar un modelo extendido de la teoría de la acción planificada que incorpore los antecedentes distales mencionados.

De la presente Tesis se derivan una serie de implicaciones prácticas además de teóricas, ya que un mejor conocimiento de los aspectos que conducen a diferentes colectivos a emprender puede contribuir a un diseño más adecuado de los programas de formación emprendedora que se están impulsando en muchas universidades y desde otro tipo de instituciones. Como señalan Krueger et al. (2000), promover la intención emprendedora no es solo deseable, sino también posible. Por tanto, la pregunta actual en la investigación en este ámbito no es si se puede enseñar a emprender, dado que la investigación ha aportado numerosas evidencias que lo confirman, sino qué se debe enseñar y cómo (Kuratko, 2005). Algunos estudios señalan

que se puede influir en las características personales y las habilidades de las personas emprendedoras mediante estos programas de educación emprendedora y que favorecen que emprender se plantee como una opción de carrera así como que se tenga una actitud más favorable hacia emprender (Liñán y Chen, 2009; Packham et al., 2010; Peterman y Kennedy, 2003).

No obstante, es necesario profundizar en qué aspectos de estos programas de educación emprendedora tienen una mayor influencia en la intención. A ello se orienta la presente Tesis, dado que mejorar la comprensión de los factores que inciden en la intención de emprender contribuye al diseño de programas de educación para el emprendimiento, así como al diseño de otras iniciativas más generales para potenciar el emprendimiento. Desde una perspectiva teórica, se analizan en el contexto de España una serie de variables que han sido estudiadas en otros países. Así, contribuye a generalizar los resultados dando apoyo a estos estudios previos. Por otra parte, se profundiza en la teoría de la acción planificada como marco de referencia en el estudio de la intención emprendedora y la suficiencia de las variables que se proponen en esta teoría sugiriendo la utilización de un modelo extendido.

## **2.1. Estudios realizados en esta Tesis**

Se han realizado cinco estudios empíricos con muestras independientes con el objetivo de profundizar en el análisis de los factores psicosociales que determinan la intención de desarrollar la carrera profesional a través del emprendimiento. La metodología seguida en todos los estudios indicados es de tipo cuantitativo, correlacional y transversal. A continuación, se recoge una breve introducción a cada uno de los estudios.

### **2.1.1. Estudio 1 – El entorno universitario y la intención emprendedora: el papel mediador de los componentes de la teoría de la acción planificada**

El emprendimiento contribuye a la generación de empleo y al desarrollo económico, por lo que es importante impulsar iniciativas emprendedoras y, en este sentido, las universidades

juegan un relevante papel. La perspectiva psicosocial tiene mucho que aportar en el estudio de los antecedentes que llevan a una persona a emprender, siendo la teoría de la acción planificada (TAP) el marco teórico más utilizado para predecir la intención emprendedora. A partir de los datos recogidos en España en el marco del proyecto internacional GUESSS (*Global University Entrepreneurial Spirit Students' Survey*)<sup>3</sup> con una muestra de 9.753 estudiantes, se analiza la influencia del entorno universitario, el entorno emprendedor y la percepción del riesgo de emprender en la intención emprendedora, tanto de forma directa como mediada a través de los tres componentes de la TAP (actitud hacia emprender, norma subjetiva y autoeficacia emprendedora). Los resultados muestran que el entorno universitario es el antecedente con mayor efecto en la intención emprendedora; por tanto, se recomienda promover el emprendimiento a partir de iniciativas y programas educativos en el entorno universitario.

### **2.1.2. Estudio 2 – Estudio psicosocial de la creatividad percibida y la intención emprendedora en una muestra de estudiantes de nivel universitario**

El emprendimiento es un fenómeno multinivel que se inicia a partir de creatividad humana, recursos financieros y capital tecnológico, promueve el descubrimiento y establecimiento de nuevas formas de organizar los procesos de producción y nuevas formas institucionales, y

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<sup>3</sup> Se han analizado los datos recogidos en España en la 6ª fase del proyecto GUESSS. GUESSS (*Global University Entrepreneurial Spirit Students' Survey*) es un reconocido proyecto de investigación internacional iniciado en 2003 cuyo propósito es conocer la intención y actividad emprendedora de estudiantes de nivel universitario. En la oleada de 2013/2014, se contactó con más de 1.9 millones de estudiantes de 759 universidades situadas en 34 países (Sieger, Fueglistaller y Zellweger, 2014), con una tasa de respuesta de 5.5. Este proyecto aporta valor añadido no solo a la comunidad científica, sino que sus recomendaciones basadas en datos contribuyen a la toma de decisiones informadas en materia de políticas económicas y además se sensibiliza a la sociedad en general sobre el emprendimiento. Los datos que se han recogido para este proyecto desde su lanzamiento se han analizado en informes internacionales/nacionales y otras publicaciones científicas, y permiten la comparación entre diferentes países. Se puede consultar más información en la página web del proyecto: <http://www.guesssurvey.org/>

conduce al crecimiento empresarial y a la creación de nuevas empresas (Phan, Zhou y Abrahamson, 2010). Las personas emprendedoras son personas creativas que generan un gran número de ideas potencialmente valiosas (Baron, 1998) y que deben ser capaces de interpretar creativamente el entorno para identificar aquellas oportunidades relacionadas con su área de conocimiento (DeTienne y Chandler, 2004), aunque no solo reconocen oportunidades y las explotan, sino que en muchas ocasiones las oportunidades surgen cuando la persona emprendedora las crea (Read, Song y Smit, 2009). El desarrollo de iniciativas emprendedoras requiere aprovechar oportunidades y resolver tareas encontrando la mejor manera de llevar a buen término el proyecto, para lo que la creatividad en el emprendimiento es fundamental (Salazar-Carvajal et al., 2014). Asimismo, la creatividad está relacionada con otro elemento de radical importancia en el área del emprendimiento y de las organizaciones en general: la innovación (Hammond, Neff, Farr, Schwall y Zhao, 2011; Hülshager, Anderson y Salgado, 2009; Hunter, Bedell y Mumford, 2007). No obstante, el número de estudios empíricos que han analizado esta relación entre creatividad y actividad emprendedora es todavía escaso, si bien existen algunas excepciones que se centran en cómo la creatividad o la educación para promover la creatividad pueden influir en la intención de emprender (Hamidi et al., 2008; Zampetakis, 2008; Zampetakis et al., 2011). Este segundo estudio pretende examinar, dentro del marco de la teoría de la acción planificada, la influencia de la creatividad percibida en la intención emprendedora tanto de forma directa como mediada por las actitudes, la norma subjetiva y la autoeficacia. Asimismo, se presta especial atención al apoyo a la creatividad percibido de la familia y la universidad y si la educación específica tanto en emprendimiento como en creatividad favorecen la intención emprendedora.

### **2.1.3. Estudio 3 – Percepción de la representación del emprendimiento en los medios de comunicación e intención emprendedora**

El efecto de los medios de comunicación (esto es, televisión, radio, prensa, películas e internet) sobre la intención emprendedora ha recibido escasa atención en España. Para intentar explorar esta relación, este tercer estudio de la Tesis se centra en el análisis de la

influencia sobre la intención emprendedora de la legitimidad social asociada al “empren-tenimiento” (exposición del emprendimiento en los medios con fines de entretenimiento) y las habilidades relevantes para el emprendimiento que se percibe que se aprenden a través de los medios de comunicación. Al igual que en los estudios previos, esta influencia es analizada tanto de forma directa como mediada por los tres componentes de la teoría de la acción planificada (actitudes, norma subjetiva y autoeficacia emprendedora). Es importante analizar el papel de los medios en relación con el emprendimiento ya que los medios ayudan a difundir estereotipos sobre las personas emprendedoras. También los formatos empleados en los medios, por su atractivo para grandes audiencias, especialmente personas jóvenes, pueden ser de utilidad en los cursos de formación para el emprendimiento.

#### **2.1.4. Estudios 4 y 5 – “Think entrepreneur – Think male”: la influencia de los estereotipos de género en la intención emprendedora**

Los hombres presentan una mayor tendencia al emprendimiento que las mujeres en la mayoría de las sociedades (véanse los informes anuales publicados por el consorcio GEM<sup>4</sup>). Desde el marco teórico de la teoría de la acción planificada, Oliveira et al. (2015) han abordado una primera aproximación a las diferencias entre mujeres y hombres universitarios en Portugal en relación a la actitud hacia emprender, la norma subjetiva y la autoeficacia, y su influencia en la intención emprendedora. Por otra parte, Hancock et al. (2014) han analizado el estereotipo de la persona emprendedora en España desde una perspectiva de género. Combinando ambas líneas de investigación, dado que los estereotipos de género pueden influir en la intención de emprender, resulta necesario profundizar mediante nuevos estudios en aquellos aspectos diferenciales que influyen en la intención emprendedora de hombres y mujeres, con especial atención a los factores que inhiben a las mujeres (amenaza del estereotipo) para convertirse en emprendedoras. De este modo, se puede contribuir al diseño

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<sup>4</sup> <http://www.gemconsortium.org/>

de iniciativas específicas que incidan de manera más focalizada en los aspectos más relevantes, coadyuvando de esta forma a crear un ecosistema emprendedor con mayor presencia femenina. Esto sin duda redundará en un beneficio para toda la sociedad, dado el impacto positivo que el emprendimiento tiene en el crecimiento económico y el empleo.

En primer lugar, es necesario mencionar que si bien en el área del liderazgo los modelos de género han sido ampliamente estudiados, en el área del emprendimiento se han constatado las diferencias de género pero no existe un marco teórico consolidado que explique estas diferencias o cómo realizar intervenciones adecuadas. Las áreas de liderazgo y emprendimiento han alcanzado un importante desarrollo en los últimos años, pero han sido analizadas de forma independiente sin tener en cuenta muchos de los aspectos que tienen en común (Cogliser y Brigham, 2004; Vecchio, 2003). Además, el liderazgo juega un importante papel en el proceso emprendedor. Por tanto, en la última parte de la Tesis se aplica la perspectiva de liderazgo “think manager – think male” al emprendimiento siguiendo la sugerencia de Godwin, Stevens y Brenner (2006). Para ello, se han llevado a cabo dos estudios.

El objetivo del estudio 4 es analizar si se percibe que las personas emprendedoras con éxito, las mujeres emprendedoras con éxito y los hombres emprendedores con éxito muestran características diferentes (agrupadas en dos dimensiones: orientación a la tarea, estereotípicamente masculina, y a la relación tarea, estereotípicamente femenina), y si la asignación a una de las tres condiciones propuestas influye en la actitud hacia emprender, la norma subjetiva, la autoeficacia emprendedora y la motivación para emprender (necesidad vs. oportunidad). En particular, se intenta explorar si hacer pensar a las mujeres sobre una mujer emprendedora de éxito tiene un impacto en su intención de emprender y las demás variables.

El estudio 5 complementa al anterior con una muestra independiente de participantes y se centra en analizar si la autopercepción en las dimensiones investigadas en el estudio 4, la

orientación a la tarea y a la relación, influye en la intención emprendedora y sus antecedentes en el marco de la teoría de la acción planificada. Dado que el emprendimiento está asociado con características masculinas, se espera que una alta orientación a la tarea presente una relación positiva y significativa con la intención emprendedora. Sin embargo, es necesario explorar cómo influye la orientación a la relación, estereotípicamente femenina, y si estas relaciones son directas o indirectas a través de la actitud hacia el emprendimiento, la norma subjetiva y la autoeficacia emprendedora. En este estudio se propone que ambas dimensiones son importantes para el emprendimiento.

### **3. ESTRUCTURA DE LA TESIS DOCTORAL**

La Tesis doctoral está estructurada en siete capítulos, más el resumen extendido en inglés que se incluye al inicio. En primer lugar, el Capítulo 1 corresponde a la presente introducción a la Tesis. En el Capítulo 2, dedicado al marco teórico, se presenta la intención emprendedora como principal antecedente de la conducta emprendedora y se describe la teoría de la acción planificada como marco teórico común que se seguirá en los distintos estudios. Asimismo, en dicho Capítulo 2 se recoge el marco metodológico que comprende una descripción de: las muestras de los estudios; del Cuestionario de Intención Emprendedora (CIE) desarrollado en España por Moriano (2005) y posteriormente validado en otros países (Laguía et al., 2017; Moriano et al., 2012), que es el instrumento empleado para medir la intención emprendedora así como los tres componentes de la teoría de la acción planificada (actitud, norma subjetiva y autoeficacia emprendedora) en los estudios, excepto en el primero en el que se ha utilizado el cuestionario del proyecto internacional GUESSS; del procedimiento y el análisis de datos.

A continuación, se dedica un capítulo a cada estudio realizado:

- Capítulo 3: El entorno universitario y la intención emprendedora: el papel mediador de los componentes de la teoría de la acción planificada (estudio 1).



- Capítulo 4: Estudio psicosocial de la creatividad percibida y la intención emprendedora en una muestra de estudiantes de nivel universitario (estudio 2).
- Capítulo 5: Percepción de la representación del emprendimiento en los medios de comunicación e intención emprendedora (estudio 3).
- Capítulo 6: “Think entrepreneur – think male”: la influencia de los estereotipos de género en la intención emprendedora (estudio 4 – Influencia de la activación de un modelo de rol de mujer emprendedora con éxito en la intención emprendedora, y estudio 5 – Orientación a la tarea y a la relación autopercebidas e intención emprendedora).

En cada capítulo se exponen los objetivos específicos, las variables consideradas (más allá de los componentes de la teoría de la acción planificada), las hipótesis, el método (participantes, instrumentos, procedimiento y análisis de datos), los resultados, la discusión, las limitaciones y las líneas futuras de investigación propuestas. El último capítulo (Capítulo 7) recoge las conclusiones de los estudios realizados y propuestas para ampliar el trabajo de esta Tesis.

Tras la bibliografía, los apéndices contienen datos adicionales analizados en los estudios. En particular, el apéndice A recoge la descripción de un estudio preliminar sobre la percepción del prestigio social de diferentes ocupaciones, con especial atención al emprendimiento. Este estudio y algunos resultados son mencionados en el Capítulo 2 (apartado 2. Emprendimiento en España). El apéndice B presenta la validación del Cuestionario de Intención Emprendedora en una muestra de estudiantes de Colombia (Laguía et al., 2017). En el apéndice C se analizan las diferencias en intención emprendedora entre estudiantes de distintas titulaciones universitarias que incluye datos adicionales a los presentados en los estudios 1 y 2. El apéndice D está relacionado con el estudio 2 y presenta la intención laboral de la muestra (esto es, la intención de seguir una carrera profesional en el emprendimiento, el emprendimiento social o el empleo por cuenta ajena en una empresa privada, una entidad pública o una organización no gubernamental) así como una serie de correlatos de la

creatividad autopercebida. Por su parte, el apéndice E recoge la validación de la escala “Emprendimiento: Tarea y Relación” (ETR) mediante análisis factorial exploratorio y confirmatorio. Esta es la escala que se ha adaptado del área del liderazgo al emprendimiento y la validación ha supuesto el primer paso para su utilización en los estudios 4 y 5.

## Capítulo 2. Marco teórico y metodológico

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## Chapter 2. Theoretical and methodological framework



## **1. DEFINICIÓN DE EMPRENDIMIENTO**

Existen múltiples definiciones de emprendimiento, por lo que el objetivo de este primer apartado es clarificar qué se entiende por emprendimiento a lo largo de esta Tesis. En primer lugar, el emprendimiento es frecuentemente utilizado como sinónimo de autoempleo (Hofstede et al., 2004). En España, la “Ley 14/2013, de 27 de septiembre, de apoyo a los emprendedores y su internacionalización” identifica en su Artículo 3 que “Se consideran emprendedores aquellas personas, independientemente de su condición de persona física o jurídica, que desarrollen una actividad económica empresarial o profesional, en los términos establecidos en esta Ley”; por otra parte, la “Ley 20/2007, de 11 de julio, del Estatuto del trabajo autónomo” señala que “La presente Ley será de aplicación a las personas físicas que realicen de forma habitual, personal, directa, por cuenta propia y fuera del ámbito de dirección y organización de otra persona, una actividad económica o profesional a título lucrativo, den o no ocupación a trabajadores por cuenta ajena. Esta actividad autónoma o por cuenta propia podrá realizarse a tiempo completo o a tiempo parcial” (Artículo 1). Es decir, el término persona autónoma o trabajadora por cuenta propia sería más restrictivo que el de persona emprendedora. Sin embargo, mientras que no existe un registro de personas emprendedoras, en el caso de España sí que se registran el número de empresas creadas y el número de personas dadas de alta en el Régimen Especial de Trabajadores por Cuenta Propia o

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<sup>5</sup> El chef, en un *showcooking* en El Huerto de Lucas, 11 de julio de 2015, en referencia a que la tortilla de patata, uno de los platos más representativos de la cocina española, no tiene una tradición tan larga, pues no fue hasta el descubrimiento de América cuando se introdujo la patata en la dieta en España.

Autónomos, RETA, de la Seguridad Social. Es decir, en las estadísticas nacionales e internacionales se puede comparar el número de personas autónomas, el porcentaje de hombres y mujeres o las tasas de altas y bajas, así como el número de microempresas, empresas pequeñas, medianas y grandes, no pudiéndose operacionalizar el término persona emprendedora (en los informes internacionales publicados por el consorcio GEM sí se define una tasa de actividad emprendedora por países, como se expondrá más adelante). Por tanto, esta Tesis se centra en la intención emprendedora (intención de “crear tu propia empresa”), pero cuando se reporten datos y estadísticas se señalarán aquellos que correspondan a personas autónomas o trabajadoras por cuenta propia o sobre el número de empresas. De hecho, la forma más simple de emprendimiento es el autoempleo (Blanchflower, 2000). En este sentido, en esta Tesis se entiende que crear tu propia empresa puede referirse tanto a crear legalmente una sociedad como por ejemplo a ser una persona autónoma que crea su consulta de psicología o su clínica veterinaria, que en un principio no tiene personas contratadas, y que puede tener un nombre comercial para su página web o local pero que realiza las facturas como persona física.

Desde una perspectiva académica, ya hace 30 años Gartner (1989) hizo un análisis sobre la definición de persona emprendedora, destacando, entre otros aspectos, que en la literatura existen muchas y vagas definiciones, que en muchos estudios no se aporta una definición y que pocos estudios emplean una misma definición. Gartner (1989) entonces propone que la investigación debe centrarse en lo que la persona emprendedora hace: crear una nueva organización. Esta definición no obstante plantea la cuestión de si una persona que es dueña de un pequeño negocio es una persona emprendedora o no. De acuerdo a Gartner (1989), el emprendimiento termina cuando la fase de creación de una organización finaliza. Quizá en este caso, el término más adecuado en castellano sea el de empresario o empresaria, aunque dado que esta Tesis se centra en la fase pre-lanzamiento del proceso emprendedor (Figura 1.1), se pregunta por la intención de emprender en lugar de por la intención de convertirse en una persona empresaria. Sin embargo, la definición de Gartner (1989) no está exenta de

críticas. Así, Shane y Venkataraman (2000) consideran que no incluye algunas consideraciones y que esta área de investigación del emprendimiento debe incluir el estudio de las fuentes de oportunidades; el proceso de descubrimiento, evaluación y explotación de estas oportunidades; y a las personas que llevan a cabo este proceso. Asimismo, Shane y Venkataraman (2000) argumentan que el emprendimiento puede incluir la creación de nuevas organizaciones, pero que no es un requisito.

Otro término relacionado es el de intraemprendimiento o emprendimiento corporativo, que hace referencia a aquellas personas que realizan conductas emprendedoras dentro de las organizaciones para las que trabajan por cuenta ajena (Moriano, Topa, Valero y Lévy, 2009; Wakkee, Elfring y Monaghan, 2010). Si bien el intraemprendimiento tiene un impacto positivo en la organización y en la propia persona (Gawke, Gorgievski y Bakker, 2017), en este caso la persona no abandona la organización en la que trabaja y no es objeto de estudio de esta Tesis. Tampoco es objeto de estudio específico aquí el emprendimiento social vs. comercial, aunque el interés académico por el emprendimiento social está creciendo (Solórzano-García & Navío-Marco, en prensa; Stephan & Drencheva, 2017). El emprendimiento social, frente a otras formas de emprendimiento, prioriza la creación de riqueza y desarrollo social sobre el valor económico y engloba diferentes perspectivas, desde las iniciativas emprendedoras sin ánimo de lucro a la mitigación de problemas sociales y catalización de la transformación social, pasando por prácticas socialmente responsables de negocios comerciales (Mair y Martí, 2006). Por último, es importante también distinguir el autoempleo o emprendimiento independiente de otras formas de empleo, como el autoempleo involuntario (Kautonen et al., 2010) o falso autoempleo (Moore y Newsome, 2018; Thörnquist, 2015). De hecho, hay una creciente preocupación sobre cómo estos otros tipos de autoempleo pueden precarizar la situación laboral, por ejemplo, en cuanto a la percepción de vacaciones pagadas, salario mínimo o protección por despido (Böheim y Muehlberger, 2006). Esta Tesis no se centra en estas formas de autoempleo, que responderían más a una motivación por necesidad (falta de una alternativa laboral mejor) que al emprendimiento por oportunidad (identificación de una

oportunidad de negocio). Mientras que la decisión de emprender por necesidad se asocia con factores de “empuje” (*push*), la motivación por oportunidad se vincula con factores de “arrastre” (*pull*) (van der Zwan, Thurik, Verheul y Hessels, 2016). Asimismo, la motivación por oportunidad se relaciona con la calidad de la actividad emprendedora en una economía dada (Singer et al., 2018) y mayor tiempo como persona autoempleada (Block y Sandner, 2009).

## **2. EMPRENDIMIENTO EN ESPAÑA**

Dado que el emprendimiento está relacionado con el crecimiento económico y la creación de empleo (Acs et al., 2012; Audretsch, Keilbach y Lehmann, 2006; Carree y Thurik, 2010; OCDE, 2004; Wong et al., 2005), desde diferentes instituciones se intenta fomentarlo (por ejemplo, Comisión Europea, 2013). No obstante, existen notables diferencias entre regiones (particularmente entre Europa y Estados Unidos) así como una brecha de género ya que el número de mujeres emprendedoras es menor que el número de hombres emprendedores en la mayoría de los países (Kelley et al., 2015; Singer et al., 2018). El *Global Entrepreneurship Monitor (GEM) Consortium*<sup>6</sup> anualmente publica un informe en el que se recoge la tasa de actividad emprendedora (*Total Entrepreneurial Activity, TEA*) en distintos países. La tasa de actividad emprendedora o tasa de emprendedores y emprendedoras con empresas en fase inicial (nacientes y nuevas) se define como el porcentaje de población adulta (entre 18 y 64 años) que es propietaria o copropietaria fundadora de empresas de nueva creación que hayan persistido en el mercado por un periodo comprendido entre 0 y 42 meses (tres años y medio). De acuerdo a los datos del último informe publicado (Singer et al., 2018), Europa es la región con menor actividad emprendedora (Figura 2.1).

En particular en nuestro contexto europeo, ya el Libro Verde sobre el espíritu empresarial de la Comisión Europea (2003) planteaba que “Europa necesita fomentar el dinamismo

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<sup>6</sup> <http://www.gemconsortium.org/>



empresarial de un modo más eficaz. Necesita más negocios nuevos y prósperos que deseen beneficiarse de la apertura del mercado y embarcarse en empresas creativas o innovadoras de explotación comercial a mayor escala” (p. 5). Se identificaba la importancia de fomentar el emprendimiento por su contribución a la creación de empleo y crecimiento económico, así como a la cohesión económica y social. Ya entonces se apuntaba que la actitud de la ciudadanía hacia la iniciativa empresarial variaba mucho de unos Estados miembros a otros, y de unas regiones a otras, y que el dinamismo empresarial era inferior al de Estados Unidos. Entre otras medidas, se proponía que la educación y la formación debían contribuir a impulsar el espíritu empresarial, fomentando una actitud favorable, la sensibilización hacia esta salida profesional y las competencias. También se recogía que el espíritu empresarial debía ser objeto de una gran promoción centrada especialmente en las mujeres y otros grupos con escasa representación. Podría decirse que muchos de estos retos siguen actualmente vigentes.

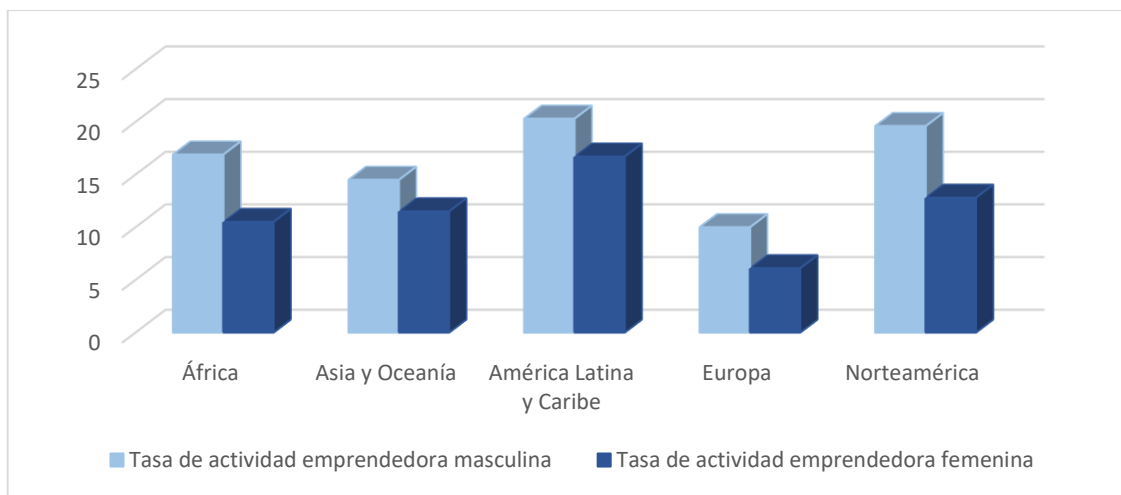


Figura 2.1. Tasa de actividad emprendedora en diferentes regiones del mundo.

Elaboración propia a partir de los datos publicados en el informe GEM Global Report 2017/2018 (Singer et al., 2018).

Al Libro Verde han seguido diferentes comunicaciones e informes, como “Aplicar el programa comunitario de Lisboa: Fomentar la mentalidad empresarial mediante la educación y la

formación” (Comisión Europea, 2006), “La iniciativa emprendedora en la enseñanza superior, especialmente en estudios no empresariales” (Comisión Europea, 2008), “Una segunda oportunidad para las personas emprendedoras: Prevención de la bancarrota, simplificación de procedimientos y apoyo para un nuevo comienzo” (Comisión Europea, 2011), “Plan de Acción sobre Emprendimiento 2020: Relanzar el espíritu emprendedor en Europa” (Comisión Europea, 2013) o “Políticas sobre el emprendimiento de las mujeres” (Comisión Europea y OCDE, 2017), que ponen de manifiesto el interés que sigue teniendo el fomento del emprendimiento. Cabe mencionar a este respecto que cada vez se presta mayor atención al emprendimiento social (Comisión Europea, 2014, 2016).

Si bien la imagen de las personas que emprenden no siempre ha sido muy positiva en Europa (Boyle y Kelly, 2016; Stephan, Lukes, Dej y Richter, 2007), en la actualidad las personas emprendedoras son vistas internacionalmente como nuevos héroes culturales (Malach-Pines, Levy, Utasi y Hill, 2005). Así, no es de sorprender que las personas con éxito en el emprendimiento atraigan la atención pública. Los libros de biografías y las entrevistas tanto en prensa como en televisión han crecido, así como los blogs de internet y las páginas webs se han expandido en los últimos años. En 2007, la Comisión Europea publicó el informe “Promoting entrepreneurship on TV and in other audio-visual media” realizado por un grupo de expertos que analizaron cómo los Estados miembros podían cooperar con los medios de comunicación para ayudar a generar una cultura más emprendedora en Europa. Este informe respondía de este modo a la menor preferencia hacia el emprendimiento, así como una percepción menos positiva en Europa en comparación con Estados Unidos, y analizaba las posibilidades que la televisión, la radio e internet ofrecen para mejorar la imagen del emprendimiento en Europa. Los medios de comunicación pueden presentar el emprendimiento y también proporcionar información de una manera interesante y entretenida. Se pueden presentar modelos de rol para atraer a más personas, especialmente jóvenes. Entre los programas que se proponen en este informe, destacan los reportajes con contenido relacionado con el emprendimiento que no sea solo económico, documentales (historias de

éxitos de personas emprendedoras conocidas), programas de información y asesoramiento, películas o series protagonizadas por personas emprendedoras (o con papeles importantes), docu-series sobre personas emprendedoras, o concursos de jóvenes o potenciales personas emprendedoras. Algunos de estos formatos comunican adecuadamente información sobre el emprendimiento (aunque no están dirigidos a grandes audiencias) y otros pueden ser menos informativos, pero estar más orientados a inspirar o a mejorar la imagen de las personas emprendedoras. En general, estos formatos varían en flexibilidad, información, entretenimiento, actitudes, condiciones legales y audiencias.

Es interesante la profundidad con la que se ha analizado en Reino Unido cómo la presentación de personas emprendedoras en televisión ha cambiado positivamente en los últimos años (Boyle y Kelly, 2016; Swail et al., 2014). De hecho, muchas personas emprendedoras se han convertido en celebridades debido a su participación en programas de televisión. En España, el emprendimiento ha inspirado programas y concursos de televisión tales como *Tu Oportunidad (Dragons' Den)*<sup>7</sup>, *Pesadilla en la cocina (Kitchen Nightmares)*<sup>8</sup>, *El Aprendiz (The Apprentice)*<sup>9</sup>, *Emprende (Emprende TVE, Emprende Express y Emprende Digital)*<sup>10</sup>, *Código Emprende*<sup>11</sup> o *Fábrica de Ideas de TVE*<sup>12</sup>. Algunos de estos programas son la versión española de formatos populares en otros países. Por ejemplo, *Dragons' Den* tiene su origen en Japón y *The Apprentice* en Estados Unidos, pero existen versiones de estos programas en muchos países europeos. Junto con los programas emitidos específicamente en cada país, se pueden seguir también otros programas emitidos en otros países, como *The Secret Millionaire* (Reino Unido) o *America's Next Great Restaurant* (Estados Unidos). Sin embargo,

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<sup>7</sup> <http://www.rtve.es/alacarta/videos/tu-oportunidad/>

<sup>8</sup> <https://www.atresplayer.com/lasexta/programas/pesadilla-en-la-cocina/>

<sup>9</sup> <https://www.lasexta.com>. Una temporada (2009/2010).

<sup>10</sup> <http://www.rtve.es/television/emprende/>

<sup>11</sup> <http://www.rtve.es/television/codigo-emprende/>

<sup>12</sup> <http://www.rtve.es/television/fabricadeideasdetve/>

estos programas no han resultado tan populares en España como en otros países y por ejemplo *Tu Oportunidad (Dragons' Den)* fue emitido solo en 2013 con alrededor de un millón de telespectadores. Más popular ha resultado *Pesadilla en la cocina (Kitchen Nightmares)* con seis temporadas o *Fábrica de Ideas* de TVE con nueve temporadas (más centrado en entrevistas que en formato de concurso).

En este contexto, ha surgido el neologismo en inglés *entre-tainment* referido a “televisual media that stage and perform entrepreneurship for entertainment purposes” (medios de comunicación televisivos que ponen en escena y representan el emprendimiento con fines de entretenimiento) (Swail et al., 2014, p. 859), que en castellano se podría traducir por “empren-tenimiento”. Mientras que el interés por explorar la relación entre medios de comunicación y emprendimiento ha sido el origen de diferentes estudios en otros países (Hindle y Klyver, 2007; Swail et al., 2014), no ha sido posible localizar investigaciones en esta línea en España.

La percepción de que las personas que emprenden tienen un alto estatus se asocia con la auto-percepción por parte de estudiantes de que poseen características relevantes para el emprendimiento (por ejemplo, independencia, iniciativa, compromiso o amor por los retos) y una mayor tendencia a asumir riesgos, así como una mayor actividad emprendedora del país (Malach-Pines et al., 2005). Dada la ausencia de literatura al respecto en España, se ha realizado un estudio previo exploratorio<sup>13</sup> (906 participantes, 52.5% mujeres,  $M = 37.8$  años,  $DT = 11.5$ ) donde se presentaban 15 ocupaciones y se pedía valorar su prestigio en la sociedad con una escala de respuesta tipo Likert desde 1 (*muy bajo*) a 7 (*muy alto*). Los resultados se muestran en la Tabla 2.1. Aunque el emprendimiento recibió una media de 4.98, ocupó la posición 10 de las 15 listadas. Malach-Pines et al. (2005) también analizaron el prestigio percibido de varias ocupaciones en tres países (Israel, Estados Unidos y Hungría) y encontraron que el emprendimiento de base tecnológica (en lugar del emprendimiento en

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<sup>13</sup> En el apéndice A se presenta con más detalle este estudio.

general como en el estudio realizado en España) ocupó el tercer puesto (el segundo en Israel) del listado de ocho ocupaciones. En dicho estudio, medicina y abogacía recibieron las mejores valoraciones, mientras que ciencia, dirección y periodismo ocuparon posiciones intermedias, y profesorado y trabajo social recibieron las peores valoraciones. Por el contrario, en el estudio realizado en España, la percepción del emprendimiento parece ser menos positiva. Esto está en línea con los resultados de Singer et al. (2018), quienes recogen que el porcentaje de población entre 18 y 64 años que considera que las personas emprendedoras con éxito tienen un alto estatus asciende a 67.3% en Europa (vs. 74.7% en Norteamérica), y es incluso más bajo en España (47.9%).

Tabla 2.1

*Prestigio social percibido de 15 ocupaciones*

	<i>M (DT)</i>
Medicina	6.61 (0.72)
Ingeniería	6.13 (0.97)
Arquitectura	6.03 (0.98)
Dirección	5.97 (1.16)
Ciencia	5.92 (1.32)
Abogacía	5.63 (1.24)
Enfermería	5.09 (1.21)
Psicología	5.05 (1.24)
Policía	4.99 (1.41)
<b>Emprendimiento</b>	4.98 (1.38)
Fisioterapia	4.96 (1.22)
Profesorado	4.95 (1.36)
Informática	4.88 (1.26)
Periodismo	4.66 (1.34)
Trabajo Social	4.46 (1.34)

Nota. *N* = 906.

Según los datos del informe internacional GEM (Singer et al., 2018), el 58.5% de las personas encuestadas en Europa creen que el emprendimiento es una buena opción de carrera profesional (53.8% en España). Este porcentaje es el más bajo de todas las regiones (76.2% en África, 64.3% en Norteamérica, 61.9% en Asia y Oceanía y 60.8% en Latinoamérica y Caribe). Asimismo, en Europa se recoge la media más baja de publicidad en los medios sobre actividad emprendedora<sup>14</sup> (54.3%). En España, este porcentaje es aun más bajo (50.9%). El estudio 3 de esta Tesis intenta profundizar en cómo los medios de comunicación pueden influir en la intención emprendedora en España.

En los párrafos anteriores se ha tratado de reflejar que el interés por el emprendimiento es más bajo en España que en otros países. Pero lo que resulta más preocupante es que este interés ha decrecido en los últimos años. En primer lugar, el índice TEA mostró en España un máximo en el año 2007 que, tras la crisis económica, no se ha vuelto a alcanzar (Figura 2.2). Estos años de crisis han coincido con los mayores porcentajes de población que indicaba que esperaba emprender en los tres años siguientes, porcentaje que ha descendido prácticamente a la mitad en el año 2017. Llama la atención particularmente la diferencia en torno al año 2012 entre la intención de emprender y la tasa de emprendimiento. Diversos factores pueden influir en esta diferencia, tanto personales como del entorno económico y social. Entre ellos, el desempleo puede incrementar la intención de emprender por necesidad, es decir, falta de una alternativa mejor. Sin embargo, cuando la tasa de desempleo se reduce, se puede considerar el emprendimiento como una alternativa menos interesante que el empleo por cuenta ajena. La falta de empleo puede influir también en una menor disponibilidad de recursos (económicos o redes de contactos, por ejemplo) y también en una mayor dificultad de localizar recursos económicos para arrancar la idea de negocio en el entorno familiar o en las entidades financieras. En el informe GEM España 2017/2018 (Peña, Guerrero, González-Pernía y

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<sup>14</sup> Porcentaje de población adulta de edades entre 18 y 64 años que creen que hay mucha atención positiva por parte de los medios de comunicación hacia el emprendimiento en su país.

Montero, 2018) se recoge que en el año 2012 la percepción de oportunidades para emprender en los 6 meses siguientes fue la más baja de los datos recogidos en el periodo 2005-2017. Asimismo, en 2011-2012 la percepción de que emprender brinda estatus social y económico fue más positiva que en otros años, al igual que la opinión sobre la difusión del emprendimiento en los medios de comunicación fue especialmente positiva en 2012.

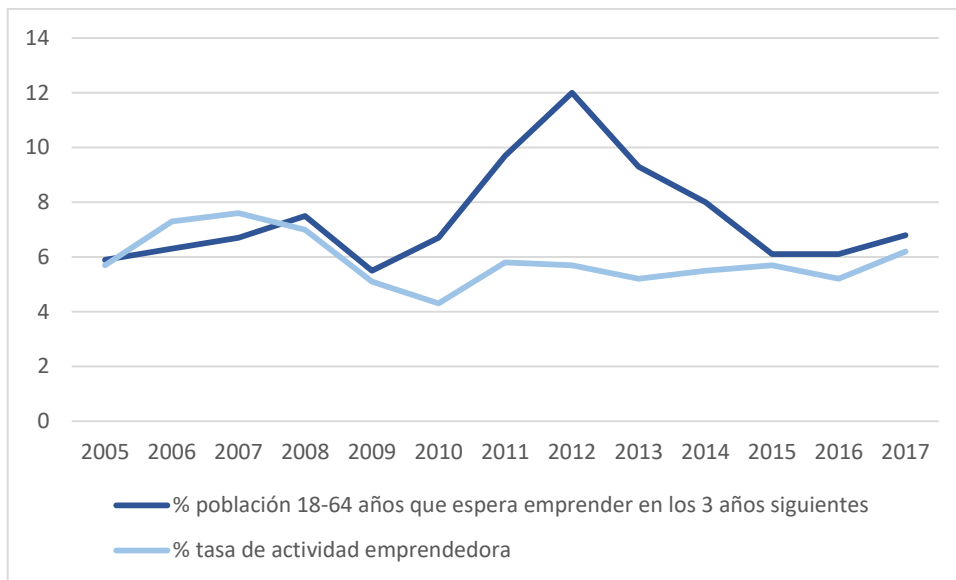


Figura 2.2. Tasa de actividad emprendedora e intención emprendedora en España.

Elaboración propia a partir de los datos publicados en el informe GEM España 2017/2018 (Peña et al., 2018).

## 2.1. Emprendimiento y género

En la Unión Europea, el porcentaje de autoempleo femenino (% del empleo femenino = 11.91%) es menor que el autoempleo masculino (% de empleo masculino = 19.30%), tal y como también ocurre en Norteamérica (mujeres = 7.85%; hombres = 12.88%) y en los países miembros de la Organización para la Cooperación y Desarrollo Económicos (OCDE, mujeres = 13.48%; hombres = 19.25%) (Banco Mundial, 2017). El porcentaje de autoempleo femenino en España en 2015 ascendió a 12.65%, mientras que el porcentaje de autoempleo masculino fue un 20.32%. Existe una brecha de género tanto para las empresas en los estados iniciales

(empresas nacientes o que no han estado en operación durante más de 42 meses) y, especialmente, en los negocios ya establecidos (negocios que han sobrevivido en el mercado durante más de 42 meses), brecha que es más acusada en los países con mayor producto interior bruto per cápita (Allen, Langowitz y Minniti, 2007). En la Figura 2.3 se recoge la evolución temporal en el periodo 2005-2017 de las tasas de actividad emprendedora de mujeres y hombres en España.

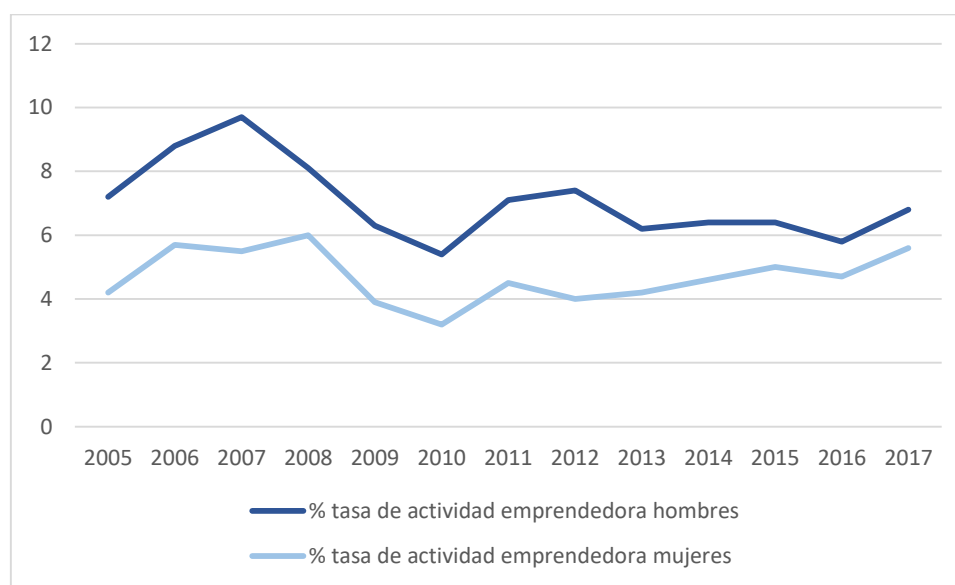


Figura 2.3. Tasa de actividad emprendedora de mujeres y hombres en España.

Elaboración propia a partir de los datos publicados en el informe GEM España 2017/2018 (Peña et al., 2018).

Diversos estudios han analizado las barreras que encuentran las mujeres para emprender destacando las dificultades de acceso a la financiación (Bigelow, Lundmark, Parks y Wuebker, 2014; Brush, Greene, Balachandra y Davis, 2018; Carter, Shaw, Lam y Wilson, 2007; Malmström, Johansson y Wincent, 2017). Los negocios creados por mujeres tienden a tener un menor tamaño y tasa de crecimiento, y frecuentemente se ubican en sectores considerados menos atractivos para una potencial financiación (Gatewood, Brush, Carter, Greene y Hart, 2009). Así, las mujeres emprendedoras representan una minoría en el sector tecnológico y en su mayoría se enmarcan en el sector servicios. De hecho, las mujeres participan



mayoritariamente en el sector orientado al consumo en el que es considerado fácil entrar pero en el que es difícil mantenerse por las bajas barreras de entrada y la alta competencia (Kelley et al., 2015). Si bien las mujeres han hecho progresos en atraer capital en la última década, existen todavía importantes diferencias entre hombres y mujeres (Brush, Greene, et al., 2018). Las investigaciones ponen de manifiesto que las mujeres encuentran barreras para obtener capital de entidades financieras o potenciales inversores (Alsos, Isaksen y Ljunggren, 2006; Gatewood et al., 2009), lo que se ha denominado el *techo verde* en analogía al techo de cristal. Incluso cuando se controlan otros factores en investigaciones con diseños experimentales y muestras homogéneas de estudiantes de MBA, las empresas creadas por mujeres muestran una desventaja para atraer capital en comparación a cuando se indica que el creador de la empresa es un hombre (Bigelow et al., 2014). Cabe destacar que no en todos los estudios se encuentra que las mujeres emprendedoras tengan más problemas para obtener financiación. Por ejemplo, Eddleston, Ladge, Mitteness y Balachandra (2016) no encontraron diferencias en la cantidad de dinero recibida por mujeres y hombres, aunque el sexo moderó otras variables: los hombres emprendedores recibieron más dinero que las mujeres en función del número de empleados y el rendimiento pasado.

Además de mayores dificultades de acceso a la financiación que los hombres, entre los retos que las mujeres afrontan cuando crean un negocio se ha identificado que, con frecuencia, la cultura y la sociedad no apoyan el emprendimiento femenino, que las mujeres tienden a percibir que carecen de las competencias para emprender, tienden a tener redes más pequeñas y menos efectivas o que las políticas familiares desincentivan su participación en el mercado de trabajo (Comisión Europea y OCDE, 2017). Por otra parte, sus potenciales clientes pueden percibir que hay una falta de ajuste (modelo *lack of fit*) entre las características de quien emprende y las características de la industria, y como consecuencia no elegir los servicios o productos de las mujeres emprendedoras (Heilman y Chen, 2003). Es decir, las mujeres emprendedoras en sectores no tradicionalmente femeninos (por ejemplo, la construcción) encontrarían más dificultades que en sectores femeninos (por ejemplo, cuidado

personal). En cuanto a la familia, podría tener un mayor impacto en las mujeres que en los hombres. Jennings y McDougald (2007) sugieren que es más probable que las mujeres al frente sus propias empresas experimenten mayor conflicto familia-trabajo que sus equivalentes hombres. Asimismo, es más probable que utilicen estrategias de afrontamiento para este conflicto que limiten el crecimiento de sus empresas.

Pero no solo hay menos mujeres emprendedoras (fase de lanzamiento o post-lanzamiento, véase Figura 1.1 en el Capítulo 1. Introducción), sino que también en la fase de pre-lanzamiento las mujeres tienden a puntuar más bajo en los cuestionarios de intención emprendedora (Haus et al., 2013; Maes et al., 2014; Moriano, 2005; Zampetakis et al., 2017; Zhang et al., 2014). En esta línea, los resultados del proyecto internacional GUESSS (Sieger, Fueglistaller y Zellweger, 2016), realizado en su última oleada en 50 países y más de 1000 universidades, ponen de manifiesto que el 7.1% de las estudiantes desea optar por el emprendimiento como carrera profesional, frente al 11.2% de los estudiantes. Las diferencias se mantienen cuando se pregunta al estudiantado por su intención de emprender a los cinco años después de terminar sus estudios ya que, en media, el 36.4% de las estudiantes aspira a emprender en comparación con el 40.8% de los estudiantes. Estas diferencias en intención emprendedora entre mujeres y hombres están relacionadas a su vez con diferencias en los antecedentes de la intención emprendedora según el modelo de la teoría de la acción planificada, como son la actitud hacia emprender, la norma subjetiva y la autoeficacia. Así, en un estudio realizado en España con una muestra de 2059 estudiantes (Moriano, 2005), se encontró que la norma subjetiva tenía un coeficiente de regresión mayor sobre la intención en las mujeres que en los hombres, mientras que ocurría lo contrario con el control conductual percibido o autoeficacia emprendedora. Es decir, las mujeres participantes en dicho estudio se veían más afectadas que los hombres por los aspectos sociales que conforman la norma subjetiva a la hora de plantearse desarrollar su carrera profesional a través del emprendimiento. Más recientemente, Oliveira et al. (2015) han analizado también dentro del marco de la teoría de la acción planificada la influencia del género en la intención

empresaria de una muestra de 315 estudiantes del norte de Portugal. Los resultados mostraron que la actitud y la norma subjetiva ejercían una influencia positiva y significativa en la intención emprendedora de las mujeres, pero no existían diferencias significativas de medias entre mujeres y hombres en estas variables de la teoría de la acción planificada. Por el contrario, la intención emprendedora de los hombres estaba fuertemente asociada a la autoeficacia emprendedora, siendo las puntuaciones medias inferiores en el caso de las mujeres. Estos resultados van en la línea de los estudios que apuntan que las mujeres, en comparación con los hombres, manifiestan una mayor falta de conocimiento, mayor temor al fracaso y más dudas en relación a su eficacia para desempeñar las tareas que requiere la creación y gestión de una nueva empresa (Comisión Europea y OCDE, 2017; Singer et al., 2018; Wilson, Kickul y Marlino, 2007).

Como se ha indicado en el apartado anterior, los medios de comunicación y otras fuentes de información tienen un profundo impacto en las personas, especialmente en las más jóvenes, así que el efecto del estereotipo de las personas emprendedoras es un aspecto importante a considerar (Swail et al., 2014). La representación en los medios de comunicación del emprendimiento está dominada por las figuras masculinas (Achtenhagen y Welter, 2011; Hamilton, 2013). En su análisis de 4955 artículos de periódico sobre mujeres emprendedoras y negocios fundados por mujeres publicados en Alemania entre 1995 y 2004, Achtenhagen y Welter (2011) encontraron que las mujeres están infrarrepresentadas en el discurso público sobre emprendimiento. Debido a esta representación del emprendimiento como una ocupación masculina, las mujeres tienen menos oportunidades de encontrar fuentes de identificación. Lo que es más, las mujeres emprendedoras son descritas más en términos de apariencia, ropas o situación familiar que los hombres emprendedores. De esta manera, tanto los estereotipos masculinos tradicionales como los modelos de rol se ven reforzados. Hombres y mujeres se exponen entonces a un mayor número de hombres emprendedores como consecuencia de que el emprendimiento es una ocupación tradicionalmente masculina. Esta exposición conduce a percibir una similitud entre las características masculinas y las

características del emprendimiento (Gupta et al., 2009). De hecho, las historias sobre grandes compañías tienden a centrarse en hombres de éxito como Bill Gates o Henry Ford, y las teorías del emprendimiento han sido desarrolladas y sometidas a prueba con muestras de hombres (Bird y Brush, 2002). Dada la ausencia de datos a este respecto en España, en el estudio exploratorio comentado anteriormente (véase Tabla 2.1 y apéndice A), se dividió aleatoriamente la muestra y se pidió indicar para 14 ocupaciones “De las personas de las que se habla o que aparecen en los medios de comunicación y que siguen estas opciones profesionales, ¿qué porcentaje dirías que son [mujeres/hombres]?” (Tabla 2.2).

Tabla 2.2

*Porcentaje percibido de mujeres y hombres en 14 ocupaciones que aparecen en medios de comunicación*

	¿Qué porcentaje dirías que son mujeres? N = 433	¿Qué porcentaje dirías que son hombres? N = 473
Enfermería	64.21 (21.96)	35.70 (19.37)
Trabajo Social	59.71 (22.11)	35.93 (19.60)
Profesorado	58.36 (18.91)	49.05 (17.20)
Periodismo	55.11 (18.24)	54.63 (16.15)
Medicina	44.94 (20.33)	63.92 (16.81)
Fisioterapia	41.84 (22.43)	53.99 (19.57)
Abogacía	40.96 (19.18)	67.05 (16.53)
<b>Emprendimiento</b>	<b>36.26 (20.26)</b>	<b>64.81 (17.05)</b>
Ciencia	34.01 (19.14)	66.04 (17.84)
Dirección	28.48 (18.89)	77.13 (17.01)
Arquitectura	28.36 (18.98)	71.09 (17.86)
Policía	27.58 (17.69)	76.26 (16.10)
Ingeniería	26.82 (18.49)	74.62 (16.35)
Informática	23.45 (17.19)	75.22 (17.69)

*Nota.* Estudio preliminar no publicado (véase apéndice A).

Existe consenso en que se percibe que se presentan más hombres emprendedores que mujeres emprendedoras en los medios de comunicación, por lo que se confirma que en España las mujeres disponen de menos modelos de rol femeninos en los que fijarse. Los estudios 4 y 5 de esta Tesis analizan si en España se perciben diferencias de género en el emprendimiento y si las personas que se adscriben características relevantes para el emprendimiento (clasificadas en orientación a la tarea y a la relación) presentan mayor intención emprendedora.

## 2.2. Emprendimiento de estudiantes de nivel universitario

En esta Tesis se presta especial atención a la intención emprendedora de estudiantes de nivel universitario (en los estudios 1 y 2). El nivel educativo, por una parte, puede favorecer la adquisición de habilidades y competencias (por ejemplo, relacionadas con la gestión) que incrementen la probabilidad de emprender (véase van der Sluis et al., 2008). Sin embargo, también puede disminuir la probabilidad de emprender al posibilitar más oportunidades en el mercado laboral tradicional trabajando por cuenta ajena. De hecho, diferentes informes en la Unión Europea y en España (por ejemplo, INE, 2018) ponen de manifiesto que a mayor nivel educativo mayor es la tasa de empleo y menor la tasa de paro (Figura 2.4).

Si bien van der Sluis et al. (2008) en su análisis de meta-regresión no encuentran un efecto significativo sobre el nivel educativo en la auto-selección o entrada en el emprendimiento, una vez que se ha emprendido, el rendimiento (ya sea medido como ingresos, supervivencia del negocio, duración o crecimiento) está positivamente asociado con los años de escolarización. Más aún, la relación entre educación y rendimiento es más fuerte en el caso de las mujeres emprendedoras, en comparación con los hombres emprendedores. Cabe destacar que van der Sluis et al. (2008) sí encuentran un efecto significativo del abandono de los estudios universitarios en la entrada en el emprendimiento, lo que atribuyen al “efecto Bill Gates”<sup>15</sup>,

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<sup>15</sup> El “efecto Bill Gates”, de acuerdo a van der Sluis et al. (2008), hace referencia a que el abandono del sistema educativo podría ser común entre las personas emprendedoras que comienzan. De hecho,

aunque también plantean otras explicaciones plausibles (por ejemplo, que las opciones en el empleo por cuenta ajena les empujen al emprendimiento). Asimismo, sus resultados apuntan a que la formación de postgrado se relaciona con el emprendimiento, lo cual atribuyen a profesionales con alta cualificación (de la abogacía o la medicina) que establecen su propio despacho tras finalizar los estudios.

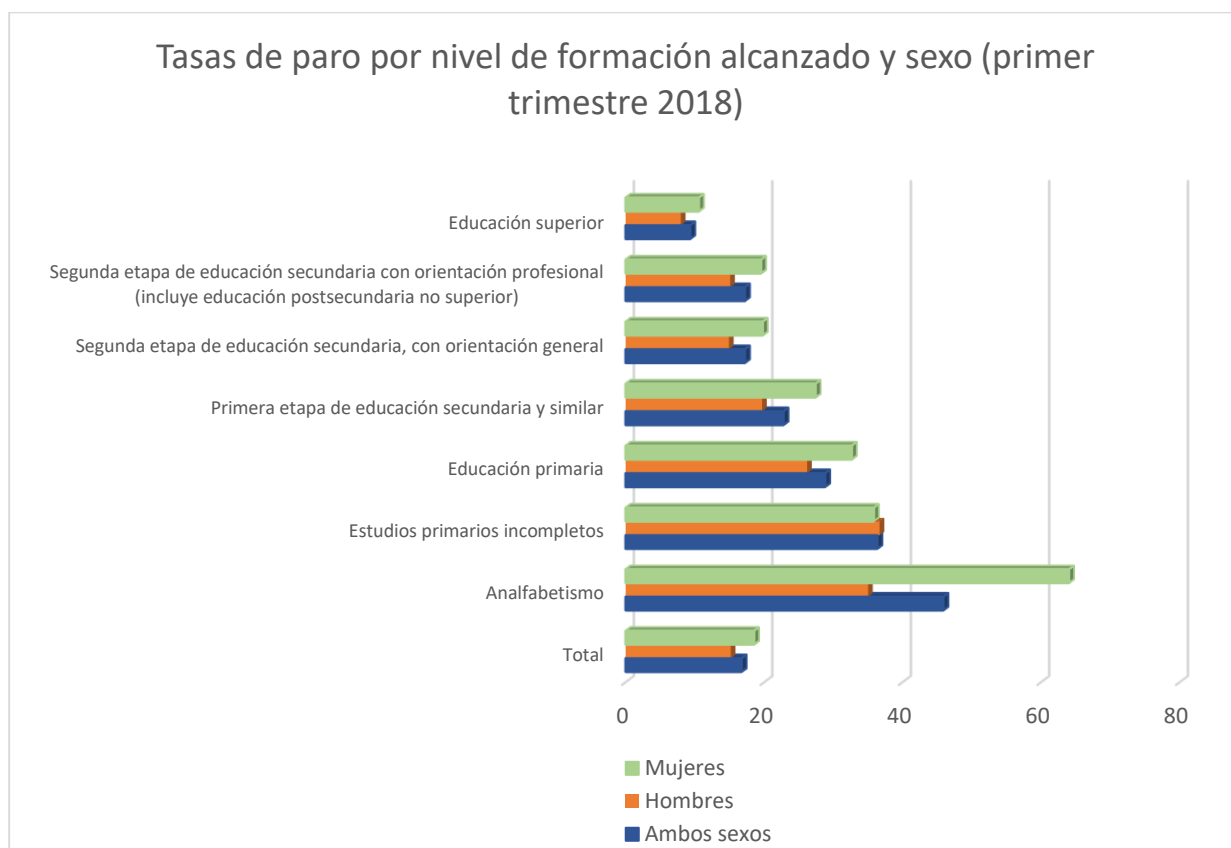


Figura 2.4. Tasa de paro en España (2018, primer trimestre).

Elaboración propia a partir de los datos publicados por el Instituto Nacional de Estadística (población de 16 años en adelante). <http://www.ine.es/jaxiT3/Datos.htm?t=6393>

No se han localizado estudios de esta profundidad en España. Sí cabe mencionar que los datos del informe anual GEM (Peña et al., 2018) ponen de manifiesto que en el año 2017 la mayoría de las personas de las empresas nuevas o nacientes tenían estudios superiores

otras personas emprendedoras famosas, como Steve Jobs o Mark Zuckerberg, también abandonaron sus estudios universitarios.

(licenciaturas, ingenierías o equivalente, 40.5% del TEA) y postgrado (9.3% del TEA), mientras que las personas con estudios secundarios representaban un 38.7%, las personas con estudios primarios un 10% y las personas sin estudios un 1.5%. No ocurre sin embargo lo mismo en el caso de las personas emprendedoras potenciales, donde la mayoría cuentan con estudios secundarios (42.6% del TEA), seguidas por las personas con estudios superiores y postgrado (40.2% del TEA), o en las empresas consolidadas (estudios secundarios: 36.6% del TEA; estudios superiores y postgrado: 35.8% del TEA). En cualquier caso, esta diferencia en las tasas de emprendimiento potencial y empresas consolidadas es pequeña.

Cabe destacar que el emprendimiento es una competencia clave para el aprendizaje permanente en el marco de referencia europeo (Comisión Europea, 2013), y tanto si se acaba creando una empresa como si no, el estudiantado puede beneficiarse de este aprendizaje. Aunque dos estudios de esta Tesis (estudios 1 y 2) se centran en estudiantes de nivel universitario, también es importante la educación en emprendimiento en otros niveles educativos. Actualmente, el Marco Estratégico Educación y Formación (ET2020)<sup>16</sup> constituye el entorno de cooperación europea en educación y formación. Este marco establece cuatro objetivos, entre los que se encuentra “Incrementar la creatividad<sup>17</sup> y la innovación, incluido el espíritu empresarial, en todos los niveles de la educación y la formación”.

A este respecto, en España la “Ley 14/2013, de 27 de septiembre, de apoyo a los emprendedores y su internacionalización” incluye diversas medidas orientadas a la adquisición por parte de las personas jóvenes de las competencias y habilidades requeridas para emprender a través del sistema educativo, tanto en el nivel de primaria y secundaria como en el universitario. Estas medidas han sido posteriormente desarrolladas

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<sup>16</sup> <http://www.mecd.gob.es/educacion-mecd/mc/redie-eurydice/prioridades-europeas/et2020.html>

<sup>17</sup> En línea con el estudio 2, también la creatividad es una de las competencias clave que se ha identificado para los trabajos del futuro (Foro Económico Mundial, 2016).

reglamentariamente<sup>18</sup> en el “Real Decreto 126/2014, de 28 de febrero, por el que se establece el currículo básico de la Educación Primaria” y el “Real Decreto 1105/2014, de 26 de diciembre, por el que se establece el currículo básico de la Educación Secundaria Obligatoria y del Bachillerato”, así como en la “Orden ECD/65/2015, de 21 de enero, por la que se describen las relaciones entre las competencias, los contenidos y los criterios de evaluación de la educación primaria, la educación secundaria obligatoria y el bachillerato”.

Según se indica en el Artículo 2 de la “Orden ECD/65/2015, de 21 de enero, por la que se describen las relaciones entre las competencias, los contenidos y los criterios de evaluación de la educación primaria, la educación secundaria obligatoria y el bachillerato”, el “sentido de iniciativa y espíritu emprendedor” es una competencia clave en el Sistema Educativo Español que se describe así: “La competencia sentido de iniciativa y espíritu emprendedor implica la capacidad de transformar las ideas en actos. Ello significa adquirir conciencia de la situación a intervenir o resolver, y saber elegir, planificar y gestionar los conocimientos, destrezas o habilidades y actitudes necesarios con criterio propio, con el fin de alcanzar el objetivo previsto”. La formación de esta competencia debe incluir conocimientos y destrezas relacionados con las oportunidades de carrera y el mundo del trabajo, la educación económica y financiera o el conocimiento de la organización y los procesos empresariales, así como el desarrollo de actitudes que conlleven un cambio de mentalidad que favorezca la iniciativa emprendedora, la capacidad de pensar de forma creativa, de gestionar el riesgo y la incertidumbre. Estas habilidades resultan muy importantes para favorecer tanto el nacimiento del emprendimiento social, como del intraemprendimiento, así como de futuros empresarios y empresarias.

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<sup>18</sup> Para más información, se puede consultar la página web del Ministerio de Educación y Formación Profesional, en particular la web creada en relación a la “Ley Orgánica 8/2013, de 9 de diciembre, para la mejora de la calidad educativa (LOMCE)”, publicada en el Boletín Oficial del Estado el día 10 de diciembre de 2013: <http://www.mecd.gob.es/educacion-mecd/mc/lomce>.



En este sentido, muchas universidades españolas han puesto en marcha iniciativas de educación tradicional basada en clases magistrales, junto a cátedras, premios y redes de *networking* (FUE, 2012; MINETUR, 2012). La universidad tiene sin duda un importante papel en el fomento de la cultura emprendedora entre sus estudiantes. Así, es habitual que se oferten diversos cursos sobre qué es el emprendimiento o cómo emprender o servicios específicos sobre emprendimiento a los que el estudiantado pueden asistir. No obstante, la investigación sobre educación emprendedora e intención emprendedora ha arrojado resultados dispares, ya que en algunos casos esta relación se ha considerado débil, mientras que en otros resulta positiva o incluso negativa.

A este respecto, Bae, Qian, Miao y Fiet (2014) han llevado a cabo un meta-análisis en el que analizan 73 estudios con una muestra total de más de 35.000 personas, concluyendo que esta relación es positiva y significativa, aunque pequeña. De hecho, la relación encontrada entre educación emprendedora (entendida como educación para las actitudes y habilidades emprendedoras) e intención emprendedora es mayor que la analizada para educación en administración de empresas (entendida como educación para trabajar en empresas ya establecidas) e intención emprendedora. Sin embargo, si se controla la intención emprendedora antes del programa de educación, la relación entre educación emprendedora e intención emprendedora tras el programa no resulta significativa. Por tanto, es preciso continuar investigando qué aspectos influyen positivamente en la intención emprendedora y a esto se orientan los estudios 1 y 2 de esta Tesis.

Por último, el tamaño de las muestras recogidas en los estudios de esta Tesis y la diversidad de titulaciones no permite concluir si existe mayor tendencia al emprendimiento en unas titulaciones que en otras<sup>19</sup>. Para intentar profundizar en esta cuestión, se han utilizado datos externos. En el año 2014, el Ministerio de Educación, Cultura y Deporte publicó el informe

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<sup>19</sup> En el apéndice C se presentan algunos análisis al respecto para las muestras de estudiantes de los estudios 1 y 2 de esta Tesis.

“Inserción laboral de los egresados universitarios. La perspectiva de la afiliación a la Seguridad Social”<sup>20</sup>, que constituye el primer informe de estas características en el que se analizan los datos del estudiantado egresado del año 2009-2010, y su transición al mercado de trabajo, desde la perspectiva de la afiliación a la Seguridad Social. En este informe se desglosa entre afiliación a la Seguridad Social y afiliación a la Seguridad Social en el régimen de autónomos durante los cuatro años posteriores a finalizar la titulación.

A continuación, se expone la información correspondiente a la afiliación a la Seguridad Social en el régimen de autónomos<sup>21</sup>. De las 148 titulaciones recogidas ( $N = 190.749$  personas, considerando todos los regímenes de afiliación), en 28 de ellas no se alcanza un 5% a los cuatro años de finalizar los estudios (por ejemplo, Medicina, Documentación, Ingeniería Aeronáutica o de Telecomunicación o distintas especialidades de Magisterio – Educación Infantil, Educación Primaria o Lengua extranjera). En la Tabla 2.3 se recogen los porcentajes de afiliación para las titulaciones con porcentajes más elevados a los cuatro años (ordenadas de mayor a menor porcentaje en 2014) y con una muestra superior a 500 personas. Destaca la afiliación en áreas de Ciencias de la Salud, como Odontología, Podología, Fisioterapia, Veterinaria y Óptica y, en menor porcentaje, Farmacia o Psicología. También las denominadas profesiones liberales (Abogacía, Arquitectura y algunas Ingenierías). En cuanto al sexo de las personas egresadas, en algunas titulaciones apenas se perciben diferencias a los cuatro años de finalizar sus estudios, por ejemplo, en Logopedia o Psicología estas diferencias no llegan al 1%. En cuatro titulaciones (Filología Eslava, Lingüística y algunas Ingenierías), las mujeres representan un porcentaje mayor que los hombres, aunque para interpretar estos resultados se debe considerar el pequeño tamaño de la muestra para estas titulaciones (entre 24 y 75

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<sup>20</sup> <http://www.mecd.gob.es/servicios-al-ciudadano-mecd/estadisticas/educacion/universitaria/estadisticas/insercion-laboral-.html>

<sup>21</sup> Aunque los datos publicados no estaban desagregados por sexo, al ser esta una variable relevante en esta Tesis (estudios 4 y 5), se procedió a solicitarlos.

Tabla 2.3

*Titulaciones con mayor porcentaje de afiliación a la Seguridad Social en régimen de autónomos*

Titulación	N total	Un año después de egresar (marzo 2011)			Dos años después de egresar (marzo 2012)			Tres años después de egresar (marzo 2013)			Cuatro años después de egresar (marzo 2014)		
		Mujeres	Hombres	Total	Mujeres	Hombres	Total	Mujeres	Hombres	Total	Mujeres	Hombres	Total
Licenciatura en Odontología	1.396	52.7	54.1	53.2	54.7	63.5	57.7	58.4	68.3	61.7	61.8	76.0	66.7
Arquitectura	2.859	25.9	41.7	34.4	29.4	44.9	37.4	36.3	48.6	42.8	42.4	53.3	48.1
Diplomatura en Fisioterapia	2.944	13.0	18.9	15.0	21.3	26.0	22.9	26.8	33.8	29.2	31.7	38.4	34.0
Arquitectura Técnica	3.267	12.5	19.3	17.0	13.3	20.0	17.6	16.5	25.0	22	21.6	31.6	28.0
Diplomatura en Logopedia	571	9.2	6.3	9.0	15.7	21.4	15.9	20.7	20.0	20.7	27.2	27.8	27.2
Licenciatura en Veterinaria	1.052	15.4	30.1	19.8	15.8	26.7	19.0	20.0	27.9	22.6	24.5	30.5	26.4
Diplomatura en Nutrición Humana y Dietética	875	17.9	35.5	20.9	20.8	41.2	24.1	21.7	34.5	24	21.1	36.8	23.8
Diplomatura en Óptica y Optometría	808	10.6	30.7	16.2	11.1	29.3	16.3	12.2	35.4	18.6	14.5	37.2	21.1
Licenciatura en Bellas Artes	1.927	12.5	17.4	14.1	12.7	19.6	14.8	15.2	21.6	17.2	19.4	25.1	21.1
Licenciatura en Psicología	5.376	7.3	14.4	8.7	10.6	13.4	11.1	14.3	17.0	14.8	19.1	19.9	19.3

*Nota.* N total = N considerando régimen de autónomos y régimen general.

personas egresadas) en comparación con otras titulaciones (más de 10.000). En el extremo opuesto, los hombres presentan mayor porcentaje que las mujeres en titulaciones como Farmacia, Odontología, Arquitectura y Comunicación Audiovisual (en estos casos la muestra era superior 1.000 personas), en Óptica y Optometría y Nutrición Humana y Dietética (en torno a 800 personas encuestadas) y en Filología Árabe, Teoría de la Literatura y Literatura Comparada e Ingeniería Técnica en Topografía (menos de 500 personas encuestadas), así como en menor medida en el resto de titulaciones analizadas. En general, las diferencias en afiliación a la Seguridad Social entre hombres y mujeres son más reducidas si se considera el régimen general y no el de autónomos.

### **3. ESTUDIO DE LA INTENCIÓN EMPRENDEDORA**

El emprendimiento está relacionado con la generación de empleo y el desarrollo económico y social (Acs et al., 2012; Carree y Thurik, 2010; OCDE, 2004; Wong et al., 2005), y es objeto de atención del ámbito político, empresarial y académico (Comisión Europea, 2013, 2014; Comisión Europea y OCDE, 2017; Gorgievski y Stephan, 2016; Liñán y Fayolle, 2015). Así, se ha analizado desde una perspectiva económica qué tipo de empresas se crean y cuáles son las características sociodemográficas de las personas emprendedoras; por ejemplo, los informes anuales del Consorcio GEM ponen de manifiesto que quienes más emprenden son los hombres jóvenes en los grupos de edad 25 – 34 años y 35 – 44 años. Desde una perspectiva psicosocial, se pueden analizar cuáles son los antecedentes que llevan a una persona a emprender y a este respecto la Psicología tiene mucho que aportar, tanto en las áreas de personalidad, cognición social, actitud, identidad o carrera profesional, como en las áreas transversales de género y contexto (Gorgievski y Stephan, 2016; Omoredede et al., 2015). El antecedente más estudiado de la conducta emprendedora, entendida como creación de una nueva empresa, es la intención emprendedora (para una revisión, véase Liñán y Fayolle, 2015). La intención emprendedora hace referencia a la decisión que lleva a una persona a crear una nueva empresa (Krueger, 2009). Las publicaciones sobre intención emprendedora

se han multiplicado desde los primeros estudios en la década de 1980. La conducta intencional ayuda a explicar y modelar por qué una gran proporción de personas emprendedoras deciden iniciar un negocio mucho antes de que exploren oportunidades (Krueger et al., 2000). De acuerdo a estos autores, el estudio de la intención es útil, por una parte, en el ámbito de la investigación para comprender qué aspectos desencadenan la búsqueda de oportunidades, las fuentes de ideas para los negocios y cómo estas acaban convirtiéndose en negocios reales. Por otra parte, este estudio de la intención tiene implicaciones prácticas en el entorno educativo, el asesoramiento a potenciales personas emprendedoras y las políticas públicas. A continuación, se describen los principales modelos que se han propuesto para explicar la intención emprendedora: el modelo de intencionalidad emprendedora (Bird, 1988), el modelo del evento emprendedor (MEE; Shapero, 1975; Shapero y Sokol, 1982) y la teoría de la acción planificada (TAP; Ajzen, 1991). En el estudio de la intención emprendedora se han seguido dos líneas de investigación fundamentalmente: la primera ha surgido en el ámbito del emprendimiento (y a ella corresponden los dos primeros modelos), y la segunda proviene de la Psicología Social y el estudio de la conducta en general, en su aplicación al emprendimiento, donde se enmarca la teoría de la acción planificada.

### **3.1. Modelo de intencionalidad emprendedora: implementación de las ideas emprendedoras**

Bird (1988) propone este modelo teórico a partir de las entrevistas a 20 personas emprendedoras en las que se identificaron varios patrones de pensamiento y comportamiento que eran relativamente estables entre las personas entrevistadas. Para Bird, la intencionalidad se define como un estado de la mente que dirige la atención de una persona, así como su experiencia y su comportamiento, hacia un objetivo específico (meta) o hacia un camino para alcanzar algo (medio). La intención emprendedora puede dirigirse bien a la creación de una nueva empresa o bien a la creación de nuevos valores en empresas existentes. Asimismo, se pueden distinguir distintas dimensiones de las intenciones, por ejemplo, la localización interna

versus externa o la racionalidad versus intuición. De hecho, Bird propone que, en la formulación de la intención emprendedora, los contextos personal y social interactúan con el pensamiento racional e intuitivo (Figura 2.5). Por un lado, se identifica el contexto social, político y económico en el que se contemplan variables como los cambios en el mercado o los aspectos regulatorios. Por otra parte, en el contexto personal se incluyen elementos que predisponen a la intención emprendedora: la historia (experiencia previa emprendiendo), características personales (necesidad de logro o de control) y habilidades (fomento de ideas). Los procesos de pensamiento racional, analítico y causa-efecto estructuran tanto la intención como la acción. Estos procesos subyacen a la mayoría de las conductas orientadas a metas observables como, por ejemplo, los planes de negocio formales. El pensamiento intuitivo, holístico y contextual enmarca y estructura la intención y la acción. Así, la persona emprendedora persevera inspirada por la visión y la sensación del potencial de la empresa.

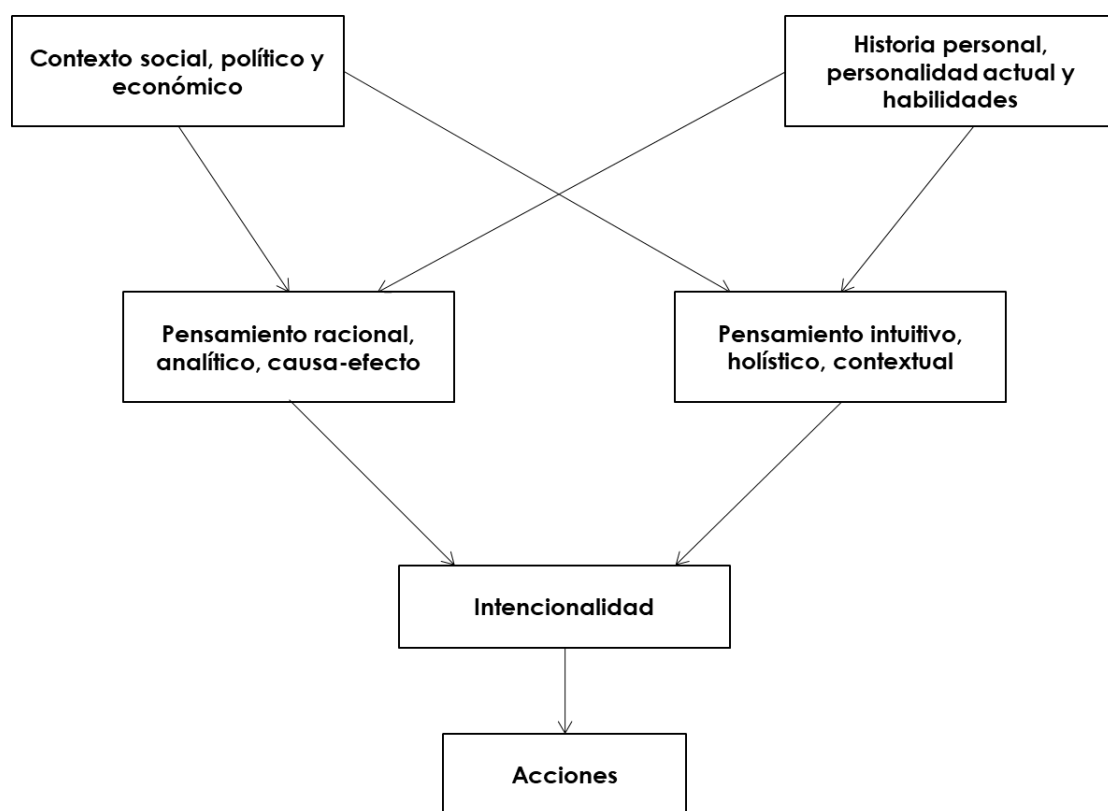


Figura 2.5. Contextos de intencionalidad (Bird, 1988).

De los análisis de las entrevistas realizadas, se propone un proceso intencional sobre cómo las personas emprendedoras implementan las ideas. Así, el proceso intencional comienza con las necesidades personales de quien emprende, sus valores, deseos, hábitos y creencias. Estos cinco antecedentes preceden en el modelo a tres actividades nucleares a los resultados intencionales y conductuales que contribuyen a la creación de una nueva organización y que, a su vez, afectan a las necesidades, valores, deseos, hábitos y creencias de quien emprende: 1) la creación y mantenimiento de una tensión temporal, 2) el mantenimiento de un objetivo estratégico, y 3) el desarrollo de una posición estratégica. Dentro de la tensión temporal se contempla el horizonte de tiempo futuro, la complejidad del tiempo y la necesidad de tomar decisiones rápidas para ajustarse al entorno. Por ejemplo, se espera que las personas con mayor necesidad de control o que más invierten en términos personales, financieros y psicológicos en la nueva empresa experimenten mayor tensión temporal. Asimismo, se espera que las personas emprendedoras de éxito, frente a las menos exitosas, dediquen más tiempo a pensar sobre el futuro y el presente que en el pasado o que sean más conscientes de los eventos temporales del negocio (por ejemplo, los ciclos económicos). En segundo lugar, la intención de las personas emprendedoras tiende a estar dirigida hacia metas en lugar de hacia medios de comportamiento. De este modo, se considera que las metas son estados finales deseables. Es decir, la mayoría de las personas emprendedoras están orientadas a fines en lugar de a medios o procesos. En esta línea, se propone que quienes tienen metas claras y específicas tienen mejor rendimiento y se sugiere, entre otros aspectos, la existencia de “lentes de enfoque emprendedor” (*entrepreneurial zoom lens*) que permiten el desplazamiento entre las operaciones, con alto nivel de detalle, y la estrategia o imagen global. Para responder de forma efectiva a la complejidad organizacional, tanto interna como externa, es importante el desarrollo de estas “lentes de objetivo focal variable”. Por último, la posición intencional implica la posición en relación a los valores, necesidades, deseos, hábitos y creencias, y el mundo exterior, donde se debe considerar la alineación y el ajuste. De acuerdo a este modelo, la intención emprendedora tiene un impacto en la dirección, el éxito (supervivencia y

crecimiento) y la forma de la organización, y a través de sus postulados teóricos es posible su estudio más allá de aspectos meramente descriptivos. Es de destacar que este modelo parte de las propias ideas y experiencias de las personas emprendedoras y no únicamente de teorías formales del ámbito de la gestión y la organización.

Posteriormente, Boyd y Vozikis (1994) integran teóricamente la autoeficacia (una de las variables de la teoría de la acción planificada) en el modelo de intencionalidad emprendedora (Bird, 1988). La autoeficacia también está relacionada con la viabilidad percibida (*feasibility*) del modelo de Shapero, como se expone más adelante. Más aun, el modelo revisado de Boyd y Vozikis (1994) considera relevantes otras variables procedentes de la teoría de la acción planificada, como las actitudes y percepciones sobre la creación de una nueva empresa, o el apoyo social y el consecuente grado de persuasión social que se deriva (Figura 2.6).

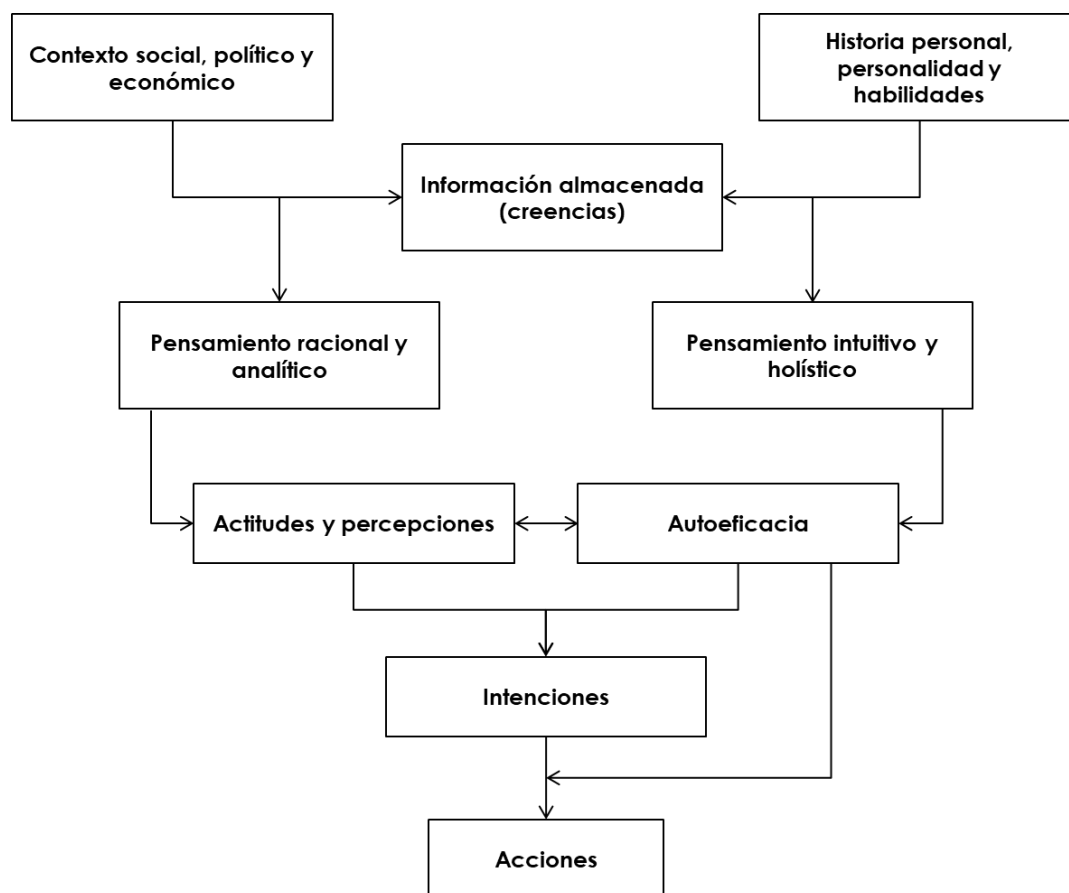


Figura 2.6. Modelo propuesto por Boyd y Vozikis (1994).



No obstante, aunque el modelo de Bird (1988) y la extensión de Boyd y Vozikis (1994) implican la inclusión de variables personales, sociales y cognitivas en la formación de la intención emprendedora, carecen de la evidencia empírica de los otros modelos que se exponen a continuación.

### 3.2. Modelo del evento emprendedor

El modelo del evento emprendedor de Shapero deriva de su trabajo sobre el rol del emprendimiento en el desarrollo económico. El evento emprendedor requiere una preparación preexistente a aceptar esa oportunidad (esto es, un potencial latente que es previo a la intención) seguida de un evento que precipita esa decisión (Shapero, 1982, citado en Krueger y Brazeal, 1994). Este modelo asume que la inercia guía el comportamiento humano hasta que un evento la interrumpe o desplaza. Este evento puede ser tanto de carácter negativo (por ejemplo, la pérdida de empleo) como positivo (por ejemplo, una herencia). En cualquier caso, lo relevante es que el evento precipita que la persona tenga que elegir entre diferentes alternativas de conducta y que, por tanto, se produzca un cambio en la conducta. La elección de una de las alternativas, entre las posibles, dependerá fundamentalmente de dos aspectos: 1) la credibilidad de las alternativas (*credibility*), que requiere que la conducta sea vista como deseable (*desirable*) y viable (*feasible*), y 2) la propensión a actuar (*propensity to act*).

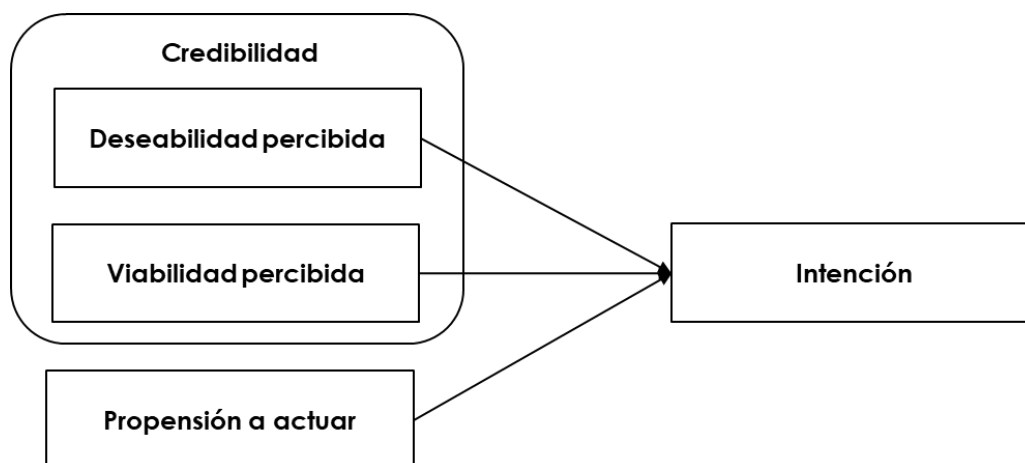


Figura 2.7. Modelo del evento emprendedor (adaptado de Krueger et al., 2000).

La deseabilidad percibida se refiere al grado en el que la persona se siente atraída por emprender y refleja las preferencias hacia la conducta emprendedora. La viabilidad percibida recoge el grado en el que la persona confía en su capacidad para crear la nueva empresa y considera la posibilidad de emprender como viable. Por último, la propensión a actuar se relaciona con la disposición personal a llevar a cabo la decisión. Depende de la percepción de control, así como de la preferencia por adquirir control mediante la realización de las acciones oportunas.

Al igual que después se comenta en el caso de la teoría de la acción planificada, otros factores más distales (factores exógenos, por ejemplo, personales o situacionales) afectan a la intención a través de los componentes principales del modelo que actúan mediando esta relación. No obstante, aunque la persona tenga una alta intención emprendedora, se requiere de un evento vital significativo (por ejemplo, emigrar, perder el empleo o cumplir los 40) que precipite la conducta emprendedora. Si bien la persona no cambia, sus percepciones sobre las nuevas circunstancias sí lo hacen. Por tanto, el modelo de Shapero pone de manifiesto la relevancia de las percepciones en este proceso.

Este modelo fue empíricamente probado y confirmado por primera vez por Krueger (1993). En su estudio encontró que las percepciones de viabilidad y deseabilidad junto con la propensión a actuar eran antecedentes significativos de la intención emprendedora. Asimismo, las experiencias previas relacionadas con el emprendimiento influían en la intención de forma indirecta a través de los antecedentes anteriores. El apoyo encontrado al modelo de Shapero condujo a un llamamiento a una mayor aplicación de los modelos de intención en la actividad emprendedora. Llamamiento que se ha traducido en numerosas publicaciones, siendo el modelo más empleado después de la teoría de la acción planificada (para una revisión de la literatura sobre intención emprendedora, véase Liñán y Fayolle, 2015).

### 3.3. Teoría de la acción planificada

La teoría de la acción planificada (Ajzen, 1991) es una de las teorías más utilizadas en diversos ámbitos de investigación, como lo demuestra el importante número de meta-análisis y revisiones sistemáticas que estudian la aplicación de la teoría de la acción planificada en conductas relacionadas con la salud (McEachan et al., 2011), la nutrición y los patrones de dieta (McDermott et al., 2015; Riebl et al., 2015), el medioambiente (Morren y Grinstein, 2016), el turismo y la restauración verde o pro-medio ambiente (Gao, Mattila y Lee, 2016), el uso del coche (Gardner y Abraham, 2008), la compartición de ficheros en internet (Fleming et al., 2017) o diferentes tipos de conductas (Armitage y Conner, 2001). La teoría de la acción planificada surge en el área de la Psicología Social como extensión de la teoría de la acción razonada (Ajzen y Fishbein, 1980) y propone que las personas actúan de acuerdo con su intención y percepción de control sobre la conducta. Por su parte, únicamente tres antecedentes influyen directamente en la intención de realizar una conducta (Figura 2.8): a) la actitud hacia la conducta, b) la norma subjetiva, y c) el control conductual percibido, mientras que otras variables se espera que influyan en la intención y en la conducta de forma indirecta a través de estos tres determinantes más proximales de la intención (Ajzen, 2011), lo que se ha denominado hipótesis de suficiencia.

Los primeros autores que proponen aplicar la teoría de la acción planificada al estudio de la intención emprendedora son Krueger y Carsrud (1993). En su argumentación teórica defienden la versatilidad y solidez de la teoría de la acción planificada en otros ámbitos y señalan la adecuación al estudio del emprendimiento. Dado que emprender es relativamente poco frecuente, el estudio de la intención emprendedora permite obtener una valiosa visión de este proceso aun cuando no se puede observar su inicio. Asimismo, plantean implicaciones para la práctica y la enseñanza, la investigación en emprendimiento y gestión, e implicaciones metodológicas. Posteriormente, otros autores han adoptado este modelo de intención emprendedora. En 1996, Kolvereid inició el estudio empírico de la intención emprendedora

aplicando la teoría de la acción planificada en una muestra de estudiantes de nivel universitario. A este estudio le han seguido numerosas investigaciones en diferentes países, como Noruega (Kolvereid y Moen, 1997), Rusia (Tkachev y Kolvereid, 1999), España (Liñán et al., 2011; Moriano, 2005), Francia (Fayolle et al., 2006a), Ucrania (Solesvik et al., 2012), Bélgica (Maes et al., 2014), Alemania (Obschonka et al., 2015), Portugal (Oliveira et al., 2015) o Grecia (Zampetakis et al., 2017), con muestras de estudiantes, pero también de población adulta en general o poblaciones específicas, por ejemplo en el ámbito científico (Obschonka et al., 2015; Rodríguez Batalla, 2015), así como estudios transculturales (Autio et al., 2001; Engle et al., 2010; Iakovleva et al., 2011; Liñán y Chen, 2009; Liñán et al., 2013; Moriano et al., 2012; Souitaris et al., 2007).

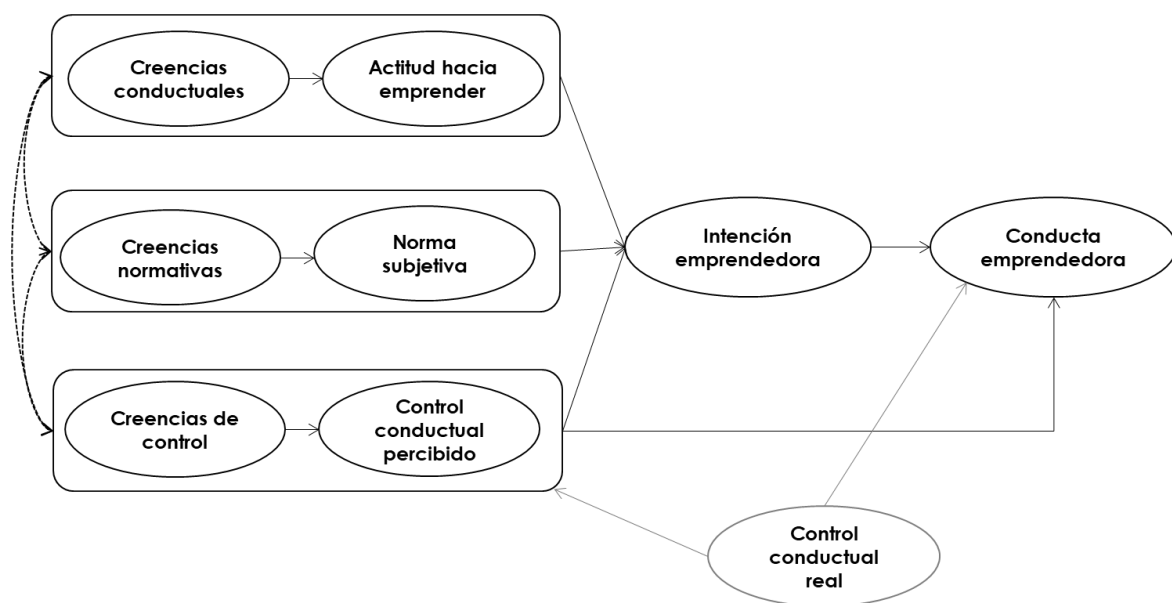


Figura 2.8. Teoría de la acción planificada (Ajzen, 1991).

Elaboración propia a partir del diagrama interactivo disponible en la página web de Icek Ajzen (<http://people.umass.edu/ajzen/tpb.diag.html>).

Actualmente, la teoría de la acción planificada es la teoría más utilizada para predecir la intención emprendedora (Liñán y Fayolle, 2015; Lortie y Castogiovanni, 2015). Los escasos estudios longitudinales que existen muestran que la medida autoinformada de la intención emprendedora es una buena predictora de las acciones relacionadas con la creación

de nuevas empresas (Kautonen, van Gelderen, et al., 2015; Kautonen et al., 2013). Asimismo, la teoría de la acción planificada se ha aplicado al estudio de las expectativas de crecimiento en las nuevas empresas (Kolvereid e Isaksen, 2017).

En los siguientes subapartados, se describen las variables que componen la teoría de la acción planificada. No obstante, antes de finalizar esta apartado es preciso indicar que esta teoría ha recibido algunas críticas sobre su validez y utilidad (por ejemplo, Sniehotta, Presseau y Araújo-Soares, 2014). En cuanto a la validez, se ha argumentado que la teoría de la acción planificada no explica suficiente varianza de la conducta o que la hipótesis de suficiencia entra en conflicto con algunas evidencias empíricas; asimismo, la mayoría de los estudios son de tipo correlacional y la teoría de la acción planificada parece tener mayor poder predictivo entre las personas jóvenes y cuando en los estudios longitudinales la conducta es autoinformada en periodos de tiempo no muy extensos. Por otra parte, si bien se reconoce su utilidad inicial, ha sido también cuestionada su utilidad actual. Sin embargo, de acuerdo a Ajzen (2015) la teoría de la acción planificada “está viva y con buena salud” (*the theory of planned behaviour is alive and well, and not ready to retire*). Asimismo, refuta las críticas mencionadas indicando, entre otros aspectos, que pueden ocurrir eventos entre la medición de la intención y la observación de la conducta que produzcan cambios en la intención así como también pueden surgir obstáculos que impidan que se pueda llevar a cabo la intención conductual. Las creencias accesibles en el momento de la medición también pueden diferir de las creencias que resulten accesibles cuando se tenga que decidir realizar la conducta.

En cualquier caso, aunque no se puede perder de vista que los cambios en las creencias producen pequeños cambios en las actitudes, norma subjetiva y percepción de control, y menores cambios incluso en la intención y la conducta, la teoría de la acción planificada ha demostrado ser un marco útil para diseñar intervenciones efectivas. De hecho, las críticas a la teoría de la acción planificada han abierto un interesante debate. Por ejemplo, Conner (2014) aboga, no por jubilar la teoría de la acción planificada como sugerían Sniehotta et al.

(2014), sino por utilizar modelos extendidos de la teoría de la acción planificada que partan de lo que se ha aprendido de esta teoría y ayuden a predecir mejor las distintas conductas así como a mejorar las intervenciones diseñadas a cambiar dichas conductas. La inclusión de variables adicionales en estos modelos extendidos de la teoría de la acción planificada puede contribuir a explicar mayor varianza de algunos comportamientos, aunque su utilidad se puede ver limitada cuando no es aplicada a una amplia variedad de comportamientos.

### **3.3.1. Actitud hacia la conducta emprendedora**

El estudio de las actitudes, su conceptualización, formación, activación, estructura y funciones, así como la relación actitud-conducta, es un importante tema de investigación en el área de las Ciencias Sociales y de la Conducta (Ajzen, 2001). De hecho, el estudio de las actitudes ha sido un tema central de investigación en Psicología Social desde sus orígenes y continúa siéndolo en la actualidad (Albarracín, Johnson y Zanna, 2014; Maio y Haddock, 2015; Pratkanis, Breckler y Greenwald, 2014; Vogel y Wänke, 2016). Las actitudes cumplen una variedad de funciones básicas para la persona, entre las que se encuentran una función adaptativa o utilitaria (guían la conducta hacia metas), una función de conocimiento o de economía (ayudan a gestionar y simplificar las tareas de procesamiento de la información), una función expresiva (permiten a las personas comunicar información sobre su personalidad y valores) y una función defensiva del yo (protegen de pensamientos o impulsos inaceptables o amenazantes) (Breckler y Wiggins, 2014). Primero la teoría de la acción razonada (Ajzen y Fishbein, 1980) y después la teoría de la acción planificada (Ajzen, 1991) han incluido las actitudes como un elemento importante en sus modelos para la predicción de las intenciones conductuales y las conductas.

De acuerdo al modelo de la expectativa-valor de las actitudes (Fishbein y Ajzen, 1975), las actitudes se desarrollan a partir de las creencias que las personas mantienen sobre el objeto de esa actitud. Las creencias sobre un objeto se forman por asociación con ciertos atributos, características o eventos (Ajzen, 1991). Específicamente en el caso de las actitudes

conductuales, cada creencia asocia la conducta con un cierto resultado u otros atributos, como el coste de llevar a cabo la conducta. En la medida en que estos atributos o resultados tienen una valoración positiva o negativa, la adquisición de la actitud hacia la conducta tiene lugar de forma automática y simultánea. De este modo se desarrollan actitudes favorables hacia las conductas con consecuencias deseables y actitudes desfavorables hacia las conductas con consecuencias no deseables. El valor subjetivo del resultado o atributo influye en la actitud de forma proporcional a la fuerza de la creencia. Es decir, las actitudes de una persona están conformadas por la fuerza de cada creencia combinada de forma multiplicativa con su valor subjetivo. Así, aunque dos personas creen con la misma fuerza que emprender significaría asumir riesgos calculados, para una de ellas esto puede ser muy deseable mientras que para la otra no (Moriano, 2005). En el estudio meta-analítico realizado por Schlaegel y Koenig (2014) la actitud hacia emprender presenta una relación positiva con la intención emprendedora ( $r_c = .43, p < .05$ ).

Para cada conducta, se deben identificar en primer lugar las creencias más relevantes o creencias salientes sobre dicha conducta y después analizar su valor subjetivo. La estimación de la actitud hacia esa conducta resulta de la suma de cada creencia multiplicada por su valor. Si bien cada creencia asocia al objeto de actitud con un atributo, la actitud global de una persona hacia un objeto depende de la interacción entre las valoraciones subjetivas de los atributos del objeto y la fuerza de dichas asociaciones (Ajzen, 2001). Es decir, aunque las personas puedan tener diferentes creencias sobre un objeto, solo aquellas que estén accesibles en memoria en un momento dado tendrán influencia sobre la actitud. Y esta accesibilidad tiende a incrementarse en función de la frecuencia con la que la expectativa es activada, la recencia de la activación y la importancia de la creencia. Aquellas actitudes más fuertes son relativamente estables en el tiempo, resistentes a la persuasión y predicen la conducta. La fuerza de las actitudes, no obstante, no es un constructo unitario sino multidimensional y depende de factores como la edad o la relevancia personal.

Otro aspecto a considerar es la ambivalencia actitudinal, que refleja la coexistencia de disposiciones tanto positivas como negativas hacia un objeto de actitud (Ajzen, 2001). Mantener actitudes ambivalentes puede afectar a las evaluaciones que se realicen y a la conducta, disminuyendo por tanto su capacidad predictiva sobre la intención de realizar la conducta. En el marco de la teoría de la acción planificada, Conner, Povey, Sparks, James y Shepherd (2003) han examinado 20 conductas alimentarias saludables encontrando que la ambivalencia actitudinal modera algunas relaciones, de tal modo que las relaciones actitud-conducta y control conductual percibido-conducta son más débiles en el caso de participantes de alta ambivalencia en comparación con quienes presentaban baja ambivalencia. Más recientemente, Conner, Godin, Sheeran y Germain (2013) han explorado la influencia de cuatro variables actitudinales (actitudes cognitivas, actitudes afectivas, reacciones afectivas negativas anticipadas y reacciones afectivas positivas anticipadas) tanto en la intención como en la conducta de donación de sangre confirmando que la ambivalencia actitudinal es una variable moderadora. La ambivalencia se suele medir combinando las respuestas a dos ítems: la medida en que la idea de realizar una determinada conducta en un periodo de tiempo provoca pensamientos o sentimientos (a) positivos y (b) negativos, y después se crean dos grupos de alta vs. baja ambivalencia. En el área del emprendimiento, no parece que la ambivalencia haya captado la atención de la investigación. Entre los pocos estudios al respecto, Zampetakis, Lerakis, Kafetsios y Moustakis (2016) han estudiado el papel moderador de la ambivalencia de tipo afectivo en la formación de la intención emprendedora. Por tanto, la investigación sobre intención emprendedora podría beneficiarse de un mayor estudio de la ambivalencia actitudinal.

### **3.3.2. Norma subjetiva**

Entre estas normas se encuentran las expectativas familiares sobre la deseabilidad de llegar a ser un o una profesional de la abogacía, la medicina o el emprendimiento (Krueger et al., 2000). Las creencias normativas hacen referencia a la probabilidad de que personas o grupos



referentes aprueben o desaprueben la realización de una determinada conducta (Ajzen, 1991), que en el caso de emprender es la presión social percibida hacia crear, o no crear, una empresa. La norma subjetiva es proporcional a la suma de los pesos de cada creencia normativa multiplicada por la motivación de la persona para cumplir con cada referente. La medida global de la norma subjetiva se obtiene preguntando en qué medida otras personas importantes aprobarían o desaprobarían que la persona que responde llevase a cabo una conducta determinada. Cuanto más positiva sea la norma subjetiva, mayor será la intención de emprender.

De los tres componentes de la teoría de la acción planificada, la norma subjetiva es el que tiene un peso más débil (Ajzen, 1991; Armitage y Conner, 2001), y en el área de la intención emprendedora, no todas las investigaciones han encontrado una influencia significativa (Krueger et al., 2000; Liñán y Chen, 2009; Liñán et al., 2011). De hecho, Krueger et al. (2000) recogen algunas explicaciones a partir de la revisión de distintas investigaciones: un alto locus de control interno puede estar relacionado con una reducción del impacto de las normas sociales; pueden existir diferencias culturales en la importancia de estas normas sociales (por ejemplo, en los países nórdicos se ha encontrado un mayor impacto); y las normas sociales pueden estar interactuando con otras actitudes (la actitud hacia la conducta y la viabilidad percibida). Ante el apoyo débil a la influencia de las normas sociales sobre la intención emprendedora, o incluso inexistente en algunos estudios, Krueger (2009) también se pregunta si las normas sociales solo influyen en la intención inicial pero se atenúan conforme el proceso de intención se desarrolla. Podría ser también que otras variables estuviesen moderando esta relación. En este sentido, se ha encontrado que la disponibilidad de empleo satisfactorio modera la relación entre la norma subjetiva y la intención emprendedora de tal modo que, cuando las oportunidades de empleo son escasas, el apoyo de familiares, amistades y otras personas significativas es incluso más importante (Vinogradov, Kolvereid y Timoshenko, 2013). Sin embargo, esta disponibilidad de empleo satisfactorio no ejerce un efecto moderador en la relación entre las actitudes o el control conductual percibido y la intención. Asimismo,

podrían existir diferencias de género; por ejemplo, las mujeres emprendedoras perciben mayor apoyo social durante el proceso de gestación del nuevo negocio que los hombres emprendedores (Ljunggren y Kolvereid, 1996). Por su parte, Oliveira et al. (2015) encuentran en su estudio con una muestra de estudiantes de Portugal que mientras que para las mujeres la norma subjetiva ejerce una influencia significativa sobre la intención, en el caso de los hombres no.

Sin embargo, en el estudio meta-analítico realizado por Armitage y Conner (2001) con diferentes conductas, la norma subjetiva sí presenta una relación significativa con la intención ( $r_c = .49$ ), al igual que en el meta-análisis específico en el área del emprendimiento ( $r_c = .36$ ,  $p < .05$ ) acometido por Schlaegel y Koenig (2014). Schlaegel y Koenig (2014) adicionalmente señalan que el país del estudio influye en esta relación entre la intención emprendedora y la norma subjetiva, de tal modo que sus resultados muestran que es más fuerte en los países occidentales en comparación con los no occidentales. Otro interesante resultado que se desprende de su meta-análisis apunta a que en los estudios más recientes (en comparación con los menos recientes), la relación entre norma subjetiva e intención emprendedora es más fuerte.

Por último, cabe mencionar que en algunos estudios se ha propuesto una modificación sobre el modelo original y se sitúa la variable norma subjetiva no como antecedente directo de la intención emprendedora sino como antecedente de la actitud y el control conductual percibido, que mediarían esa influencia entre la norma subjetiva y la intención (Liñán y Chen, 2009; Liñán et al., 2013; Maes et al., 2014). De acuerdo a este enfoque, la norma subjetiva podría ser considerada una forma de capital social y, desde la perspectiva del capital social, los valores transmitidos por las personas de referencia conducirían a percepciones más favorables con respecto a las actitudes personales y el control conductual percibido (Liñán y Chen, 2009). Aunque estos estudios encuentran apoyo empírico para este nuevo modelo, en la mayoría de las investigaciones se sigue utilizando el modelo original propuesto por Ajzen.

### 3.3.3. Control conductual percibido

Del mismo modo que las creencias conductuales producen una actitud favorable o desfavorable hacia la conducta y las creencias normativas conducen a una presión social percibida o norma subjetiva, las creencias de control dan lugar al control conductual percibido (Ajzen, 2002). Si bien los componentes de actitud y norma subjetiva estaban ya presentes en la teoría de la acción razonada (Ajzen y Fishbein, 1980), la teoría de la acción planificada (Ajzen, 1991) incorpora el constructo de control conductual percibido para contemplar aquellas situaciones en las que las personas pueden carecer de control sobre la realización de la conducta. Un alto nivel de control percibido puede fortalecer la intención de la persona de realizar la conducta y, en consecuencia, incrementar el esfuerzo y la perseverancia (Ajzen, 2002). De este modo, el control conductual percibido puede afectar a la conducta de forma indirecta a través de su influencia en la intención. Pero además, el control percibido proporciona información útil sobre el control real que una persona puede ejercer en la situación y, por tanto, presenta una influencia directa sobre la conducta. A diferencia de las actitudes y la norma subjetiva, que influyen indirectamente en la conducta a través de la intención, se considera que el control conductual percibido influye tanto de forma directa en la conducta como de forma indirecta a través de la intención.

Las creencias de control hacen referencia a la capacidad para ejecutar con éxito determinadas conductas e incorporan al modelo de la teoría de la acción planificada la influencia de la presencia o ausencia de recursos y oportunidades que determinan la intención y la conducta (Ajzen, 1991). Estas creencias se pueden asentar en la propia experiencia en relación a la conducta o en información vicaria sobre la conducta a partir de familiares y amistades, así como también pueden depender de otros factores que incrementen o reduzcan la dificultad percibida de realizar la conducta. Es decir, cuanto mayor sea el número de recursos y oportunidades que se perciban y menor el de obstáculos que se anticipen, mayor será el control conductual percibido. De acuerdo a la formulación de la expectativa-valor, el control

conductual percibido es proporcional a la suma de la probabilidad percibida (o frecuencia) de que un factor de control esté presente (fuerza de la creencia de control) multiplicada por la medida en que la presencia del factor de control tenga el poder de facilitar o impedir la conducta, esto es, el poder de la creencia de control (Ajzen, 2002).

El control conductual percibido combina aspectos relacionados con creencias de controlabilidad y autoeficacia (Ajzen, 2002). El control conductual percibido es similar al concepto de autoeficacia de Bandura (1977, 1993), ya que ambos hacen referencia a la habilidad percibida para realizar una determinada conducta. De acuerdo a la teoría de la autoeficacia, las personas que perciben un bajo nivel de eficacia en un dominio muestran bajas aspiraciones y un compromiso débil, mientras que una fuerte percepción de autoeficacia se relaciona con el logro y la recuperación después de contratiempos. Es importante resaltar la especificidad de dominio de la autoeficacia, que influirá en la intención y conducta específica de ese dominio aunque puede ser diferente en otros dominios. Las expectativas de eficacia personal determinan la iniciación de conductas de afrontamiento, el esfuerzo invertido y la persistencia cuando surgen obstáculos. De esta manera, las personas que crean que poseen las habilidades y competencias para emprender mostrarán una mayor intención emprendedora así como una mayor conducta emprendedora. Por el contrario, la percepción de baja autoeficacia emprendedora se relacionará con una menor intención y menor probabilidad de emprender.

Armitage y Conner (2001) consideran que la autoeficacia está más claramente definida y operacionalizada que el control conductual percibido y, de su meta-análisis con 185 estudios, concluyen que, aunque ambos constructos permiten explicar proporciones equivalentes de la varianza de la conducta, la autoeficacia permite explicar una mayor varianza de la intención, por lo que recomiendan emplear la autoeficacia en lugar del control conductual percibido. De hecho, en distintos estudios se utiliza una medida de la autoeficacia en lugar del control (Engle et al., 2010; Krueger et al., 2000; Moriano et al., 2012). De su revisión de diferentes estudios,

el propio Ajzen (1991) recoge que solo la autoeficacia (conceptualizada como el grado de dificultad anticipada en la realización de la conducta), pero no la controlabilidad percibida (si las personas creen que cuentan con el control sobre la realización de la conducta), mejora significativamente la predicción de la intención y la conducta. No obstante, en el estudio meta-analítico realizado por Schlaegel y Koenig (2014) el control conductual percibido ( $r_c = .56, p < .05$ ) presenta una mayor relación con la intención que la autoeficacia emprendedora ( $r_c = .28, p < .05$ ). Sin embargo, la autoeficacia explica también en gran medida las diferencias étnicas y en función del sexo en la elección de carrera (Krueger et al., 2000). De hecho, la educación selectiva hace posible incrementar la eficacia emprendedora lo que redundaría en un incremento en la percepción de viabilidad. Asimismo, la autoeficacia emprendedora se relaciona no solo con la intención de emprender, sino también con la intención de intraemprender (Douglas y Fitzsimmons, 2013).

### 3.4. Comparación entre modelos de intención

En su capítulo “Entrepreneurial intentions are dead: Long live entrepreneurial intentions”, Krueger (2009) revisa cómo la introducción de teorías procedentes de la Psicología (primeramente del área de la Psicología Social, y más tarde de las áreas Cognitiva y del Desarrollo) proporcionó modelos contrastables relevantes en el emprendimiento que permitieron ir más allá de los estudios meramente descriptivos o las limitaciones del estudio de los rasgos de personalidad. Los modelos de Fishbein y Ajzen (Ajzen, 1991; Ajzen y Fishbein, 1980), que ya se estaban empleando en el ámbito del marketing con gran éxito práctico, se mostraron adecuados para contrastar en el emprendimiento. Desde entonces, los modelos de intención emprendedora han proliferado. En su reflexión, Krueger (2009) se pregunta, casi 30 años después de las primeras publicaciones en esta línea, si es el momento de reconceptualizar la intención. Por ejemplo, la relación entre la intención y sus antecedentes podría ser bidireccional más que causal, o incluso ser inversa a cómo se ha estado planteando. Por otra parte, los modelos podrían estar recogiendo una imagen estática de un

proceso de carácter dinámico. Para ello, primero deconstruye la intención, analizando los modelos de intención en general y de intención emprendedora y centrándose en cómo la intención se encuadra en el contexto amplio del emprendimiento, y después la vuelve a construir proponiendo diferentes preguntas de investigación que abren nuevas vías para el futuro. Concluye que las teorías que subyacen a los modelos de intención emprendedora son sólidas y la intención sigue siendo un elemento crítico para el estudio del emprendimiento.

A pesar de la existencia de los modelos alternativos presentados, con sus similitudes y diferencias, se ha evidenciado la compatibilidad de estos modelos. En esta línea, Krueger y Brazeal (1994) desarrollan teóricamente el modelo del potencial emprendedor que se basa en dos modelos que se considera que se solapan considerablemente: la teoría de la acción planificada y el modelo del evento emprendedor (Figura 2.9). Así, la viabilidad percibida en el modelo del evento emprendedor se corresponde con el control conductual percibido de la teoría de la acción planificada (y ambos se corresponden con la autoeficacia). Por otra parte, los otros dos componentes de la teoría de la acción planificada, la norma subjetiva y las actitudes, se incluyen dentro de la deseabilidad percibida del modelo del evento emprendedor. En particular, las actitudes hacia una conducta reflejan percepciones de lo que la persona considera deseable, que dependen de la probabilidad de impacto personal de los resultados de realizar dicha conducta y se relacionan con el interés intrínseco en el emprendimiento y la innovación. Las normas sociales están ligadas a las percepciones sobre lo que pensarían sobre que la potencial persona emprendedora crease su propia empresa otras personas importantes para ella, entre las que se encuentran familiares, amistades y compañeros y compañeras de trabajo.

Posteriormente, Krueger et al. (2000) comparan y contrastan empíricamente la capacidad de predecir la intención emprendedora de estos dos modelos de forma separada, la teoría de la acción planificada y el modelo del evento emprendedor, encontrando apoyo estadístico para ambos. En particular, el modelo del evento emprendedor en su estudio presenta un coeficiente

de determinación ajustado ( $R^2 = .41$ ) ligeramente mayor que en el caso de la teoría de la acción planificada ( $R^2 = .35$ ), aunque se concluye que ambos modelos son igualmente útiles y ofrecen una valiosa herramienta de investigación para comprender el proceso de creación de empresas. Otros estudios han seguido también esta línea de comparar y/o integrar ambos modelos (para una revisión sistemática de la literatura, véase Liñán y Fayolle, 2015).

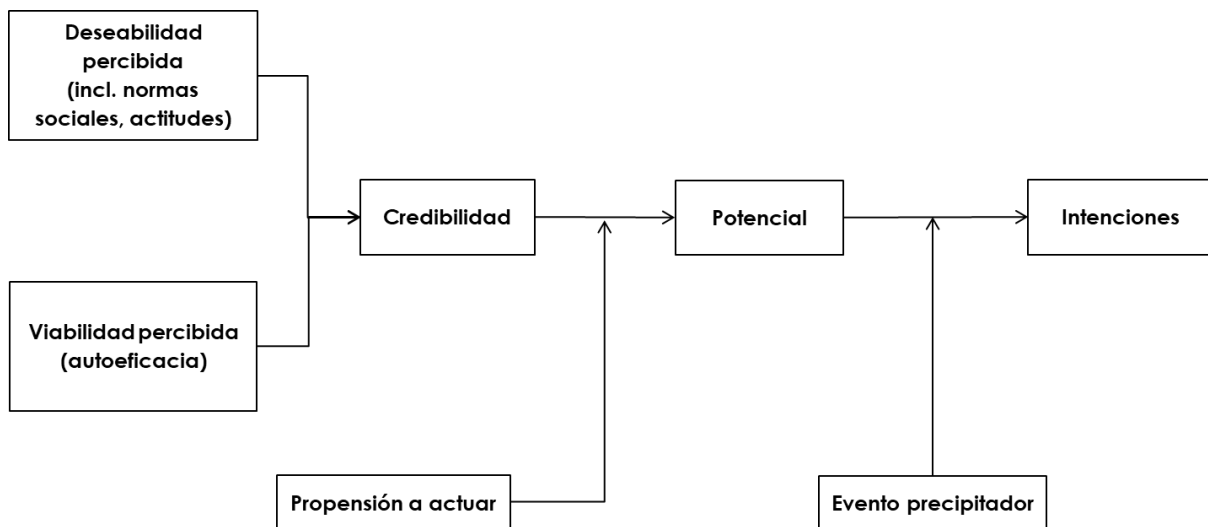


Figura 2.9. Modelo del potencial emprendedor (Krueger y Brazeal, 1994).

Más recientemente, Schlaegel y Koenig (2014) someten a prueba e integran meta-analíticamente la teoría de la acción planificada y el modelo del evento emprendedor. A partir de los resultados de 98 estudios con 123 muestras y 114.007 participantes en más de 30 países, examinan el ajuste de los dos modelos explicativos propuestos y construyen un modelo integrado. Aunque el ajuste del modelo integrado propuesto no resulta adecuado, realizan una serie de modificaciones que conducen al modelo recogido en la Figura 2.10. Por otra parte, realizan diferentes comparaciones encontrando que, si bien los determinantes del modelo del evento emprendedor presentan mayores tamaños del efecto que los componentes de la teoría de la acción planificada, los componentes de la teoría de la acción planificada permiten explicar un mayor porcentaje de la varianza ( $R^2 = .28$ ) que los determinantes del modelo del evento emprendedor ( $R^2 = .21$ ).

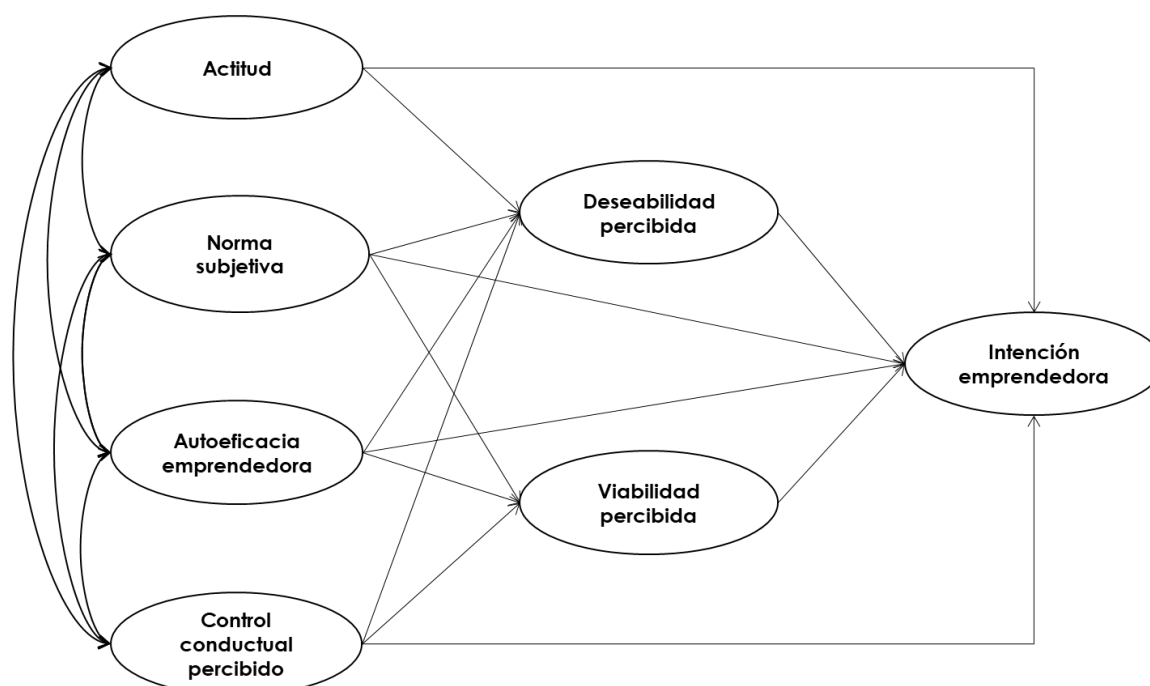


Figura 2.10. Modelo integrado revisado (Schlaegel y Koenig, 2014).

En resumen, el amplio número de estudios sobre intención emprendedora confirma la aplicabilidad de los modelos de intención en el emprendimiento. La revisión sistemática sobre intención emprendedora realizada por Liñán y Fayolle (2015) pone de manifiesto que el modelo más utilizado en esta área es la teoría de la acción planificada, seguida del modelo del evento emprendedor. Asimismo, la teoría de la acción planificada (Ajzen, 1991) es el modelo que ha recibido mayor apoyo empírico para predecir la intención en el área del emprendimiento (Liñán y Fayolle, 2015; Lortie y Castogiovanni, 2015), así como la creación de empresas (Kautonen, van Gelderen, et al., 2015; Kautonen et al., 2013). Por este motivo, en esta Tesis doctoral se ha elegido la teoría de la acción planificada como marco para la realización de los distintos estudios.

De acuerdo a la teoría de la acción planificada, únicamente tres antecedentes influyen directamente en la intención de realizar una conducta: a) la actitud hacia la conducta, b) la norma subjetiva, y c) el control conductual percibido, mientras que otras variables se espera que influyan en la intención y en la conducta de forma indirecta a través de estos tres



determinantes más proximales de la intención (Ajzen, 2011). Por tanto, en los estudios de esta Tesis se analiza la influencia de las distintas variables consideradas tanto de forma directa como mediada a través de los tres componentes de la teoría de la acción planificada.

## **4. MARCO METODOLÓGICO**

### **4.1. Muestras**

Según se ha indicado en la Introducción (véase Capítulo 1, apartado 2. Objetivos, novedad e interés de la Tesis), en los estudios 1 y 2 la muestra se compone de estudiantes de nivel universitario mientras que los estudios 3, 4 y 5 incluyen población general. En los primeros estudios (1 y 2), se hace especial énfasis en estudiantes de nivel universitario, ya que: (a) el grupo de población con mayor tendencia a emprender en diferentes regiones del mundo es el segmento de 25 a 34 años (Singer et al., 2018); (b) en los estudios de intención emprendedora son habituales las muestras de estudiantes de nivel universitario, ya sea grado o máster (Autio et al., 2001; Krueger et al., 2000), dado que es un fenómeno que debe estudiarse antes de que ocurra; y (c) el número de años de educación se relaciona positivamente con el rendimiento de las empresas creadas (van der Sluis et al., 2008), y por tanto, la población de profesionales con estudios superiores que crean su propia empresa es de especial interés.

Por otra parte, los estudios 3, 4 y 5 están orientados a complementar los dos primeros generalizando los resultados a la población general y se centran en la percepción de los medios de comunicación y los estereotipos de género en el emprendimiento. La inclusión de muestras de no solo estudiantes sino de personas ya trabajando por cuenta ajena o en otras situaciones ha estado motivada por la importancia del emprendimiento en distintas etapas de la carrera profesional (véase Capítulo 1, apartado 2. Objetivos, novedad e interés de la Tesis). En la Tabla 2.4 se recoge un resumen de los estudios, las variables analizadas y las muestras.

Tabla 2.4

Estudios realizados en esta Tesis doctoral

Estudio	Variables consideradas predictoras de la TAP	Otras variables	Muestra estudiantes	Muestra no solo estudiantes	Instrumento TAP
<b>Estudio 1</b>	Entorno universitario, entorno emprendedor y riesgo percibido de emprender		9.753 estudiantes universitarios/as (59.9 % mujeres, $M_{edad} = 22.6$ , $DT = 4.4$ , 17 – 40 años)		Proyecto internacional GUESSS
<b>Estudio 2</b>	Creatividad percibida, apoyo percibido de la familia y la universidad a la creatividad		559 estudiantes universitarios/as (58.5 % mujeres, $M_{edad} = 24.4$ , $DT = 4.2$ , 18 – 40 años)		CIE
<b>Estudio 3</b>	Legitimidad social percibida del emprendimiento y habilidades aprendidas a través de los medios de comunicación			320 participantes (65.6 % mujeres, $M_{edad} = 32.3$ , $DT = 11.6$ , 19 – 75 años)	CIE
<b>Estudio 4</b>		Influencia de la asignación a una de las tres condiciones de estudio (personas emprendedoras, mujeres emprendedoras y hombres emprendedores) en la intención emprendedora, actitud, norma subjetiva, autoeficacia y motivación emprendedora		902 participantes (55.9 % mujeres, $M_{edad} = 31.0$ , $DT = 6.9$ , 18 – 44 años)	CIE
<b>Estudio 5</b>	Orientación a la tarea y a la relación autopercebidas			1.147 participantes (54.5 % mujeres, $M_{edad} = 35.6$ , $DT = 10.9$ , 18 – 64 años)	CIE

Nota. CIE: Cuestionario de Intención Emprendedora (Moriano et al., 2012).

## 4.2. Medición de la intención emprendedora y componentes de la teoría de la acción planificada

En este apartado se identifican algunas escalas que pueden utilizarse para medir tanto la intención emprendedora como el resto de variables que componen la teoría de la acción planificada (actitud hacia emprender, norma subjetiva y autoeficacia emprendedora). En algunos estudios se mide solo la intención o también algunas de las otras variables. En distintas investigaciones se han desarrollado escalas específicas para medir alguna de estas variables y únicamente se han localizado tres cuestionarios integrados que miden todos los componentes, aunque presentan algunas diferencias.

### 4.2.1. Intención emprendedora

En diversos estudios se mide solo la intención y no el resto de variables que considera la teoría de la acción planificada (o para ello se emplean medidas desarrolladas en otras investigaciones). Algunos autores, como Iakovleva et al. (2011), crean su escala de intención combinando ítems de escalas previas y añadiendo ítems específicos, o toman solo algunos ítems de esas escalas previas y cambian ligeramente la redacción de algún ítem (por ejemplo, Souitaris et al., 2007). En la Tabla 2.5 se resumen distintas escalas sobre intención y sus características. Nótese que el objetivo no es realizar una revisión sistemática, sino identificar las escalas más utilizadas en diferentes estudios y que, por tanto, se resumen solo las principales escalas consultadas y aquellas en las que se han identificado ítems diferentes a los incluidos en la mayoría de las escalas.

Tabla 2.5

*Escalas que miden la intención emprendedora*

Escala	Referencia	Descripción
Intención emprendedora	Autio et al. (2001)	Se pregunta sobre la probabilidad de empezar una nueva empresa (individualmente o con amigos/as) como ocupación a tiempo completo o tiempo parcial. Para cada una de estas dos opciones se plantean dos preguntas

Escala	Referencia	Descripción
		("Start a firm on full/part-time basis within one year from now" and "Start a firm on full/part-time basis within five (5) years from now"), con una escala de respuesta tipo Likert desde 1 ( <i>not at all likely</i> ) a 5 ( <i>already started a firm</i> ).
Intención emprendedora	Carr y Sequeira (2007)	Seis preguntas con opción de respuesta sí/no, por ejemplo "Have you begun saving money to invest in the business?".
Intención emprendedora	Kautonen et al. (2013)	Se plantea la pregunta "In the last three years (that is, from November 2006 on), have you started a business or thought about starting a business alone or together with others?" con cuatro opciones de respuesta: "have not thought about starting a business", "thought about it but have not taken action", "have not started a business but have commenced preparations and intend to start up in the near future" y "have started a business".
Intención emprendedora	Kautonen, Hatak, et al. (2015)	Tres ítems sobre "How well do the following statements describe you?", por ejemplo, "I plan to take steps to start a business in the next 12 months".
Intención emprendedora	Kolvareid (1996), Tkachev y Kolvareid (1999)	Tres ítems: 1) "If you were to choose between running your own business and being employed by someone, what would you prefer?", 1 ( <i>would prefer to be employed by someone</i> ) a 7 ( <i>would prefer to be self-employed</i> ), 2) "How likely is it that you will pursue a career as self-employed?", 1 ( <i>unlikely</i> ) a 7 ( <i>likely</i> ) y, 3) "How likely is it that you will pursue a career as employed in an organization?", 1 ( <i>unlikely</i> ) a 7 ( <i>likely</i> ).
<i>Individual Entrepreneurial Intent Scale</i>	Thompson (2009)	Diez ítems (tres invertidos) con el enunciado "Thinking of yourself, how true or untrue is it that you:", por ejemplo, "Are saving money to start a business". Cuatro de los 10 ítems son distractores y no se analizan, por ejemplo "Plan your future carefully". La escala de respuesta es tipo Likert de 1 ( <i>very untrue</i> ) a 6 ( <i>very true</i> ).
Intención emprendedora	Valliere y Steele (2015)	Ocho ítems con el enunciado "Within the next 12 months I intend to...", por ejemplo, "Open a business bank account", con una escala de respuesta tipo Likert, de 1 ( <i>strongly disagree</i> ) a 5 ( <i>strongly agree</i> ).
Intención emprendedora	van Gelderen et al. (2008)	Cinco preguntas, por ejemplo, "Realistically, however, considering your actual situation and constraints upon your options (for example, lack of money), indicate which employment opportunity you're most likely to choose

Escala	Referencia	Descripción
		( __ Work for an organization; __ Operate your own business)".
Intención emprendedora	von Graevenitz, Harhoff y Weber (2010)	Utilizan un único ítem "I intend to start my own enterprise within the next 5–10 years", con una escala de respuesta tipo Likert, de 1 ( <i>strongly disagree</i> ) a 7 ( <i>strongly agree</i> ).
Intención emprendedora	Zapkau, Schwens, Steinmetz y Kabst (2015)	Se pregunta a las personas participantes sobre su: 1) intención, 2) expectativas, 3) si quieren empezar un negocio en los próximos dos años, y 4) cómo valoran la probabilidad de comenzar un negocio en los dos años siguientes. La escala de respuesta es tipo Likert de 1 a 7.

#### 4.2.2. Actitud hacia la conducta emprendedora

Al igual que en el caso de la medida de la intención emprendedora, se han desarrollado diferentes escalas para medir la actitud hacia el emprendimiento (Tabla 2.6). Asimismo, en algunos estudios se utilizan combinaciones de ítems de varias escalas (por ejemplo, Iakovleva et al., 2011), o adaptaciones de escalas previas (por ejemplo, Kautonen et al., 2013) o se incorpora algún ítem a estas escalas (por ejemplo, Kolvereid e Isaksen, 2006). Si bien para medir la intención se emplean en general escalas tipo Likert, para medir las actitudes es frecuente también emplear diferenciales semánticos.

Tabla 2.6

#### *Escalas que miden la actitud hacia emprender*

Escala	Referencia	Descripción
Actitud hacia el emprendimiento	Autio et al. (2001)	En primer lugar, se pregunta por diferentes alternativas de carrera, como empleo por cuenta ajena, funcionariado, carrera académica, emprendimiento y "otras" (aquí se solicita especificar cuál). Específicamente para el emprendimiento se enuncia "Entrepreneurial career (starting up and or managing a firm of my own or with family or friends, self-employment)". La escala de respuesta tipo Likert, de 1 ( <i>not at all desirable</i> ) a 5 ( <i>highly desirable</i> ). Se

Escala	Referencia	Descripción
		platean asimismo dos enunciados: "If my child decided to become an entrepreneur, I myself would consider it to be...", de -3 ( <i>bad</i> ) a 3 ( <i>good</i> ), y "I personally consider entrepreneurship to be a highly desirable career alternative for people with my professional and educational background", de 1 ( <i>do not agree</i> ) a 7 ( <i>agree</i> ).
Actitudes hacia empezar un negocio	Carr y Sequeira (2007)	Se proponen cinco pares de adjetivos bipolares con el enunciado "In general, starting a business is": 1) "Harmful – Helpful", 2) "Negative – Positive", 3) "Worthless – Worthwhile", 4) "Bad for me – Good for me", y 5) "Disappointing – Rewarding".
Actitudes - creencias	Kolvereid (1996), Tkachev y Kolvereid (1999)	Cinco razones favorecen el autoempleo: oportunidad económica (3 ítems, por ejemplo "To receive compensation based on merit"), retos (4 ítems, por ejemplo "To have an exciting job"), autonomía (4 ítems, por ejemplo "Freedom"), autoridad (2 ítems, por ejemplo "Have power to make decisions"), auto-realización (4 ítems, por ejemplo "Realize one's dreams") y participación en todo el proceso (2 ítems, por ejemplo "To follow work tasks from a to z"). La escala de respuesta es tipo Likert, de 1 ( <i>strongly disagree</i> ) a 7 ( <i>strongly agree</i> ).
Actitud	Lüthje y Franke (2003)	Tres ítems, por ejemplo "I'd rather be my own boss than have a secure job", con una escala de respuesta tipo Likert, de 1 ( <i>not at all accurate</i> ) a 5 ( <i>very accurate</i> ).
Actitud hacia el emprendimiento académico	Obschonka, Goethner, Silbereisen y Cantner (2012)	Cuatro adjetivos bipolares para la pregunta "My personal attitude toward participation in the development of a business idea to commercialize my own research is that this is...": 1) 1 = "uninteresting" vs. 5 = "interesting", 2) 1 = "unattractive" vs. 5 = "attractive", 3) 1 = "boring" vs. 5 = "exciting", y 4) 1 = "waste of time" vs. 5 = "worth investing as much time as possible".
Actitud hacia empezar un negocio	Zapkau et al. (2015)	Diferencial semántico con cuatro ítems para la pregunta "starting a business within the next two years would be for you...": 1) "foolish/smart", 2) "harmful/beneficial", 3) "worthless/useful" y, 4) "bad/good", con una escala de respuesta de 1 a 7.

### 4.2.3. Norma subjetiva

Las escalas de norma subjetiva hacen referencia, en general, a la medida en que se percibe que personas importantes para la persona que responde al cuestionario apoyarían o esperarían que esta emprenda (Tabla 2.7). Sin embargo, esto se aborda de forma muy diferente en las medidas, preguntando de forma global por “personas importantes” o específicamente por la familia o amistades. En otros casos, se considera la percepción de la sociedad en la que se vive o el apoyo de la universidad.

Tabla 2.7

#### *Escalas que miden la norma subjetiva*

Escala	Referencia	Descripción
Norma subjetiva	Autio et al. (2001)	En primer lugar, se incluyen cuatro ítems con una escala de respuesta tipo Likert, de 1 ( <i>disagree</i> ) a 5 ( <i>agree</i> ), por ejemplo “In my university, people are actively encouraged to pursue their own ideas”. Tres de estos ítems hacen referencia a la universidad y uno a las infraestructuras de apoyo (aunque no se explicita de la universidad). En segundo lugar, se plantean cuatro enunciados con opciones de respuesta desde -3 ( <i>bad</i> ) a 3 ( <i>good</i> ), por ejemplo, “If I became an entrepreneur, my family would consider it to be...”. En esta parte, los cuatro colectivos por los que se pregunta son: familia, amistades cercanas, colegas y otras personas cercanas.
<i>Perceived family business support</i>	Carr y Sequeira (2007)	Se proponen ocho enunciados con una escala de respuesta tipo Likert, de 1 ( <i>extremely negative</i> ) a 5 ( <i>extremely positive</i> ) sobre cómo se cree que otras personas se sienten acerca de que quien responde empiece un negocio, específicamente: padres, esposo(a)/otra persona significativa, hermanos o hermanas, en general los familiares, sus vecinos/as, las personas con las que se trabaja, en general personas conocidas y las amistades cercanas.
<i>Community-level culture</i>	Hopp y Stephan (2012)	Comprende dos escalas: cultura basada en el rendimiento (por ejemplo, “The social norms and culture of your community encourage entrepreneurial risk-taking”) y entorno institucional que socialmente apoya (por ejemplo, “Community groups provide good support

Escala	Referencia	Descripción
		for those starting new businesses”). La escala de respuesta tipo Likert ( <i>strongly agree - strongly disagree</i> ).
Norma subjetiva	Kautonen et al. (2013)	Se miden tanto creencias sobre tres grupos referentes como motivación para acomodarse. Se pregunta la opinión de tres grupos (familia cercana, amistades cercanas y colegas y personas importantes para quien responde) sobre si la persona debería o no debería crear su propio negocio y convertirse en emprendedor/a.
<i>Social valuation</i>	Liñán et al. (2011)	Aunque más adelante se presenta el cuestionario integrado de Francisco Liñán y su equipo, en esta tabla se recogen tres medidas específicas en las que se valora: 1) “In your closest environment, do you think the entrepreneurial activity is valued worse or better than other activities and careers?” con opciones “close family”, “friends” y “colleagues and mates” y una escala de 1 ( <i>much below others</i> ) a 7 ( <i>much above others</i> ); 2) “If you decided to create a firm, people in your close environment would approve of that decision?”, con las mismas opciones y respuesta de 1 ( <i>total disapproval</i> ) a 7 ( <i>total approval</i> ); y 3) cinco ítems sobre como “Entrepreneurial activity clashes with the culture in my country” o “The entrepreneur’s role in the economy is not sufficiently recognized”, de 1 ( <i>total disagreement</i> ) a 7 ( <i>total agreement</i> ). Una escala similar es empleada en Liñán et al. (2013) y por do Paço, Ferreira, Raposo, Rodrigues y Dinis (2013).
Norma social (emprendimiento académico)	Obschonka et al. (2012)	Las normas percibidas se miden con dos ítems con el enunciado “Most of my colleagues whose opinions matter to me...”: 1) “... think I should participate in the development of a business idea to commercialize my research” y, 2) “...would encourage my participation in the development of a business idea to commercialize my research”. La escala de respuesta tipo Likert de 1 ( <i>not at all correct</i> ) a 5 ( <i>totally correct</i> ).
Norma subjetiva	Tkachev y Kolvereid (1999)	Se miden tanto creencias sobre tres grupos referentes como motivación para acomodarse. Se pregunta la opinión de tres grupos (familia cercana, amistades cercanas y colegas y personas importantes para quien responde) sobre si la persona debería/no debería seguir una carrera como autoempleado/a, de 1 ( <i>should not</i> ) a 7 ( <i>should</i> ) y en qué medida le importan lo que estos grupos piensen si decide o no seguir una carrera como autoempleado/a, de 1 ( <i>I don’t care at all</i> ) a 7 ( <i>I care very</i>



Escala	Referencia	Descripción
		<i>much</i> ). Iakovleva et al. (2011) emplean la misma escala sustituyendo “self-employed” por “an entrepreneur”.
Norma subjetiva	Zapkau et al. (2015)	Dos ítems, sobre si personas importantes para quien responde esperan que empiece un negocio en los próximos dos años y si estas personas piensan que debería empezar un negocio en los próximos dos años. La escala de respuesta tipo Likert de 1 ( <i>strongly disagree</i> ) a 7 ( <i>strongly agree</i> ).

#### 4.2.4. Control conductual percibido

Como ya se ha indicado, el control conductual percibido (CCP) se refiere a la facilidad o dificultad que una persona estima que tiene para emprender y aúna aspectos relacionados con la controlabilidad y la autoeficacia. En esta apartado se recogen aquellas escalas diseñadas para medir tanto el control conductual percibido como la autoeficacia y la controlabilidad (Tabla 2.8).

Tabla 2.8

*Escalas que miden control conductual percibido y/o autoeficacia y/o controlabilidad*

Escala	Referencia	Descripción
CCP	Autio et al. (2001)	Cuatro ítems, por ejemplo “I am confident that I would succeed if I started my own firm”, con una escala de respuesta tipo Likert de 1 ( <i>disagree</i> ) a 5 ( <i>agree</i> ).
Autoeficacia emprendedora	Carr y Sequeira (2007)	26 ítems, precedidos del enunciado “How much confidence do you have in your ability to...” y con respuesta de 1 ( <i>very little confidence</i> ) a 5 ( <i>complete confidence</i> ), por ejemplo “Work long hours in my business” o “Estimate customer demand for a new product or service”.
CCP	Kautonen et al. (2013)	Tres ítems, por ejemplo, “There are (very few – very many) such issues that I cannot influence myself but that prevent me from starting a business”.
CCP	Kautonen, Hatak, et al. (2015)	Cuatro ítems, “Please assess yourself with the following statements”, por ejemplo, “It would be easy for me to take steps to start a business in the next 12 months”.

Escala	Referencia	Descripción
Habilidades / competencias emprendedoras	Liñán et al. (2013)	Aunque más adelante se presenta el cuestionario integrado de Francisco Liñán y su equipo, en esta tabla se recoge una medida específica de seis ítems en los que se pregunta "How do you rate yourself on the following entrepreneurial abilities/skills sets?", por ejemplo "Creativity", de 1 ( <i>no aptitude at all</i> ) a 7 ( <i>very high attitude</i> ).
CCP	Obschonka et al. (2012)	Tres ítems: "I believe I can meet the demands posed by participation in the development of a business idea to commercialize my research", "I am convinced that I would find it generally easy to participate in the development of a business idea to commercialize my research" y "If I wanted to participate in the development of a business idea to commercialize my research, I am confident that I would succeed". La escala de respuesta tipo Likert de 1 ( <i>not at all correct</i> ) a 5 ( <i>totally correct</i> ).
CCP	Tkachev y Kolvereid (1999)	Seis ítems (4 de ellos se invierten), por ejemplo "As self-employed, how much control would you have over the situation?", de 1 ( <i>absolutely no control</i> ) a 7 ( <i>complete control</i> ), o "For me, being self-employed would be...", de 1 ( <i>very easy</i> ) a 7 ( <i>very difficult</i> , invertido).
CCP	Zapkau et al. (2015)	Contiene ítems de autoeficacia y controlabilidad. Tres ítems en los que se solicita indicar si empezar un negocio en los próximos dos años sería imposible/posible o fácil/difícil y si empezar un negocio en los próximos dos años estaría más allá/dentro de su control. La escala de respuesta es tipo Likert de 1 a 7.

#### 4.2.5. Conducta emprendedora

Únicamente en algunos estudios de carácter longitudinal se pregunta sobre la conducta emprendedora. Por ejemplo, Kautonen, Hatak, et al. (2015) consideran tres ítems "How much effort have you given to activities aimed at starting a business in the last 12 months?", "How much time have you used in activities aimed at starting a business in the last 12 months?" y "How much money have you invested into activities aimed at starting a business in the last 12 months?".

#### 4.2.6. Cuestionarios integrados

Existen algunos cuestionarios que incluyen todas las escalas para medir la intención emprendedora y las otras variables de la teoría de la acción planificada. Estos cuestionarios presentan la ventaja de tener una estructura similar en sus escalas. El cuestionario desarrollado por Liñán y Chen (2009) ha sido ampliamente utilizado en estudios de diferentes países (1.195 citas de acuerdo a Google Académico en marzo de 2018) y es el cuestionario que se emplea en proyectos internacionales como el proyecto GUESSS. Este cuestionario consta de las siguientes escalas: actitudes personales (cinco ítems), norma subjetiva (tres ítems), control conductual percibido (seis ítems) e intención emprendedora (seis ítems). No obstante, este cuestionario, que es el que se emplea en el primer estudio de la Tesis, presenta una alta correlación entre las escalas de actitud e intención, al igual que ocurre en otros estudios con la misma escala de medida (para una revisión de algunas posibles limitaciones de esta escala, véase McNally et al., 2016) y resulta superior a la relación encontrada con otras medidas (por ejemplo, Kautonen, van Gelderen, et al., 2015; Moriano et al., 2012). Por tanto, se decidió sustituirlo por otra medida en los siguientes estudios de la Tesis. Posteriormente, Liñán et al. (2013) también incorporan en su artículo el cuestionario de 20 ítems utilizados, con una escala de respuesta es tipo Likert de 1 (*total disagreement*) a 7 (*total agreement*), junto con otras escalas (algunas comentadas en los apartados anteriores).

Por otra parte, Maes et al. (2014) utilizan un cuestionario compuesto por las siguientes escalas, cada una de las cuales incluye cuatro ítems con un formato de respuesta de 1 (*entirely disagree*) a 5 (*entirely agree*): intención emprendedora, actitud personal, creencias conductuales – expectativas, creencias conductuales – valor, motivación para acomodarse, creencias normativas, control conductual percibido, creencias de control – fortaleza y creencias de control – poder. No obstante, este cuestionario no ha tenido una difusión tan amplia (69 citas de acuerdo a Google Académico en marzo de 2018).

Por último, Moriano (2005) ha desarrollado en España el Cuestionario de Intención Emprendedora (CIE). El artículo de validación en distintos países (Moriano et al., 2012) ha sido citado en 219 artículos (consulta en Google Académico actualizada en marzo de 2018). Este es el cuestionario que ha sido seleccionado para los estudios 2, 3, 4 y 5 de esta Tesis, por estar desarrollado y validado en castellano y por su relevancia, por lo que es descrito en detalle a continuación.

#### **4.2.7. El Cuestionario de Intención Emprendedora (CIE)**

Para medir la intención emprendedora así como los tres componentes de la teoría de la acción planificada (actitud, norma subjetiva y autoeficacia emprendedora) se ha empleado, excepto en el primer estudio de la Tesis en el que se ha utilizado el cuestionario del proyecto GUESSS, el Cuestionario de Intención Emprendedora (CIE) originalmente desarrollado en España por Moriano (2005) y posteriormente validado en otros países (Moriano et al., 2012; Oliveira et al., 2016). En el apéndice B se presenta la validación en Colombia (Laguía et al., 2017).

Dado que esta información es común para los estudios 2, 3, 4 y 5, se expone en el marco teórico para evitar reiteraciones. Los ítems del cuestionario tienen un formato de respuesta tipo Likert de 5 ó 7 puntos (se especifica en cada estudio). Se ha elegido un formato u otro en función de las otras escalas de cada cuestionario. En los siguientes subapartados, se recoge la descripción de cada una de las escalas empleadas y en cada estudio se indicará la fiabilidad y los descriptivos para las distintas muestras.

##### **4.2.7.1. Actitud hacia la conducta emprendedora**

Dado que las actitudes no solo dependen de las creencias, sino también de la evaluación que se realiza sobre dichas creencias, para medir este componente se emplea: (a) un grupo de seis ítems sobre lo que supondría para la persona emprender con extremos 1 (*totalmente improbable*) y 5 ó 7 (*totalmente probable*), y (b) otro grupo de seis ítems sobre en qué medida es deseable cada uno de esos aspectos, de 1 (*nada deseable*) a 5 ó 7 (*totalmente deseable*).

Para calcular la puntuación total se ha multiplicado en primer lugar la puntuación en cada una de las expectativas sobre lo que supondría ser emprendedor o emprendedora por su deseabilidad y se ha dividido este resultado entre cinco o siete (en función de la escala Likert empleada). Según Moriano (2005), al evaluar de esta forma indirecta la actitud hacia la conducta emprendedora, en contraposición a la medición directa, es posible explicar por qué personas que sostienen diferentes creencias pueden mostrar las mismas actitudes y a la inversa. Las puntuaciones altas reflejan una actitud positiva hacia la conducta de emprender.

Tabla 2.9

*Ítems del Cuestionario de Intención Emprendedora (CIE): escala actitud*

Escala	Enunciado	Ítems
Actitud – creencias	Crear una nueva empresa (ser emprendedor/a) para ti supondría...	Enfrentarme a nuevos retos Crear empleo para otras personas Ser creativo/a e innovar Tener altos ingresos económicos Asumir riesgos calculados Ser mi propio jefe/a (independencia)
Actitud – valoración	Ahora debes señalar hasta qué punto son <u>deseables</u> para ti en tu vida en general...	Enfrentarte a nuevos retos La creación de empleo para otras personas La creatividad y la innovación Altos ingresos económicos Asumir riesgos calculados Ser independiente (tu propio jefe/a)

**4.2.7.2. Norma subjetiva**

La norma subjetiva consta de: (a) un grupo de tres ítems sobre el nivel de acuerdo que cada participante considera que otras personas significativas o referentes (familia, amistades y colegas) mostrarían si decidiese emprender, con una escala de respuesta de 1 (*nada de acuerdo*) a 5 ó 7 (*totalmente de acuerdo*); y, (b) otro grupo de tres ítems sobre cómo se valora

la opinión de estas personas al respecto, de 1 (*nada importante*) a 5 ó 7 (*muy importante*), que refleja la motivación para acomodarse a las directrices de los referentes. La puntuación en cada ítem del primer grupo se ha multiplicado por la importancia correspondiente y se ha dividido este resultado entre cinco o siete (en función de la escala Likert empleada). A mayor puntuación global, mayor es la importancia de la norma subjetiva.

Tabla 2.10

*Ítems del Cuestionario de Intención Emprendedora (CIE): escala norma subjetiva*

Escala	Enunciado	Ítems
Norma subjetiva – creencias	Por favor, piensa ahora en tus familiares y amigos/as más cercanos/as. ¿En qué grado se mostrarían de acuerdo si decides emprender y crear tu propia empresa?	Mi familia directa (padres y hermanos/as) Mis amigos/as íntimos/as Mis compañeros/as o colegas
Norma subjetiva – motivación para acomodarse	Y, ¿cómo valoras la opinión de estas personas a este respecto? La considero...	La de mi familia directa (padres y hermanos/as) La de mis amigos/as íntimos/as La de mis compañeros/as o colegas

**4.2.7.3. Autoeficacia emprendedora**

Esta escala, que consta de nueve ítems con un formato de respuesta tipo Likert de 1 (*totalmente ineficaz*) a 5 ó 7 (*totalmente eficaz*), es una versión reducida de la escala de autoeficacia emprendedora desarrollada por De Noble, Jung y Ehrlich (1999) y adaptada y validada en España por Moriano, Palací y Morales (2006a) a la que se añadió un nuevo factor relativo a los pasos básicos para la creación de una nueva empresa (definir la idea, escribir el plan de negocio y realizar los trámites administrativos).

Tabla 2.11

*Ítems del Cuestionario de Intención Emprendedora (CIE): escala autoeficacia emprendedora*

Escala	Enunciado	Ítems
Autoeficacia emprendedora	Si crearas tu propia empresa, ¿en qué grado crees que serías capaz de desempeñar eficazmente cada una de las siguientes tareas?	<p>Definir tu idea de negocio y la estrategia de tu empresa</p> <p>Escribir tu plan de negocio (estudio de mercado, estudio financiero, etc.)</p> <p>Realizar los trámites administrativos y burocráticos necesarios para crear tu empresa</p> <p>Trabajar bajo un continuo estrés, presión y conflicto</p> <p>Reclutar, seleccionar y entrenar a tus empleados/as</p> <p>Relacionarte con personas clave para obtener capital para tu empresa</p> <p>Tolerar los cambios inesperados en las condiciones de tu negocio</p> <p>Persistir frente a la adversidad en tu negocio</p> <p>Formar asociaciones o alianzas con otras empresas</p>

#### **4.2.7.4. Intención emprendedora**

Para evaluar la intención en este modelo se utiliza una escala de cuatro ítems en los que se valora la probabilidad percibida de diferentes aspectos sobre la creación de una empresa (con escalas de respuesta de 5 ó 7 puntos). Asimismo, se ha preguntado “Si finalmente decidieras crear tu propia empresa, lo harías principalmente por:”, con opciones de respuesta de 1 (*necesidad*, falta de una alternativa laboral mejor) a 5 ó 7 (*vocación*, oportunidad de negocio innovadora), a partir del cuestionario Valores e Intenciones Empresariales, VIE, de Liñán et al. (2009).

Tabla 2.12

Ítems del Cuestionario de Intención Emprendedora (CIE): escala intención emprendedora

Escala	Enunciado	Ítems
Intención	-	<p>¿Has considerado alguna vez fundar tu propia empresa? No, nunca (1) - Sí, muchas veces (5 ó 7)</p> <p>¿Piensas que en el futuro crearás tu propio negocio? Definitivamente No (1) - Definitivamente Sí (5 ó 7)</p> <p>Si se presentara la oportunidad, y pudieras elegir libremente que carrera laboral seguir, qué preferirías: Preferiría trabajar por cuenta ajena (1) - Preferiría crear mi propia empresa (5 ó 7)</p> <p>¿Con qué probabilidad consideras que crearás tu propia empresa de aquí a cinco años? Totalmente improbable (1) - Totalmente probable (5 ó 7)</p>

#### 4.2.7.5. Variables sociodemográficas y de control

Estudios previos sobre intención emprendedora aconsejan tener en cuenta una serie de variables control. Aunque en cada estudio se presentan específicamente los aspectos considerados, en este apartado se mencionan en general las variables más frecuentemente incluidas. Las mujeres emprenden en menor medida que los hombres en la mayoría de los países (Kelley, Singer y Herrington, 2016) y el género resulta relevante en el estudio de la intención emprendedora (Haus et al., 2013; Maes et al., 2014). La edad es otro factor que se suele controlar (Schlaegel y Koenig, 2014), ya que los grupos de población que más emprenden son los que se encuentran en los rangos 25 – 34 años y 35 – 44 años (Kelley et al., 2016). Asimismo, la experiencia laboral presenta una relación positiva con la intención de emprender (Autio et al., 2001; Carr y Sequeira, 2007). Por otra parte, se ha preguntado en los cuestionarios sobre la situación laboral o de estudio, el nivel educativo, la asistencia a cursos/charlas sobre emprendimiento (y creatividad en el estudio 2; en caso afirmativo, se



pedía indicar duración y lugar de impartición y modalidad – presencial, online o mixta), la experiencia en la creación de un plan de negocio y en la creación previa de una empresa. Otro aspecto incluido en algunos de los estudios es la intención laboral; para ello se ha empleado la escala propuesta por Moriano (2005), en la que se debe puntuar la intención de seguir los siguientes trayectos profesionales desde 1 (*ningún interés*) a 5 ó 7 (*total interés*): desarrollar la carrera profesional en una empresa privada, trabajar en la Administración Pública (funcionariado), crear una empresa propia (ser emprendedor o emprendedora) y trabajar en una ONG, incorporando una opción más debido a la importancia del emprendimiento social: crear tu propia empresa para solucionar problemas sociales y medioambientales (ser emprendedor o emprendedora social). Adicionalmente, tener familiares emprendedores y conocer personas emprendedoras se ha relacionado con una mayor intención de emprender (BarNir, Watson y Hutchins, 2011; Zhang et al., 2014). Por tanto, se ha incluido una pregunta sobre si alguien en su familia tenía su propia empresa (madre, padre, otros familiares directos – en este caso se solicitaba especificar quién – o nadie) y el número de personas conocidas que hubiesen emprendido en su entorno (familiar, vecindario, amistades, etc.) con opciones: ninguna, entre 1 y 3 personas, entre 3 y 5 personas, entre 5 y 10 personas, más de 10 personas.

### **4.3. Procedimiento**

Excepto en el estudio 2 en el que se han empleado cuestionarios en papel, en el resto de estudios se han utilizado cuestionarios online. En el estudio 1, el cuestionario fue desarrollado y alojado por el equipo coordinador del proyecto GUESSS. Las personas que participaron en el estudio 2 fueron contactadas personalmente en diferentes centros universitarios y cumplimentaron el cuestionario en papel. Para los estudios 3, 4 y 5 se empleó la herramienta Qualtrics de creación de cuestionarios online, de la cual tiene licencia el departamento de Psicología Social y de las Organizaciones. En todos los casos, los cuestionarios fueron anónimos.

#### **4.4. Análisis de datos**

En el estudio 1 se ha empleado la macro PROCESS para SPSS (Hayes, 2013, v2.16.3), mientras que en los estudios 2, 3 y 5 se ha utilizado para el análisis exploratorio de los datos el programa SmartPLS (Ringle, Wende y Becker, 2015). En el estudio 4 se han llevado a cabo fundamentalmente análisis de la varianza (ANOVA) y comparaciones de medias entre dos grupos (*t-Student*). Asimismo, se ha empleado el programa SPSS para calcular los estadísticos descriptivos, correlaciones, ANOVA, comparaciones de medias y fiabilidades (alfa de Cronbach). Para la validación del Cuestionario de Intención Emprendedora (apéndice B) y la escala de “Emprendimiento: Tarea y Relación” (apéndice E) se han empleado también análisis factoriales exploratorios (con el programa FACTOR) y confirmatorios (programas AMOS y EQS). Aunque en cada estudio se expone el análisis seleccionado, el presente apartado recoge la elección de la técnica de mínimos cuadrados parciales para la mayoría de los estudios (2, 3 y 5).

Se ha optado por la técnica de mínimos cuadrados parciales para el análisis de sistemas de ecuaciones estructurales (*Partial Least Squares Structural Equation Modeling*, PLS-SEM) debido a los complejos modelos que se analizan donde se deben estimar numerosos indicadores y relaciones (Hair, Hult, Ringle y Sarstedt, 2017). Esta técnica es recomendable cuando el objetivo principal es la exploración y el desarrollo de nuevas teorías, más que la confirmación de modelos ya propuestos, y conceptualmente es similar a los análisis de regresión múltiple.

Asimismo, PLS-SEM es una técnica no paramétrica que permite la incorporación de modelos de medida formativos y reflectivos (Hair et al., 2017). Los modelos formativos intentan cubrir el dominio del constructo latente de estudio mediante la agregación de diferentes indicadores, es decir, son la causa del constructo, mientras que en los modelos reflectivos los indicadores representan los efectos o manifestaciones del constructo subyacente, esto es, son la consecuencia del constructo. Si bien los constructos no son inherentemente formativos o

reflectivos, su especificación dependerá de la conceptualización del constructo y de los objetivos del estudio. Se ha analizado empíricamente (mediante el *confirmatory tetrad analysis*, CTA-PLS) la especificación de los modelos de medida, de tal modo que los valores que difieren significativamente de cero apuntan a que el constructo es formativo mientras que en los casos en los que no se encuentran valores significativos el constructo sería reflectivo; no obstante, se deben tener en cuenta también consideraciones teóricas para tomar esta decisión de plantear un constructo como formativo o reflectivo. El error de especificación en los modelos de medida tiene implicaciones que pueden llevar a sesgar los resultados. Por ejemplo, en un modelo reflectivo las medidas representan los efectos o manifestaciones del constructo subyacente, por lo que los indicadores deben presentar altas correlaciones. Sin embargo, en un modelo formativo los indicadores forman el constructo mediante combinaciones lineales y, en este caso, no necesariamente correlacionarán entre sí. Cuando se especifica un constructo formativo como reflectivo, las cargas factoriales pueden ser bajas así como la fiabilidad, por lo que los valores de corte habituales pueden aconsejar incorrectamente eliminar algunos ítems, con las implicaciones que esto puede tener. En cada estudio se han analizado en primer lugar los modelos de medida (relación entre los indicadores y las variables latentes o constructos en los que saturan) y después el modelo estructural (relación entre las variables latentes).



**Capítulo 3. El entorno universitario y la  
intención emprendedora: el papel  
mediador de los componentes de la teoría  
de la acción planificada**

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**Chapter 3. University environment and  
entrepreneurial intention: The mediating  
role of the components of the theory of  
planned behavior**



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## 1. INTRODUCCIÓN

El emprendimiento está relacionado con la generación de empleo y el desarrollo económico y social, y es objeto de atención en el ámbito político, empresarial y académico (Comisión Europea, 2013; Gorgievski y Stephan, 2016). Desde una perspectiva económica, se ha analizado qué tipo de empresas se crean y cuáles son las características sociodemográficas de las personas emprendedoras (véanse, por ejemplo, los informes del *Global Entrepreneurship Consortium*, GEM<sup>22</sup>). Desde una perspectiva psicosocial, se pueden analizar cuáles son los antecedentes que llevan a una persona a emprender. En esta línea, la Psicología Social tiene mucho que aportar al emprendimiento, tanto en las áreas de cognición social, actitudes e identidad, como en las áreas transversales de género y contexto (Gorgievski y Stephan, 2016; Omorede et al., 2015).

El antecedente más estudiado de la conducta emprendedora, entendida como creación de una nueva empresa, es la intención emprendedora (Liñán y Fayolle, 2015). Aunque se han propuesto diversos modelos para explicar la intención emprendedora (Krueger et al., 2000), ha sido una teoría procedente de la Psicología Social, la Teoría de la Acción Planificada (TAP; Ajzen, 1991), la que ha recibido mayor apoyo empírico para predecir la intención en el área del emprendimiento (Liñán y Fayolle, 2015; Lortie y Castogiovanni, 2015; Schlaegel y Koenig, 2014), así como la creación de empresas (Kautonen, van Gelderen, et al., 2015; Kautonen et

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<sup>22</sup> <http://www.gemconsortium.org/>

al., 2013). De acuerdo a la TAP, únicamente tres antecedentes influyen directamente en la intención de realizar una conducta: la actitud hacia la conducta, la norma subjetiva y el control conductual percibido, mientras que otras variables se espera que influyan en la intención y en la conducta de forma indirecta a través de estos tres determinantes más proximales de la intención (Ajzen, 2011).

Asimismo, el emprendimiento ha recibido gran atención desde los diferentes niveles educativos, en particular, desde las universidades (Kuratko, 2005; Martin, McNally y Kay, 2013). De entre los posibles factores que pueden influir en la intención emprendedora (para una revisión, véase Liñán y Fayolle, 2015) se han seleccionado tres factores psicosociales de especial relevancia para el alumnado de nivel universitario. Dentro del contexto social de este alumnado destacan el entorno universitario (específicamente, la disponibilidad de cursos y servicios sobre emprendimiento) y el entorno emprendedor (familia extendida y amistades), donde se pueden encontrar personas que hayan emprendido y que actúen como modelos de rol. Por otra parte, uno de los factores individuales más estudiados en la literatura sobre emprendimiento es el riesgo percibido (Caliendo, Fossen y Kritikos, 2009; Rauch y Frese, 2007), que sin embargo ha recibido escasa atención en las investigaciones realizadas en el entorno universitario en España. Si bien esta propuesta no es exhaustiva, supone un avance en el estudio de la intención emprendedora en el ámbito universitario al incluir junto a las variables que comprende la TAP otros factores psicosociales relevantes para explicar la formación de la intención emprendedora.

Por todo ello, este estudio tiene como objetivo analizar cómo el entorno universitario, el entorno emprendedor y el riesgo percibido de emprender influyen en la intención emprendedora, tanto de forma directa como a través de los tres antecedentes proximales de la intención: actitud hacia el emprendimiento, norma subjetiva y control conductual percibido. Así, se plantea un modelo extendido de la TAP y se somete el mismo a prueba empírica con una muestra de 9.753 estudiantes de nivel universitario.



## 2. MARCO TEÓRICO

### 2.1. El entorno universitario

Dentro del entorno universitario se pueden distinguir los cursos y programas de formación para el emprendimiento y los servicios creados para fomentar el emprendimiento (por ejemplo, servicios de orientación, cátedras y otras iniciativas). La educación emprendedora universitaria, entendida como cursos optativos, obligatorios y/o programas específicos sobre la creación de empresas o emprender, ha mostrado su impacto positivo en la intención emprendedora de estudiantes de nivel universitario (Souitaris et al., 2007; Zhang et al., 2014). No obstante, en otros estudios no se han encontrado relaciones significativas (Nabi, Walmsley, Liñán, Akhtar y Neame, 2016) o han sido incluso negativas para algunos estudiantes (Fayolle et al., 2006b; von Graevenitz et al., 2010). Específicamente, Nabi et al. (2016) no encontraron una relación significativa entre la educación emprendedora y la intención en su estudio longitudinal con una muestra de estudiantes de primer año. Fayolle et al. (2006b) y von Graevenitz et al. (2010) hallaron incluso una disminución en la intención emprendedora para algunas personas tras realizar un curso de emprendimiento.

Ahora bien, las revisiones meta-analíticas sobre los resultados de la educación en el emprendimiento avalan su impacto positivo. Así, Martin et al. (2013) encontraron que la educación emprendedora influye sobre resultados relacionados con el emprendimiento ( $r = .159$ ), como la creación de una empresa o su rendimiento, así como sobre aspectos relacionados con el capital humano ( $r = .217$ ), por ejemplo, conocimientos y habilidades adquiridos o intención emprendedora. En la misma línea, Bae et al. (2014) hallaron una correlación significativa entre educación emprendedora e intención emprendedora ( $r = .143$ ), aunque esta relación dejó de ser significativa cuando se controló la intención emprendedora previa a recibir la educación.

A partir de estos estudios previos, se considera relevante explorar este impacto del contexto universitario sobre el emprendimiento y se propone que:

*Hipótesis 1:* El entorno universitario (los cursos y servicios a los que se han asistido) se relacionará positivamente con la intención emprendedora.

## **2.2. El entorno emprendedor**

Los modelos de rol, es decir, personas emprendedoras en el entorno próximo, han demostrado de forma consistente un impacto positivo en la intención de emprender como opción de carrera, especialmente en el caso de familiares (véase Liñán y Fayolle, 2015). Entre otros mecanismos para explicar esta influencia, se ha propuesto que la comparación social con el modelo facilita la evaluación de las propias habilidades, motivos y acciones posibles o que el modelo puede constituir una fuente de información y apoyo así como de aprendizaje vicario (véase BarNir et al., 2011).

Algunas investigaciones consideran que no solo el entorno familiar puede ejercer una influencia positiva, sino que también ocurrirá cuando una persona esté expuesta a otros modelos como son las amistades o jefes, ya que estos modelos, junto a los familiares, pueden transmitir su conocimiento emprendedor (BarNir et al., 2011; Zhang et al., 2014). Así, la existencia de modelos de referencia en el entorno más cercano es una de las variables contempladas en los estudios internacionales del GEM (véase por ejemplo para el caso de España el informe elaborado por Peña, Guerrero y González-Pernía, 2015).

En la presente investigación se considera a los progenitores, otros familiares, así como amistades cercanas que hayan emprendido, y se propone la siguiente hipótesis:

*Hipótesis 2:* El entorno emprendedor se relacionará positivamente con la intención emprendedora.

## **2.3. El riesgo percibido de emprender**

El riesgo forma parte inherente del proceso de creación de una nueva empresa ya que la persona emprendedora puede comprometer su capital, su patrimonio, su prestigio o su futuro profesional. De hecho, de las empresas creadas en Europa, un 50% cierra antes de cumplir

su quinto aniversario (Comisión Europea, 2011). Este fracaso puede considerarse un estigma social (Cardon, Stevens y Potter, 2011; Simmons, Wiklund y Levie, 2014), por lo que el miedo al fracaso y a sus consecuencias (por ejemplo, la quiebra financiera) puede llevar a que muchos emprendedores y emprendedoras potenciales no den el paso a iniciar su negocio (Comisión Europea, 2011). De esta forma, el miedo al fracaso tiene un efecto negativo sobre la creación de empresas, aunque este efecto está moderado por los aspectos culturales (Wennberg, Pathak y Autio, 2013). En particular en España, el 46.5% de las personas encuestadas en el estudio GEM señalaron la percepción del miedo al fracaso como un obstáculo para emprender (Peña et al., 2015).

Los resultados de diversos estudios muestran la necesidad de profundizar en cómo el riesgo percibido afecta al proceso emprendedor (Caliendo et al., 2009; Simon, Houghton y Aquino, 2000). Además, otros factores, como la situación laboral previa (empleo vs. desempleo), pueden influir en la percepción del riesgo. Así, los resultados de Caliendo et al. (2009) muestran que una menor aversión al riesgo se relaciona con una mayor tendencia al autoempleo, pero solo para las personas que ya están trabajando, mientras que no parece una variable significativa en el caso de las personas en situación de desempleo o inactividad.

En relación con la intención emprendedora, diferentes estudios muestran que el riesgo, ya sea medido como aversión al riesgo o baja propensión por el riesgo, tiene una influencia negativa (Barbosa, Gerhardt y Kickul, 2007; Segal, Borgia y Schoenfeld, 2005; Zhao et al., 2010). En línea con estos estudios, se establece la siguiente hipótesis:

*Hipótesis 3:* El riesgo percibido de emprender se relacionará negativamente con la intención emprendedora.

#### **2.4. La teoría de la acción planificada (TAP) aplicada al emprendimiento**

Diferentes meta-análisis han puesto de manifiesto la solidez de la TAP para la predicción de una amplia variedad de conductas (Armitage y Conner, 2001; McEachan et al., 2011).

Específicamente en el área del emprendimiento, la TAP es la teoría más utilizada para predecir la intención emprendedora (Liñán y Fayolle, 2015; Lortie y Castogiovanni, 2015; Schlaegel y Koenig, 2014). Los aún escasos estudios longitudinales que existen muestran que la medida autoinformada de la intención emprendedora es una buena predictora de las acciones relacionadas con la creación de nuevas empresas (Kautonen, van Gelderen, et al., 2015; Kautonen et al., 2013).

La TAP propone que son tres los antecedentes que influyen directamente en la intención de realizar una conducta: la actitud, la norma subjetiva y el control conductual percibido (CCP). La actitud hacia el emprendimiento hace referencia al grado en el que una persona evalúa la conducta de emprender de forma favorable o desfavorable. La norma subjetiva recoge la parte más social del modelo y refleja la presión social percibida para emprender o no emprender. Por último, el CCP se refiere a la facilidad o dificultad que una persona estima que tiene para emprender y aúna aspectos relacionados con la controlabilidad y la autoeficacia. Sin embargo, la autoeficacia es el elemento que mayor varianza de la intención explica y además está más claramente definido y operacionalizado (Armitage y Conner, 2001), por lo que en esta investigación se ha optado por medir solo la autoeficacia emprendedora siguiendo a otros estudios previos (Engle et al., 2010; Krueger et al., 2000; Moriano et al., 2012).

Cuanto más favorable sea la actitud, mayor sea la norma subjetiva y más autoeficacia se perciba, mayor será la intención (Ajzen, 1991). Por consiguiente, en línea con lo anteriormente expuesto, se analiza la relación de cada uno de los componentes de la TAP con la intención emprendedora en función de la siguiente hipótesis:

*Hipótesis 4:* La actitud ( $H_{4a}$ ), la norma subjetiva ( $H_{4b}$ ) y la autoeficacia ( $H_{4c}$ ) se relacionarán positivamente con la intención emprendedora.

De acuerdo a la TAP, otros factores pueden influir en la intención y en la conducta de forma indirecta a través de los determinantes más proximales: actitud, norma subjetiva y autoeficacia (Ajzen, 2011; Lortie y Castogiovanni, 2015). Por tanto, en este estudio se analiza la influencia

de los tres factores psicosociales expuestos (entorno universitario, entorno emprendedor y riesgo percibido de emprender) también indirectamente sobre la intención emprendedora a través de los antecedentes propuestos por la TAP. Así, estudios previos muestran que la educación emprendedora universitaria influye positivamente en las actitudes (Athayde, 2012), la norma subjetiva (Souitaris et al., 2007) y la autoeficacia emprendedora (Zhao, Siebert y Hills, 2005). Por lo tanto, se propone la siguiente hipótesis:

*Hipótesis 5:* La relación entre el entorno universitario y la intención emprendedora estará mediada por la actitud ( $H_{5a}$ ), la norma subjetiva ( $H_{5b}$ ) y la autoeficacia ( $H_{5c}$ ).

En cuanto al entorno familiar, tener padre/madre dedicados a los negocios se relaciona con mayores puntuaciones en actitud hacia el emprendimiento (Athayde, 2012). Asimismo, Carr y Sequeira (2007) encontraron que la actitud, la norma subjetiva y la autoeficacia mediaban la relación entre la exposición a un negocio familiar (padres u otros miembros de la familia en el presente o en el pasado dueños de un negocio) y la intención emprendedora. Por consiguiente, se plantea la siguiente hipótesis:

*Hipótesis 6:* La relación entre el entorno emprendedor y la intención emprendedora estará mediada por la actitud ( $H_{6a}$ ), la norma subjetiva ( $H_{6b}$ ) y la emprendedora ( $H_{6c}$ ).

Por otra parte, se ha encontrado que la relación entre el riesgo percibido o la propensión al riesgo y la intención emprendedora está mediada por las actitudes (Nabi y Liñán, 2013) y la autoeficacia (Zhao et al., 2005) o el control conductual percibido (Nabi y Liñán, 2013). La norma subjetiva es el aspecto menos estudiado como variable mediadora en la relación entre el riesgo percibido y la intención emprendedora. No obstante, investigaciones en otras áreas (por ejemplo, riesgo percibido e intención de utilizar la banca por internet) sí plantean esta mediación dentro de la TAP (Lee, 2009). Así, a medida que el riesgo asociado a una conducta aumenta, es más probable que las personas consideren que sus referentes desaprobaban esta conducta. En consonancia, se formula la siguiente hipótesis:

*Hipótesis 7:* La relación entre el riesgo percibido de emprender y la intención emprendedora estará mediada por la actitud ( $H_{7a}$ ), la norma subjetiva ( $H_{7b}$ ) y la autoeficacia ( $H_{7c}$ ).

### **3. MÉTODO**

#### **3.1. Participantes y procedimiento**

Para analizar la intención y actividad emprendedora del alumnado de nivel universitario, en 2003 se inició el proyecto de investigación internacional GUESSS (*Global University Entrepreneurial Spirit Students' Survey*)<sup>23</sup>. En la sexta oleada de recogida de datos del proyecto GUESSS (2014) participaron 34 países y más de 700 universidades (Sieger et al., 2014). En este artículo se utilizan los datos recogidos en España.

La muestra está compuesta por 9.753 estudiantes (59.9% mujeres), con una media de 22.6 años ( $DT = 4.4$ , rango 17 – 40 años<sup>24</sup>). La distribución según el nivel de estudios es: 81.2% licenciatura/grado, 17.4% máster/MBA y 1.4% doctorado/postdoctorado. Respecto al área principal de estudios, Negocios/Administración es la más numerosa (19.3%), seguida de Ingeniería/Arquitectura (17.2%) y otras Ciencias Sociales (12.5%).

En este estudio transversal, se preguntó cuál era el camino que en el momento de responder al cuestionario pensaban seguir: 1) al terminar sus estudios, y 2) a los cinco años de terminar. La mayoría señaló que al terminar quería trabajar para una empresa, ya fuese pequeña (20.4%), mediana (19.6%) o grande (15.5%). Únicamente un 4.7% indicó como opción crear su propia empresa. Un 12.7% eligió el servicio público y otras respuestas minoritarias se relacionan con la carrera académica o trabajar en una ONG. Cabe señalar que el 12.9% no lo sabían todavía o tenían pensadas otras opciones. Sin embargo, en la estimación para dentro

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<sup>23</sup> <http://www.guesssurvey.org>

<sup>24</sup> No se registró el dato de la edad en un 28.39% de los casos.

de cinco años esta situación es muy distinta ya que la opción mayoritaria fue llegar a ser fundador/a (emprendedor/a) trabajando en su propia empresa (31.4%), seguida de trabajar para una gran empresa (20%) y en el servicio público (19.1%).

El enlace al cuestionario online del proyecto fue distribuido a estudiantes de 21 universidades españolas. La respuesta era voluntaria y anónima. Cada universidad distribuyó el cuestionario entre sus estudiantes y la base de datos resultante con toda la muestra fue facilitada por los coordinadores en España del proyecto GUESSS.

### 3.2. Instrumento

Se empleó el cuestionario del proyecto GUESSS. A continuación, se detallan las distintas escalas.

*Teoría de la acción planificada.* Se miden las siguientes variables (Liñán y Chen, 2009): (a) intención emprendedora, seis ítems, por ejemplo, “mi meta profesional es llegar a ser emprendedor(a)” (escala de respuesta tipo Likert de siete puntos: 1 = *muy en desacuerdo*, 7 = *muy de acuerdo*), (b) actitud hacia el emprendimiento, cinco ítems, por ejemplo, “una carrera como emprendedor(a) es atractiva para mí” (1 = *muy en desacuerdo*, 7 = *muy de acuerdo*), (c) norma subjetiva, tres ítems que recogen “Si quisieras seguir una carrera como emprendedor(a), ¿cómo reaccionaría la gente de tu entorno?” con tres grupos referentes: familia más cercana, amigos/as y compañeros/as de estudios (1 = *muy negativamente*, 7 = *muy positivamente*), y (d) autoeficacia emprendedora, ocho ítems, a partir de Zhao et al. (2005) y otros estudios, en los que se solicita “Por favor, indica tu nivel de competencia en la realización de las siguientes tareas”, por ejemplo, “aplicar mi creatividad personal” (1 = *muy baja competencia*, 7 = *muy alta competencia*).

*Entorno universitario.* Adaptación de la escala de Souitaris et al. (2007), que consta de cinco ítems en los que se debe indicar si los cursos y servicios a los que se ha asistido han aumentado una serie de habilidades y conocimientos, por ejemplo, “mis habilidades prácticas

administrativas/de gestión para iniciar un negocio”. La escala de respuesta es tipo Likert de siete puntos (1 = *nada importante*, 7 = *muy importante*).

*Entorno emprendedor.* Cuatro preguntas con dos opciones de respuesta (0 = *no*; 1 = *sí*): (a) si actualmente su padre, madre o ambos trabajan por cuenta propia, (b) si su padre, madre o ambos son accionistas mayoritarios de alguna empresa, (c) si tienen otros familiares que trabajen por cuenta propia y/o sean accionistas mayoritarios, y (d) si tienen amigos/as cercanos/as que trabajen por cuenta propia y/o accionistas mayoritarios de una empresa privada. En las preguntas (a) y (b), se puntuó con 2 si la respuesta era afirmativa para ambos progenitores. Así, esta variable se operacionalizó como suma de las respuestas, de tal modo que el valor mínimo posible es 0 (ninguna persona del entorno familiar o de amistad trabaja por cuenta propia y/o es accionista mayoritaria de una empresa) y el máximo es 6 (en el caso en que ambos progenitores son trabajadores por cuenta propia, ambos progenitores son accionistas mayoritarios de una empresa, otros familiares así como amigos/as cercanos/as son trabajadores por cuenta propia y/o accionistas mayoritarios).

*Riesgo percibido de emprender.* Consta de tres ítems sobre si se considera que “poseer mi propio negocio tiene altos riesgos” (a partir de Pennings y Wansink, 2004). La escala de respuesta es también tipo Likert (1 = *muy en desacuerdo*, 7 = *muy de acuerdo*).

### **3.3. Análisis de datos**

Los análisis descriptivos han sido realizados con el programa SPSS 19. Para el análisis de los datos y someter a prueba las hipótesis de mediación, se empleó el modelo 4 de la macro PROCESS para SPSS (Hayes, 2013, v2.16.3). En este modelo se incluyó la intención emprendedora como variable dependiente y las tres variables mediadoras (actitud hacia el emprendimiento, norma subjetiva y autoeficacia emprendedora) simultáneamente. Se realizaron tres análisis sucesivos (con el mismo valor en la opción *seed*) en los que se incluyó cada una de las variables predictoras (entorno universitario, entorno emprendedor y riesgo percibido) como variable independiente y las otras dos como covariables. Se estableció un



número de muestras de bootstrapping de 10.000 y el intervalo de confianza al 95%. Esta macro permite presentar el efecto total, directo e indirecto para cada una de las variables.

## 4. RESULTADOS

En primer lugar, se calcularon los estadísticos descriptivos y las correlaciones entre las variables de estudio (Tabla 3.1). Las fiabilidades superaron el valor recomendado de .70. Las variables entorno universitario y entorno emprendedor presentaron correlaciones positivas y significativas con la intención emprendedora, mientras que la variable riesgo percibido presentó una correlación negativa. Las variables del modelo de la TAP (actitud, norma subjetiva y autoeficacia emprendedora) presentaron una alta correlación con la intención<sup>25</sup>.

Para someter a prueba las hipótesis planteadas, se utilizó la macro PROCESS y se analizó un modelo de mediación donde las variables independientes fueron los tres factores de estudio (entorno universitario, entorno emprendedor y riesgo percibido), las variables mediadoras fueron los tres antecedentes proximales de la TAP (actitud, norma subjetiva y autoeficacia emprendedora) y la variable dependiente fue la intención emprendedora. Los resultados apoyaron las hipótesis propuestas sobre la relación positiva con la intención emprendedora del entorno universitario ( $H_1: c'_1 = .06, SE = .01, 95\% CI [.04, .07], p < .001$ ) y el entorno emprendedor ( $H_2: c'_2 = .02, SE = .01, 95\% CI [.01, .04], p = .003$ ), así como la relación negativa del riesgo percibido ( $H_3: c'_3 = -.06, SE = .01, 95\% CI [-.07, -.05], p < .001$ ).

Considerando las variables mediadoras, el mayor peso sobre la intención lo tuvo la actitud ( $H_{4a}: b_1 = .83, SE = .01, 95\% CI [.82, .85], p < .001$ ), seguida por la autoeficacia emprendedora ( $H_{4c}: b_2 = .15, SE = .01, 95\% CI [.13, .17], p < .001$ ), mientras que el coeficiente de la norma

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<sup>25</sup> Con el objetivo de comprobar que son constructos diferenciados, se llevó a cabo un análisis factorial confirmatorio con el programa EQS 6.3 para Windows y método de estimación de máxima verosimilitud robusto. El modelo de cuatro factores (CFI = .94, NNFI = .93, RMSEA = .07) resultó preferible al modelo unifactorial (CFI = .73, NNFI = .70, RMSEA = .15).

Tabla 3.1

Estadísticos descriptivos y correlaciones de las variables de estudio

	<i>M</i>	<i>DT</i>	Alfa de Cronbach	1	2	3	4	5	6	7	8	9
Variable criterio												
1. Intención emprendedora	3.95	1.71	.95	-								
Variables mediadoras												
2. Actitud	4.50	1.58	.94	.85***	-							
3. Norma subjetiva	5.55	1.18	.82	.36***	.40***	-						
4. Autoeficacia emprendedora	4.72	1.18	.92	.56***	.55***	.39***	-					
Variables predictoras												
5. Entorno universitario	3.79	1.47	.93	.30***	.28***	.21***	.37***	-				
6. Entorno emprendedor	1.27	1.24	-	.15***	.14***	.15***	.17***	.08***	-			
7. Riesgo percibido	4.78	1.38	.84	-.17***	-.15***	-.08***	-.08***	-.03***	-.07***	-		
Variables control												
8. Sexo (1= H, 2 = M)	-		-	-.11***	-.09***	.01	-.09***	-.04***	-.02	.04***	-	
9. Edad	22.6	4.4	-	-.03**	-.02	-.07***	-.02	-.09***	.03**	-.02	-.03**	-
10. Trabajo fijo (0 = no, 1 = sí)	-		-	.01	.01	-.03**	.02	-.03**	.06***	-.04***	-.02	.34***

Nota. *N* = 9.753.

\*\**p* < .01. \*\*\**p* < .001.

subjetiva no resultó significativo ( $H_{4b}$ :  $b_3 = -.01$ ,  $SE = .01$ , 95% CI  $[-.03, .00]$ ,  $p = .14$ ). En cuanto a la relación de las variables predictoras con las mediadoras, el entorno universitario influyó positivamente en la actitud ( $a_1 = .28$ ,  $SE = .01$ , 95% CI  $[.25, .30]$ ,  $p < .001$ ), la norma subjetiva ( $a_2 = .16$ ,  $SE = .01$ , 95% CI  $[.14, .17]$ ,  $p < .001$ ) y la autoeficacia emprendedora ( $a_3 = .28$ ,  $SE = .01$ , 95% CI  $[.26, .26]$ ,  $p < .001$ ). Igualmente, el entorno emprendedor se relacionó positivamente con las tres variables mediadoras (actitud:  $a'_1 = .14$ ,  $SE = .01$ , 95% CI  $[.11, .16]$ ,  $p < .001$ ; norma subjetiva:  $a'_2 = .12$ ,  $SE = .01$ , 95% CI  $[.10, .14]$ ,  $p < .001$ ; autoeficacia emprendedora:  $a'_3 = .12$ ,  $SE = .01$ , 95% CI  $[.10, .14]$ ,  $p < .001$ ). Por el contrario, la relación del riesgo percibido con estas variables mediadoras fue negativa (actitud:  $a''_1 = -.15$ ,  $SE = .01$ , 95% CI  $[-.17, -.13]$ ,  $p < .001$ ; norma subjetiva:  $a''_2 = -.05$ ,  $SE = .01$ , 95% CI  $[-.07, -.03]$ ,  $p < .001$ ; autoeficacia emprendedora:  $a''_3 = -.05$ ,  $SE = .01$ , 95% CI  $[-.07, -.03]$ ,  $p < .001$ ). El nivel explicativo del modelo fue adecuado con un coeficiente de determinación alto para la intención ( $R^2 = .73$ ). No obstante, los coeficientes de las variables actitud ( $R^2 = .10$ ) y autoeficacia emprendedora ( $R^2 = .15$ ) fueron bajos, aunque superan el mínimo recomendado por Falk y Miller (1992) de .10. Sin embargo, esto no se cumple en el caso de la norma subjetiva ( $R^2 = .06$ ).

En la Tabla 3.2 se representan el efecto directo, indirecto (a través de cada una de las variables mediadoras) y el efecto total de cada una de las variables predictoras sobre la intención emprendedora. En línea con los resultados anteriores, las variables entorno universitario y entorno emprendedor presentaron una influencia positiva en la intención emprendedora, mientras que la influencia del riesgo percibido resultó negativa. La mediación fue significativa para las tres variables predictoras en el caso de las variables mediadoras actitud (hipótesis  $H_{5a}$ ,  $H_{6a}$  y  $H_{7a}$ ) y autoeficacia emprendedora (hipótesis  $H_{5c}$ ,  $H_{6c}$  y  $H_{7c}$ ). En cuanto a la norma subjetiva, la mediación no resultó significativa en ninguno de los tres casos ( $H_{5b}$ ,  $H_{6b}$  y  $H_{7b}$  rechazadas).

Tabla 3.2

*Análisis de mediación (variable dependiente: intención emprendedora)*

Variable predictora	Efecto directo	Efecto indirecto (mediación: actitud hacia emprender) [IC 95%]	Efecto indirecto (mediación: norma subjetiva) [IC 95%]	Efecto indirecto (mediación: autoeficacia emprendedora) [IC 95%]	Efecto total
Entorno universitario	.06 (.01) [.04, .07]	.23 (.01) [.21, .25]	-.00 (.00) [-.00, .00]	.04 (.00) [.03, .05]	.33 (.01) [.30, .35]
Entorno emprendedor	.02 (.01) [.01, .04]	.11 (.01) [.09, .13]	-.00 (.00) [-.00, .00]	.02 (.00) [.01, .02]	.15 (.01) [.13, .18]
Riesgo percibido de emprender	-.06 (.01) [-.07, -.05]	-.13 (.01) [-.15, -.11]	.00 (.00) [-.00, .00]	-.01 (.00) [-.01, -.00]	-.20 (.01) [-.22, -.17]

*Nota.* Coeficientes de regresión no estandarizados (errores entre paréntesis). Los efectos son significativos cuando el valor cero no está comprendido dentro de los límites inferior y superior del intervalo de confianza corregido (IC 95%).

## 5. DISCUSIÓN Y CONCLUSIONES

El objetivo de esta investigación era estudiar cómo el entorno universitario, el entorno emprendedor y el riesgo percibido de emprender influyen en la intención emprendedora, tanto de forma directa como a través de los tres antecedentes proximales de la intención (actitud hacia el emprendimiento, norma subjetiva y autoeficacia emprendedora). Para ello, se analizaron los datos recogidos en España en el marco del proyecto internacional GUESSS centrado en estudiantes de nivel universitario y emprendimiento.

El emprendimiento es una competencia clave en el Marco Europeo, y tanto si se acaba creando una empresa como si no, el alumnado puede beneficiarse de este aprendizaje (Comisión Europea, 2013). En este sentido, muchas universidades españolas han puesto en marcha iniciativas de educación tradicional basada en clases magistrales, junto a cátedras, premios y redes de *networking* (FUE, 2012; MINETUR, 2012). Esto no significa que todas las

personas deberían convertirse en emprendedoras, sino que deberían considerar si crear su propia empresa es una opción viable en consonancia con sus propias habilidades, motivos y preferencias generales (Sieger et al., 2014).

La universidad tiene un importante papel en el fomento de la cultura emprendedora entre sus estudiantes. En el presente estudio, el entorno universitario (los cursos y servicios específicos sobre emprendimiento a los que el estudiantado había asistido), incidió de forma positiva en su intención emprendedora ( $H_1$ ), por lo que sería recomendable que las universidades potenciaran ambos aspectos. En esta misma línea, Küttim, Kallaste, Venesaar y Kiis (2014) analizaron el efecto de la educación emprendedora en el nivel universitario en 17 países europeos, empleando datos recogidos en una anterior oleada del proyecto GUESSS, y concluyeron que lo que se oferta no es necesariamente lo que se demanda, ya que lo más habitual son cursos y seminarios, pero el alumnado espera más actividades de *networking* o *coaching*.

Por otra parte, los resultados del presente estudio mostraron que tener modelos de rol emprendedor en el entorno familiar o próximo (entorno emprendedor) se relacionó con mayores puntuaciones en intención emprendedora ( $H_2$ ), aunque su influencia fue menor que en el caso anterior del entorno universitario. Por el contrario, el riesgo percibido, como se esperaba, tiene un impacto negativo sobre la intención emprendedora ( $H_3$ ). Según el estudio GUESSS 2013/2014 (Sieger et al., 2014), España presenta una posición intermedia en la valoración del riesgo de emprender ( $M = 4.78$ ), mientras que los países donde se percibe mayor riesgo son Polonia ( $M = 5.50$ ) y Japón ( $M = 5.16$ ), y los países donde se percibe menor riesgo son Argentina ( $M = 3.90$ ) y Colombia ( $M = 4.08$ ). Dado que el riesgo percibido se considera vital en la fase de identificación de oportunidades, así como en fases posteriores del proceso emprendedor (Peña et al., 2015), se trata de una variable a la que se debe prestar más atención en futuras investigaciones.

Respecto a las variables propuestas por la TAP, la actitud resultó ser la variable con mayor influencia en la intención de emprender ( $H_{4a}$ ), seguida de la autoeficacia emprendedora ( $H_{4c}$ ). Sin embargo, la norma subjetiva ( $H_{4b}$ ) no presentó una relación significativa con la intención emprendedora. Estudios previos han obtenido resultados similares y señalan a la norma subjetiva como el componente con menor influencia de la TAP en la intención emprendedora (Autio et al., 2001; Krueger et al., 2000; Lortie y Castogiovanni, 2015). Una posible explicación puede ser que la medida de norma subjetiva no incluya a todos los grupos relevantes para la persona y/o el emprendimiento (Moriani et al., 2012).

Las variables predictoras entorno universitario y entorno emprendedor se relacionaron con mayores puntuaciones en actitud hacia emprender, norma subjetiva y autoeficacia emprendedora. Por el contrario, el riesgo percibido de emprender se relacionó con menores puntuaciones en actitud hacia emprender, norma subjetiva y autoeficacia emprendedora.

En cuanto al modelo de mediación propuesto, el entorno universitario, el entorno emprendedor y el riesgo percibido influyeron en la intención emprendedora indirectamente a través de las variables mediadoras actitud (hipótesis  $H_{5a/6a/7a}$ ) y autoeficacia emprendedora (hipótesis  $H_{5c/6c/7c}$ ). Esta influencia tuvo mayor peso en el caso de la actitud, por lo que sería recomendable trabajar en crear una visión realista del emprendimiento y en el miedo al fracaso. Los resultados, sin embargo, no confirmaron el papel mediador de la norma subjetiva ( $H_{5b/6b/7b}$ ). En conjunto, estos resultados reflejan la relevancia de considerar modelos extendidos de la TAP que permitan profundizar en el estudio psicosocial de la conducta emprendedora y aplicar los avances teóricos de forma práctica para el diseño de intervenciones y programa educativos orientados a la promoción del emprendimiento.

## **5.1. Limitaciones e investigación futura**

La actitud presentó una alta correlación con la intención emprendedora, al igual que ocurre en otros estudios que utilizan la misma escala (para una revisión de algunas posibles limitaciones de esta escala, véase McNally et al., 2016). Aunque el análisis factorial confirmatorio apoyó

la diferenciación entre estos constructos, resulta necesario emplear en futuros estudios aproximaciones multimétodo y multiescala. Por otra parte, este estudio se han centrado en una serie de variables psicosociales (limitadas a las medidas en el cuestionario GUESSS, Sieger et al., 2014) para analizar un modelo no exhaustivo que podría ser ampliado con otras variables como, por ejemplo, el tipo de titulación cursada y los contenidos de los cursos y otros servicios ofrecidos por las universidades. Asimismo, se trata de un estudio transversal, por lo que es preciso realizar más estudios que apoyen los resultados encontrados, ya que resultan escasas las investigaciones longitudinales en el área del emprendimiento (Kautonen, van Gelderen, et al., 2015; Kautonen et al., 2013).

Entre las futuras líneas de investigación, es necesario analizar no solo la intención emprendedora de estudiantes, sino de la comunidad docente e investigadora. Además de la impartición de cursos, pueden convertirse en modelos de rol de su área de estudio, con un impacto positivo sobre la actitud, la norma subjetiva, la autoeficacia y la intención emprendedora. Y explorar en futuros estudios, asimismo, las posibles diferencias de género en el marco de la TAP (véase Zampetakis et al., 2017).

Por último, la realización de proyectos internacionales como GUESSS posibilita la recopilación de datos sobre emprendimiento en la universidad que es relevante analizar a nivel nacional, pero también con comparaciones entre varios países o analizando series temporales (p. ej. Küttim et al., 2014; Loiola, Gondim, Prereira y Ferreira, 2016; Shirokova, Osiyevskyy y Bogatyreva, 2016; Verheul et al., 2015).





**Capítulo 4. Estudio psicosocial de la  
creatividad percibida y la intención  
emprendedora en una muestra de  
estudiantes de nivel universitario**

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**Chapter 4. A psychosocial study of self-  
perceived creativity and entrepreneurial  
intention in a sample of university  
students**



*Genius is one percent inspiration, ninety-nine percent perspiration.*

Thomas A. Edison

## **1. INTRODUCTION**

Entrepreneurship has a recognized impact on economic growth, innovation, and employment (Acs et al., 2012; Carree & Thurik, 2010). Therefore, different institutions are involved in boosting entrepreneurial intention and career choice (for instance, European Commission, 2013). In fact, the European Union has even proposed entrepreneurship as one of the key competences for lifelong learning (European Commission/EACEA/Eurydice, 2016). Despite these considerations, early-stage entrepreneurial activity in Europe is at the lowest average regional rate compared to North America (8.1 vs. 16.2, respectively, in 2017/2018) and has decreased in countries such as France and the United Kingdom (Singer et al., 2018). Moreover, while the number of entrepreneurship programs has increased, questions remain as to which aspects of these programs are most effective. Contrary to the expectations, some studies conclude that students' intention to become entrepreneurs does not improve and may even decrease after attending entrepreneurship educational programs (Fayolle et al., 2006b; Nabi et al., 2016; von Graevenitz et al., 2010). In a meta-analytic review of 73 studies, Bae et al. (2014) observed a significant, although small, correlation between entrepreneurship education and post-education entrepreneurial intention. However, this relationship disappeared after controlling for pre-education entrepreneurial intention. Different factors have been proposed to explain this phenomenon. For instance, it was suggested that students may gain more realistic perspectives on starting one's own firm, which may actually be beneficial. Nevertheless, studies unravelling possible key elements of educational programs, which have the potential to boost entrepreneurial intention, remain relevant.

The current study focuses on the role of self-perceived creativity as an antecedent of

entrepreneurial intention. Depending on the educational paradigm, educational approaches to teaching entrepreneurial competences vary in the extent to which they pay attention to the role of creativity and innovation (Edwards-Schachter, García-Granero, Sánchez-Barrioluengo, Quesada-Pineda, & Amara, 2015). The basic assumption behind including creativity related content is that entrepreneurs are considered creative individuals who generate a great deal of potentially valuable ideas (Baron, 1998). They must be capable of creatively interpreting their environment in order to identify opportunities related to their area of expertise (DeTienne & Chandler, 2004). Moreover, on many occasions, opportunities emerge because they are created by an entrepreneur (Read et al., 2009). According to the European Commission, “Entrepreneurship refers to an individual’s ability to turn ideas into action. It includes creativity, innovation and risk taking, as well as the ability to plan and manage projects in order to achieve objectives” (2006, p. 4). Thus, it could be asserted that if students function in an educational environment that emphasizes creativity as an important prerequisite for entrepreneurship and if they believe in their own creative potential, entrepreneurship would become more attractive as a career option for them. For example, students might become more confident they will make a good entrepreneur or because they perceive they fit the entrepreneur stereotype.

Notwithstanding previous theoretical acknowledgement, empirical studies that analyze the link between education aimed at fostering creativity, self-perceived creativity, and choosing an entrepreneurial career are still scarce, although there are some exceptions (Hamidi et al., 2008; Smith, Sardeshmukh, & Combs, 2016; Zampetakis, 2008; Zampetakis et al., 2011; Zampetakis & Moustakis, 2006). Some mechanisms explaining positive links have been proposed, such as the role of creativity in opportunity recognition and implementation (i.e., creative individuals may be more likely to recognize, create, and implement new ideas to start a business). The present study aims to expand this line of research. Building on the theory of planned behavior (TPB; Ajzen, 1991), it is posited that other mechanisms may also play a role. The TPB, widely applied for predicting different types of behavioral intention in diverse areas (Armitage & Conner, 2001), constitutes the most frequently used model in the study of

entrepreneurial intention (Liñán & Fayolle, 2015; Lortie & Castogiovanni, 2015). While other authors have investigated direct links between students' creativity and entrepreneurial intention, the TPB posits a sufficiency hypothesis, according to which three antecedents (attitudes, subjective norms, and perceived behavioral control) would be the most relevant determinants of entrepreneurial intention. Other factors are theorized to only indirectly influence entrepreneurial intention through one or more of these elements (Ajzen, 2011). The inclusion of self-perceived creativity as a distal antecedent in the TPB model may benefit from drawing on this framework, because it helps identify possible explanatory mechanisms.

The purpose of the present study is twofold. First, relationships between possible antecedents of students' creativity (university and family support for creativity, and following creativity courses) and self-perceived creativity were explored. Second, drawing on the TPB, relationships were examined between self-perceived creativity and entrepreneurial intention, both directly and as mediated by attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy. The model was tested in a group of university students. Samples of university students are commonly used to study entrepreneurial intention (Autio et al., 2001; Krueger et al., 2000), since it is a phenomenon that must be studied before it occurs. Additionally, the number of years of education has been proven to be positively related to business performance (van der Sluis et al., 2008); thus, more highly educated professionals who start businesses constitute a particularly interesting population to consider. Showing that self-perceived creativity is an important antecedent of entrepreneurial intention has implications for designing adequate entrepreneurship education programs.

## **2. THEORETICAL BACKGROUND**

### **2.1. Self-perceived creativity and entrepreneurial intention**

In the present study, self-perceived creativity is defined as the self-perceived "creative capacity, skills and abilities that the individual possesses (Hinton, 1968, 1970)" (cited in DiLiello

& Houghton, 2008, p. 39), which refers to the extent to which students perceive that they can produce new and useful ideas (Zhou, Shin, & Cannella, 2008). Entrepreneurs are usually described as creative people, and creativity is deemed a main characteristic of entrepreneurship (Athayde, 2009; Dimov, 2007; Gielnik, Krämer, Kappel, & Frese, 2014; Radu & Redien-Collot, 2008; Rauch & Frese, 2007; Ward, 2004; Zhao et al., 2010). Creativity also forms part of the entrepreneurial stereotype (Gupta & Fernández, 2009; Gupta, Goktan, & Gunay, 2014; Hancock et al., 2014; Orser, Elliott, & Leck, 2011). Indeed, students consider creativity to be strongly related to entrepreneurship (Edwards-Schachter et al., 2015; Nabi et al., 2016), and drawing on the “careers anchors” typology, Feldman and Bolino (2000) have linked creativity to self-employment motivation, arguing that individuals with high perceived creativity are likely to be drawn to an entrepreneurial career option. Combining these different lines of research, it could be argued that students’ self-perceived creativity will be relevant for considering entrepreneurship as a career option. High self-perceptions of creativity will fit with students’ ideas of good entrepreneurs and render entrepreneurship to be an attractive and feasible option. If students evaluate themselves as not very creative, they may exclude entrepreneurship as a viable career option, because they perceive a lack of fit between their own characteristics and the entrepreneurial profile.

The few empirical studies on this topic thus far have supported the premise that if students believe they are more creative, their intention to become entrepreneurs are higher. Zampetakis and Moustakis (2006) found that university students with higher self-perceived creativity reported higher entrepreneurial intention. These results have been further supported by Zampetakis (2008) and Zampetakis et al. (2011), using different scales of self-perceived creativity. In two studies (Smith et al., 2016), creative output, measured as the number of ideas in a scenario task (Study 1) and using the Runco Ideational Behavior Scale -RIBS- (Study 2), showed a positive effect on entrepreneurial intention. Based on this literature, the following hypothesis is formulated:

*Hypothesis 1:* Self-perceived creativity positively relates to entrepreneurial intention.

In research on creativity, the environment is a key element (Hennessey & Amabile, 2010). In work contexts, there is evidence for a positive link between creativity and emotional, informational, and organizational support for creativity (Madjar, 2008; Zhou & George, 2001). There is also a relationship between family and friends' support and creativity in work contexts (Madjar, 2008). In the university context, Zampetakis et al. (2011) analyzed the influence of family and university support for creativity on a higher self-perceived creativity. Moreover, they found that self-perceived creativity in turn predicted entrepreneurial intention. Contrary to their hypotheses, though, no significant relationships were found for university support. To attest the generalizability of these earlier findings, the present study tests similar relationships but in a completely different cultural context (Spain rather than England) and with a sample of more diverse university students (including undergraduate, master, and pre-doctoral students, whereas Zampetakis and colleagues only included undergraduate students). These aspects guide the following hypotheses:

*Hypothesis 2a:* Family support for creativity relates positively to entrepreneurial intention through increased self-perceived creativity.

*Hypothesis 2b:* University support for creativity relates positively to entrepreneurial intention through increased self-perceived creativity.

## **2.2. The role of the theory of planned behavior**

Entrepreneurial intention is the most commonly studied antecedent of new venture creation. Intentions are the best predictor of any type of planned behavior, "particularly when that behavior is rare, hard to observe, or involves unpredictable time lags" (Krueger et al., 2000, p. 411). The TPB (Ajzen, 1991, 2011) has been widely used to study entrepreneurial intention. This theory posits that behavioral intention depends on the influence of three components: (a) attitudes toward the behavior, (b) subjective norms, and (c) perceived behavioral control. Each

of these components can have different weights, their importance varying across behaviors and situations (Ajzen, 1991). With respect to entrepreneurial intention, the influence of each element varies across studies (Autio et al., 2001; Engle et al., 2010; Krueger et al., 2000; Moriano et al., 2012).

The attitudes of a person comprise the strength of each belief they hold, combined multiplicatively with their subjective value. Each belief associates the behavior in question with certain outcomes or other attributes, for instance the cost of performing that behavior (Ajzen, 1991). In this vein, favorable attitudes are developed toward behaviors with desirable consequences, and unfavorable attitudes arise toward behaviors with undesirable consequences. Thus, two people can believe with the same strength that becoming an entrepreneur would mean being their own boss. Still, one person may highly value this independence, while it may be undesirable for the other.

Subjective norms include such elements as family expectations about the desirability of becoming a lawyer, doctor, or entrepreneur (Krueger et al., 2000). More generally, normative beliefs refer to the likelihood of important referent individuals or groups approving or disapproving of a behavior (Ajzen, 1991). In the case of entrepreneurship, normative beliefs would relate to the perceived social pressure to create or not create a new venture. Subjective norms are proportional to the sum of the weights of each normative belief, multiplied by the individual motivation to meet each referent's expectations. The more positive the subjective norms, the higher the intention to become an entrepreneur.

Control beliefs refer to the presence or absence of resources and opportunities that determine either the behavioral intention or the behavior itself (Ajzen, 1991). Control beliefs address the capacity to succeed in certain behaviors and may be based on people's own experience and/or vicarious information (from acquaintances and friends), as well other factors that increase or reduce the perceived difficulty of performing the behavior. As a result, perceived control over the behavior will increase with the higher perceived availability of resources and opportunities



and fewer obstacles or impediments. Perceived behavioral control combines aspects related to beliefs of controllability and self-efficacy (Ajzen, 2002). Several scholars have suggested self-efficacy would be a better construct to include in the model. Based on their meta-analytic review, Armitage and Conner (2001) concluded the construct of self-efficacy is more clearly defined and operationalized and they found self-efficacy explained higher variance in intention than the concept of perceived behavioral control. In addition, entrepreneurial self-efficacy has been found to relate to both entrepreneurial and intrapreneurial intention (Douglas & Fitzsimmons, 2013). Thus, following previous research on entrepreneurial intention (Engle et al., 2010; Krueger et al., 2000; Moriano et al., 2012), entrepreneurial self-efficacy is the variable measured in the present study.

According to the TPB, attitudes toward a behavior, subjective norms, and self-efficacy contain the most substantive information about the determinants of a behavior, whereas other background factors, such as personality and broad life values, demographic variables (education, age, gender, income, etc.), and exposure to media and other sources of information may indirectly influence entrepreneurial intention through one or more of these components (Ajzen, 2011). Therefore, self-perceived creativity is expected to relate indirectly to entrepreneurial intention, through attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy.

First, self-perceived creativity is expected to link to positive attitudes toward entrepreneurship, because these attitudes include the expectations that an entrepreneurial career would offer opportunities to express creative potential. Examples are opportunities for being able “to create something” and “to take advantage of your creative needs” (Kolvereid, 1996), facing new challenges and being creative and innovative (Moriano, 2005), and being able to use one’s creativity (Kautonen et al., 2013). Creative people can be expected to value such opportunities more than people who perceive themselves as being less creative. A specific objective of an entrepreneurial learning experience developed by Toledano and Urbano (2008) was to

stimulate positive attitudes associated with entrepreneurship, which included imagination and creativity alongside effective problem-solving, autonomy, and responsibility. Training creativity has also been shown to positively affect attitudes toward risk-taking (Perry & Karpova, 2017). Negative attitudes toward the risks related to starting one's own business may relate to lower entrepreneurial intention. Therefore, it is hypothesized that:

*Hypothesis 3a:* The positive relationship between self-perceived creativity and entrepreneurial intention will be mediated by more positive attitudes toward entrepreneurship.

Second, cultural norms and practices of the environment surrounding a person influence the development and expression of creativity (Mockros & Csikszentmihalyi, 2014). In addition, creativity training in the context of an entrepreneurship course can be expected to communicate subjective norms toward becoming an entrepreneur. Students will likely perceive that important referent others -parents, teachers, and friends- have higher expectations for the more creative students and peers as future entrepreneurs. Students' perceptions of their own creativity can interact with these perceptions to form normative beliefs. In a congruent scenario, students who perceive themselves as being creative may be more motivated to meet the expectations of important others, which would mean they perceive a higher social norm to become an entrepreneur. In cases where students perceive themselves to be less creative, the scenario is incongruent, which would lead them to avoid referents' high expectations. They may either feel that important other people do not expect them to become entrepreneurs, or they might find their positive opinion less relevant. Hence, it is hypothesized that:

*Hypothesis 3b:* The positive relationship between self-perceived creativity and entrepreneurial intention will be mediated by subjective norms.

Third, self-rated creativity can also be considered an antecedent of entrepreneurial self-efficacy (Phipps & Prieto, 2015; van Gelderen et al., 2008). Entrepreneurial self-efficacy means being confident that one can successfully perform entrepreneurial tasks. These tasks include

identifying new business opportunities, creating new products, commercializing ideas or new developments, solving problems, managing money, gaining agreement from people, being a leader, and making decisions (Moriano, 2005; Wilson et al., 2007). Many of these tasks relate to creativity, and possessing this skill could influence motivational factors by enhancing the perceived level of ease in pursuing this career option. Students may view entrepreneurial behavior as easier if they are more creative, and consequently, they may report greater entrepreneurial self-efficacy. If students do not recognize their own creativity, they may be less confident that they could successfully perform such tasks and perceive an entrepreneurial career as less feasible. Accordingly, the following hypothesis is posited:

*Hypothesis 3c:* The positive relationship between self-perceived creativity and entrepreneurial intention will be mediated by entrepreneurial self-efficacy.

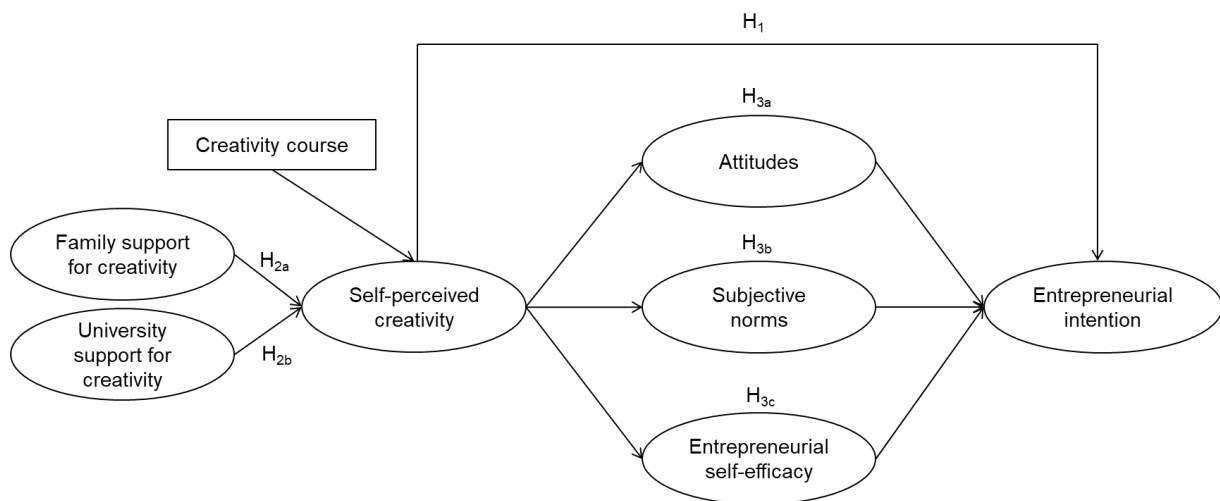


Figure 4.1. Theoretical model and hypotheses.

Figure 4.1 illustrates the theoretical model guiding this study and research hypotheses. Drawing on previous studies on entrepreneurial intention, some control variables are considered. Nonetheless, these variables present few significant effects on entrepreneurial intention, and such effects are generally small (Liñán & Chen, 2009). In addition, attendance of a creativity course is expected to have an influence on self-perceived creativity.

### **3. METHOD**

#### **3.1. Participants and procedure**

A total of 559 university students from Spain took part in this study (58.5% female; 41.5% male). The average age was 24.4 years ( $SD = 4.2$ ). This sample consisted of 88.7% undergraduate students, 10.2% master's students, and 1.1% pre-doctoral students. The most representative areas of study (undergraduate and postgraduate students) were: Engineering and Architecture (27.3%), Psychology (24.4%), Law (11.9%), and Economics and Business Administration (11.6%).

Almost half of the participants (49.4%) indicated they had at least one relative who was an entrepreneur, specifically: 15.2% father, 4.3% mother, 2.9% both parents, 24.3% other relatives (usually uncles/aunts), and 2.7% a combination of two or more of the previous options. Up to 30.1% of participants claimed having attended a course about how to create a firm or what it means to be an entrepreneur, with a course duration of between 1 and 200 hours ( $M = 14.5$ ,  $SD = 30.1$ ). Only 16.6% of participants claimed having attended a course about creativity and techniques to foster it, with a course duration of between 1 and 120 hours ( $M = 12.1$ ,  $SD = 19.6$ ). These courses were usually taught at their university, 73.4% of these courses pertained to entrepreneurship and 68.8% involved creativity. Of the participants, 20.8% reported having experience in developing a business plan, 5.2% had experience in creating a firm, and 46.5% had work experience ( $M = 4.3$  years,  $SD = 4.3$ ). For 12.7% of participants, that work experience lasted less than one year.

For the purposes of this study, a non-probabilistic convenience sampling procedure was used to recruit participants in person at different universities in March-May 2014. To obtain the data for this study, the participants completed a self-report questionnaire.<sup>26</sup>

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<sup>26</sup> In Appendix D, additional analyses are presented regarding students' intention to pursue different career paths (being an entrepreneur, developing a professional career in a private company, being a

### 3.2. Measures

All variables were measured with pre-existing scales, which were contextualized to the students' situation if necessary (see below). All scales had good composite and Cronbach's alpha reliabilities, ranging between .72 and .92 (see Table 4.1).

*Self-perceived creativity* was measured with the subscale "creative potential" of the Creative Potential and Practiced Creativity scale (CPPC-17) developed by DiLiello and Houghton (2008) (adaptation in Spain by Boada-Grau, Sánchez-García, Prizmic-Kuzmica, & Vigil-Colet, 2014). Creative potential is defined as the creative capacity, skills, and abilities that the individual possesses. An example item is: "I have confidence in my ability to solve problems creatively" (1 = *strongly disagree* to 5 = *strongly agree*). The subscale originally included six items, but the item "I have the talent and skills to do my work well" was excluded due to low factor loading both in the original scale, .33, and in the Spanish version, .47.

*Perceived university support for creativity* was measured with four items of the CPPC-17 and additional two items taken from Zampetakis et al. (2011). "My organization" (CPPC-17) was substituted with "my university". An example item is: "In my university you learn to examine old problems in new ways" (1 = *strongly disagree* to 5 = *strongly agree*). Two of the six CPPC-17 items on organizational support were excluded, "Ideas are judged fairly in this organization" and "People are encouraged to take risks in this organization", because they were less relevant for the student sample and difficult to adapt to the students' environment.

*Perceived family support for creativity* was measured with three items taken from Zampetakis et al. (2011): "My family members are always thinking about new ideas for making their life easier," "My family members easily adapt to several circumstances," and "I can freely talk to my family members about new ideas" (1 = *strongly disagree* to 5 = *strongly agree*).

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civil servant, working in a NGO, and being a social entrepreneur) and correlates of creativity (e.g., frequency of occurrence of several events or activities).

The Entrepreneurial Intention Questionnaire (EIQ) was used to gauge intention to become an entrepreneur as well as the three components of the TPB (attitudes, subjective norms, and self-efficacy). The EIQ was developed in Spain by Moriano (2005) and has been validated in several other countries (Moriano et al., 2012).

*Entrepreneurial intention* was assessed with a four-item scale measuring the perceived probability of different aspects about the creation of a business, for instance, “With what probability do you anticipate creating your own business between now and in five years’ time?” (1 = *totally improbable* to 7 = *totally probable*).

*Attitudes toward entrepreneurship.* Attitudes depend not only on beliefs but also on the assessment of these beliefs. Thus, this scale comprises: (a) a set of six items about what creating a new company or becoming an entrepreneur would mean for the participant (1 = *totally improbable* to 7 = *totally probable*), for example, response options to “*Creating a new company or becoming an entrepreneur would mean for you...*” such as “facing new challenges” or “obtaining a high income”; and, (b) another set of six items about how desirable these aspects are for the participant (1 = *not desirable* to 7 = *totally desirable*), for example, response options to “*Now, please indicate how desirable are they for you in your everyday life.*” such as “facing new challenges” or “obtaining high incomes”. To calculate the overall score, the score on each item of the first set is combined in a multiplicative fashion with the corresponding item of the second set. This score is then divided by seven. High scores indicate a positive attitude toward entrepreneurship.

*Subjective norms were measured with the following:* (a) a set of three items about the extent to which the participant considers that other significant people (family, friends, and colleagues) would agree if the participant decided to become an entrepreneur (1 = *not at all* to 7 = *totally agree*); and, (b) another set of three items about how the participant assesses the opinions of these significant people with respect to becoming an entrepreneur (1 = *not important* to 7 = *very important*). This denotes the motivation to comply with expectations of these referent

groups. The score on each item of the first set is combined multiplicatively with the corresponding item of the second set, and the overall score is then divided by seven. The higher the global score, the more important the subjective norms.

*Entrepreneurial self-efficacy* was measured with nine items using a seven-point Likert response format (1 = *totally ineffective* to 7 = *totally effective*). Participants were asked “If you were to create your own business, to what degree would you be able to complete the following tasks effectively?” followed by rating items such as “define your business idea and strategy of your company,” “complete the necessary and administrative, and bureaucratic work to create your own business,” or “develop relationships with key people who are connected to capital sources”.

Finally, socio-demographic background questions covered gender, age, major, work experience, and entrepreneurial family models (“Does anyone in your family have their own company?” with response options of “my mother,” “my father,” “other relatives,” or “no one”). A group of questions about attendance of entrepreneurship courses and/or creativity courses (if yes, participants indicated the duration and organizer), experience in preparing a business plan, and/or experience in starting a business were collected as well. These variables are operationalized as dichotomous variables: gender (0 = *male*, 1 = *female*), course attendance, experience in preparing a business plan, and/or experience in starting a business, and family role (for these cases, 0 = *no*, 1 = *yes*). Age and work experience were included in the models as continuous variables.

### 3.3. Data analysis

Data were analyzed using SPSS 22 (descriptive statistics, and correlations) and SmartPLS v3.0 software (Ringle et al., 2015). Partial Least Squares Structural Equation Modelling (PLS-SEM) is a useful technique in cases where complex mediation models are being analyzed with a large number of indicators and relationships (Hair et al., 2017). This approach is recommended when the main objective is the exploration and development of new theories,

rather than confirmation of previously proposed models. Furthermore, PLS-SEM is a nonparametric technique that allows for the incorporation of reflective and formative measurement models (Hair et al., 2017). Formative models cover the construct domain under study through the aggregation of different indicators, while indicators in reflective models are the effects of the construct. In the present research, the constructs of attitudes, subjective norms, and self-efficacy were measured by means of formative indicator scales. In contrast, reflective indicator scales were used for gauging self-perceived creativity, support from family and university, as well as entrepreneurial intention.

The bootstrapping procedure was used with 5,000 samples and pairwise deletion for missing data. All of the relationships between the reflective indicators and their constructs were significant ( $p < .001$ ), and the outer loadings were above the recommended value of .60 (Hair et al., 2017)<sup>27</sup>. Average Variance Extracted (AVE) values achieved the critical threshold, .50, indicating good convergent validity. The AVE measures the amount of variance that is captured by the construct in relation to the amount of variance due to measurement error (Fornell & Larcker, 1981); thus, an AVE value greater than .50 indicates that the variance captured by the construct is larger than the variance due to measurement error. In order to assess the constructs' discriminant validity, the indicators' cross loadings were examined, the Fornell and Larcker's (1981) criterion was applied, and all the Heterotrait-Monotrait (HTMT) ratios were ascertained to be below .85 (Hair et al., 2017). These three criteria coincided to indicate that the reflective measurement models exhibit discriminant validity. Table 4.1 provides the correlations between constructs, reliability scores, and on the diagonal, the AVE root square

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<sup>27</sup> Regarding formative indicators, weights of items "Creating new jobs for other people," "Obtaining high incomes," and "Taking calculated risks" (attitudes), as well as "Complete the necessary and administrative and bureaucratic work to create your own business" (entrepreneurial self-efficacy), were not significant and their loadings did not achieve the minimum cut-off value of .50. However, they were kept based on theoretical grounds and that analyzing the data without these items did not change the results significantly (Hair et al., 2017).



value of reflective constructs. Regarding multicollinearity, the maximum values of Variance Inflation Factors (VIF) stayed under the recommended value of 5.

#### 4. RESULTS

Table 4.1 shows mean scores, reliability scores, and correlations between the variables. Participants scored relatively low on entrepreneurial intention ( $M = 3.64$ ,  $SD = 1.56$ ). Considering the creativity scales, mean perceived support from family ( $M = 3.42$ ,  $SD = 0.91$ ) and the university ( $M = 3.05$ ,  $SD = 0.85$ ) were moderate. Students more often tended to perceive themselves as more than average creative rather than less than average ( $M = 3.44$ ,  $SD = 0.77$ ). With respect to components of the TPB, the highest mean score corresponded to entrepreneurial self-efficacy ( $M = 4.69$ ,  $SD = 0.99$ ).

Self-perceived creativity correlated strongly with the intention to become an entrepreneur ( $r = .35$ ,  $p < .001$ ), as well as with the variables of the TPB model (attitudes, subjective norms, and self-efficacy). All variables related to creativity and support from the family or the university had a positive and significant correlation with entrepreneurial intention. These results are all in line with the hypotheses formulated.

With respect to control variables, all of the variables (gender, age, work experience, experience in creating a business plan or company, and having a relative who is an entrepreneur) related significantly to the intention to become an entrepreneur. The correlation between intention and attendance of a creativity course was  $.17$  ( $p < .001$ ) while the correlation with attendance of a course on entrepreneurship was slightly higher ( $r = .24$ ,  $p < .001$ ).

A step-by-step analysis of the structural model was followed to test the hypotheses. First, the relationships between self-perceived creativity (and support for creativity) and entrepreneurial intention (hypotheses  $H_1$ ,  $H_{2a}$ , and  $H_{2b}$ ) was analyzed. Second, the three components of the TPB (attitudes, subjective norms, and entrepreneurial self-efficacy) were introduced as mediators and the full model ( $H_{3a}$ ,  $H_{3b}$ , and  $H_{3c}$ ) was assessed.

Table 4.1

*Descriptive statistics and correlations of study and control variables*

	<i>M</i>	<i>SD</i>	$\rho_c$	$\alpha$	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Criterion variable																		
1. Entrepreneurial intention	3.64	1.56	.92	.88	.85													
TPB mediator variables																		
2. Attitudes	4.01	1.21	.83	.76	.41***	-												
3. Subjective norms	4.08	1.48	.89	.81	.27***	.40***	-											
4. Entrepreneur. self-efficacy	4.69	0.99	.89	.87	.42***	.53***	.33***	-										
Predictor variables																		
5. Self-perceived creativity	3.44	0.77	.88	.84	.35***	.26***	.13**	.41***	.78									
6. Family support for creativity	3.42	0.91	.84	.72	.19***	.15***	.24***	.26***	.26***	.80								
7. University support for creativity	3.05	0.85	.87	.83	.20***	.04	.08*	.22***	.37***	.30***	.73							
8. Creativity course	-	-	-	-	.17***	.13**	.08*	.11**	.19***	.00	.11*	-						
Control variables																		
9. Gender (0 = Male)	-	-	-	-	-.10*	-.01	.04	-.16***	-.16***	-.03	-.06	-.04	-					
10. Age	24.4	4.22	-	-	.13**	.00	-.07	.08	.08	.02	.01	.05	-.06	-				
11. Business plan	-	-	-	-	.17***	.08	.08	.20***	.09*	.06	-.04	.16***	-.06	.14**	-			
12. Work experience	2.05	3.67	-	-	.10*	-.01	-.06	.08	.07	-.06	-.06	.08	-.02	.75***	.50***	-		
13. Former entrepreneur	-	-	-	-	.16***	-.08	-.11**	.05	.14**	.04	.03	.07	-.05	.25***	.18***	.25***	-	
14. Family entrepreneur	-	-	-	-	.16***	.07	.11**	.13**	.13**	.12**	.01	.08	-.03	.09*	.11**	.08	.12**	-
15. Entrepreneurship course	-	-	-	-	.24***	.15***	.11*	.19***	.08	.07	.05	.22***	-.07	.08*	.35***	.02	.01	.07

*Note.*  $N = 559$ . Entrepreneurial intention, attitudes, subjective norms, and entrepreneurial self-efficacy were seven-point Likert scales (1-7), while self-perceived creativity and its support were five-point Likert scales (1-5).  $\sqrt{AVE}$  estimates for reflective latent variables are presented on the diagonal (PLS measurement models).

$\rho_c$  = composite reliability;  $\alpha$  = Cronbach's alpha. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Figure 4.2 depicts the influence of the psychosocial variables of support for creativity (from the family and the university) on entrepreneurial intention, both directly and mediated by self-perceived creativity. Attendance of a course on creativity was introduced as a control variable. The results of this first model showed that although the family and university support had a significant influence on the intention to become an entrepreneur, this direct model only explained 6.4% of the variance of entrepreneurial intention. The introduction of self-perceived creativity as a mediating variable increased the explained variance to 15%.

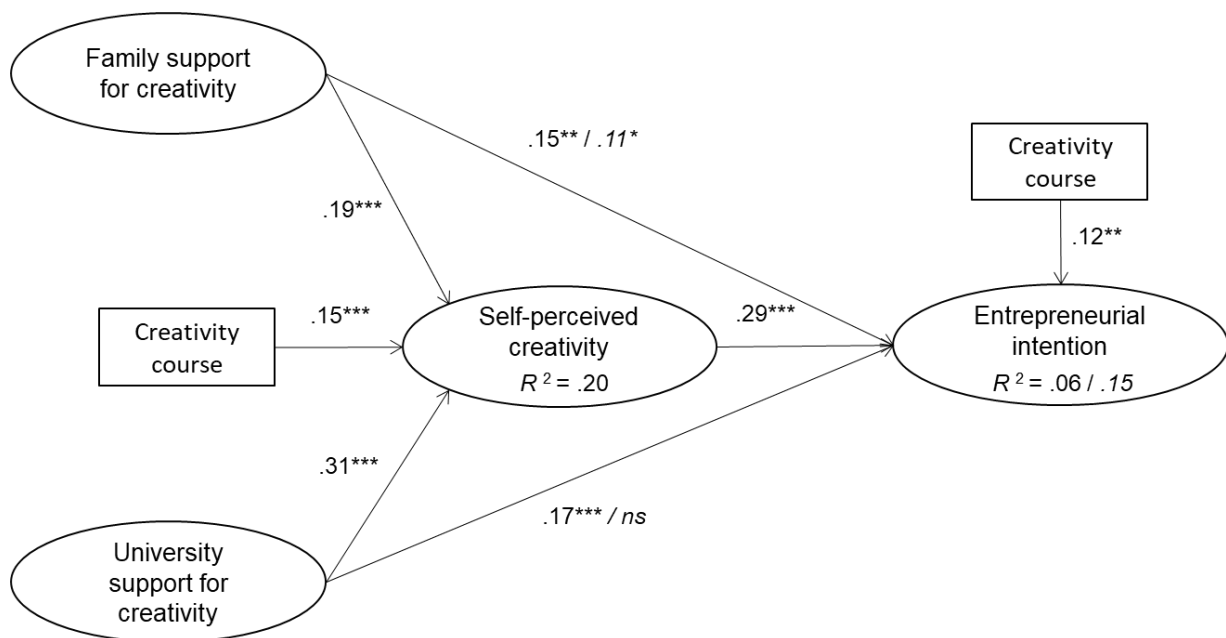


Figure 4.2. Structural model: Support for creativity, self-perceived creativity, and entrepreneurial intention.

Note. Indirect effects are displayed in italics.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 4.2 illustrates the significance of the total, direct, and indirect effects. Self-perceived creativity mediated the university support and entrepreneurial intention relationship, as well as partially mediated the family support and entrepreneurial intention relationship.

Table 4.2

*Self-perceived creativity and entrepreneurial intention: Total, direct, and indirect effects*

	Total	Direct effect	Indirect effect (through self-perceived creativity)	VAF
H <sub>2a</sub> : Family support → Intention	.16**	.11*	.05***	.34
H <sub>2b</sub> : University support → Intention	.14**	.05	.09***	.65

Note. VAF = variance accounted for value.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

In the second model (Figure 4.3), the three antecedents of the TPB were introduced as mediators: attitudes, subjective norms, and entrepreneurial self-efficacy, in addition to the control variables. All of the coefficients of latent variables were significant, supporting the hypotheses formulated. However, the coefficient of determination of subjective norms ( $R^2 = .02$ ) did not achieve a minimum value of .10 (Falk & Miller, 1992).

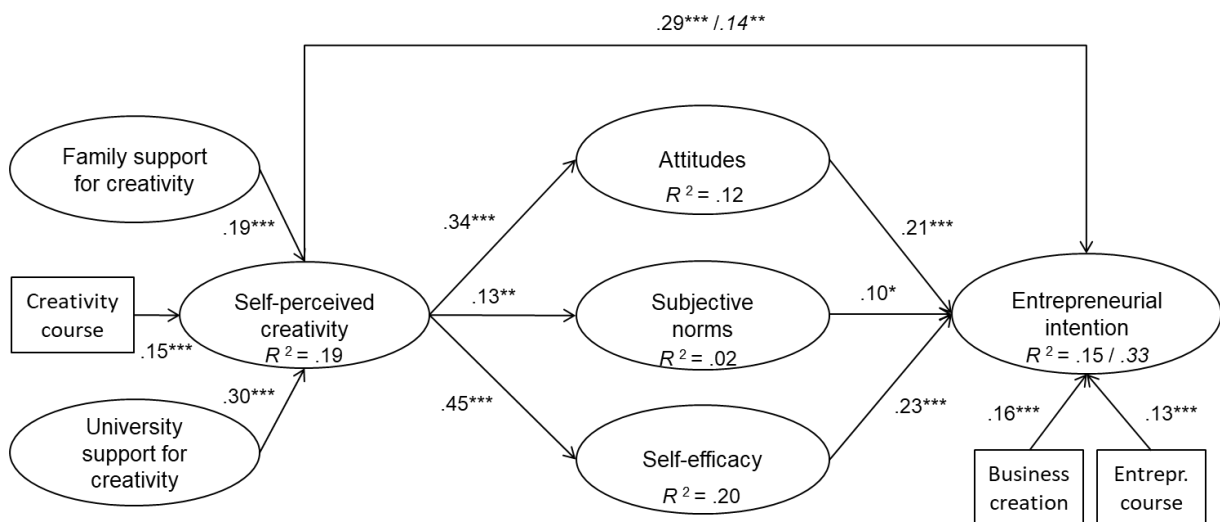


Figure 4.3. Structural model: Self-perceived creativity and entrepreneurial intention (mediated links TPB).

Note. Non-significant paths regarding control variables have been omitted. Indirect effect is shown in italics. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

The other coefficients of determination presented low to moderate values ( $R^2 = .12$  for attitudes, and  $R^2 = .20$  for entrepreneurial self-efficacy), underpinning the predictive validity of this model. Regarding control variables, only having experience in creating a business and attending an entrepreneurship course were significant. This global model explained 32.9% of the variance of entrepreneurial intention.

The pseudo  $t$ -value and confidence intervals were calculated (Nitzl, Roldán, & Cepeda, 2016) to analyze the significance of the total, direct, and indirect effects (Table 4.3). Attitudes and self-efficacy mediated the self-perceived creativity to entrepreneurial intention relationship. However, subjective norms did not appear to be significant in this model.

Table 4.3

*Overall model: Total, direct, and indirect effects*

	Coefficient	95% Confidence interval	$t$ - value	a x b	95% Confidence interval	Pseudo $t$ -value	VAF
Total effect	.32	[.25, .40]	8.54				
H <sub>1</sub> : Self-perceived creativity → Entrepreneurial intention	.14	[.04, .22]	3.09				
H <sub>3a</sub> : Self-perceived creativity → Attitudes → Entrepreneurial intention				.07	[.04, .11]	3.87	.35
H <sub>3b</sub> : Self-perceived creativity → Subjective norms → Entrepreneurial intention				.01	[.00, .03]	1.79	.09
H <sub>3c</sub> : Self-perceived creativity → Self-efficacy → Entrepreneurial intention				.10	[.06, .16]	4.42	.44

*Note.*  $N = 559$ . *Bootstrap* = 5,000 samples. VAF = variance accounted for value.

## **5. DISCUSSION**

This study set out to increase the understanding of the relationship between self-perceived creativity and entrepreneurial intention in a sample of Spanish university students. The results show a moderate relationship between self-perceived creativity and entrepreneurial intention, which partially mediates the relationship between family support for creativity and entrepreneurial intention and fully mediates the relationship between perceived university support for creativity and entrepreneurial intention. Moreover, the relationship between self-perceived creativity and entrepreneurial intention is itself partially mediated by positive attitudes toward entrepreneurship and entrepreneurial self-efficacy.

These findings attest to the generalizability of the findings of previous studies conducted in Greece and England (Zampetakis et al., 2011; Zampetakis & Moustakis, 2006), which also showed that family support for creativity predicted students' self-perceived creativity, which in turn predicted entrepreneurial intention. Replicating previous findings is important, given that this is an emerging field of research. Present results additionally revealed a direct effect for family support for creativity on entrepreneurial intention, indicating that it is quite a crucial factor. Family support for creativity showed an even higher correlation with entrepreneurial intention than being from an entrepreneurial family, which was not a significant predictive background variable in the multivariate path model. This finding indicates that family support for creativity is one of the key elements through which families can stimulate entrepreneurship (Zampetakis et al., 2011).

Furthermore, in contrast to prior studies (Zampetakis et al., 2011), present results indicate that university support for creativity relates to entrepreneurial intention through self-perceived creativity. University support for creativity associates slightly stronger with self-perceived creativity than family support does. These differences in findings may relate to the characteristics of the present sample, which was both more diverse, including not only undergraduate or master's students but also pre-doctoral students and students from other

areas besides business administration or technology. In addition, this sample also comprised a larger number of participants (559 in the present sample vs. less than 200 in other studies); as a result, present analyses had more statistical power. These findings concur well with the prior evidence in work environments that linked perceived organizational support for creativity (Zhou & George, 2001) and emotional and informational support (Madjar, 2008) to employee creativity.

Regarding a mediating role of the TPB antecedents (attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy), self-perceived creativity proved to have the strongest link to entrepreneurial self-efficacy, and self-efficacy showed the strongest link with entrepreneurial intention. These results support the premise that students believe creativity is an important prerequisite for becoming an entrepreneur and are more likely to self-select into an entrepreneurial career in case of a higher self-perceived creativity. Students who perceive themselves as being less creative may believe this makes them less capable of performing entrepreneurial tasks, which relates to lower self-efficacy beliefs and subsequently lower entrepreneurial intention.

Attitudes were a relevant mediator as well. Creativity is related to openness to experience values, which describes someone who seeks out new ideas and alternative standards as guiding principles in his or her life (Zhao et al., 2010). Entrepreneurship provides ample opportunities to live according to these values, as well as opportunities to express ones' creativity, which would be more valued by more creative people. It seems plausible that self-perceived creativity may not only influence more positive attitudes toward entrepreneurship, but it may also predict more innovative types of entrepreneurship. This would be an interesting avenue for future research.

Finally, self-perceived creativity is related to subjective norms as well, but the indirect relationship with entrepreneurial intention was not significant. Subjective norms appeared to be the weakest predictor of entrepreneurial intention. This is consistent with previous research

(Ajzen, 1991; Armitage & Conner, 2001). In the field of entrepreneurial intention, not all studies find a significant relationship (Krueger et al., 2000; Liñán & Chen, 2009). Subjective norms are suggested to be the component that is most influenced by culture (Moriano et al., 2012).

Present results defy to some extent the so-called “sufficiency hypothesis” of the TPB by showing that self-perceived creativity is not only a distal antecedent but also a direct predictor of entrepreneurial intention. The overall model explained 32.9% of the variance in the intention to become an entrepreneur. In the specific case of entrepreneurial intention, the variance explained by the three components of the TPB have been found to range between 20% and 65% (Autio et al., 2001; Kolvereid & Isaksen, 2006; Liñán & Chen, 2009; Liñán et al., 2013). Taking into account that the TPB typically explains approximately 50% of variance in behavioral intention or less, the inclusion of other variables remains relevant in order to broaden the understanding of what predicts entrepreneurial intention. Examples are factors linked to employee creativity, such as risk taking propensity and intrinsic motivation (Dewett, 2007). Affect is considered another key process relevant to understanding creativity (Baron & Tang, 2011; George, 2008). Furthermore, positive affect is related to heightened entrepreneurial performance (Fodor & Pinteá, 2017).

## **5.1. Limitations and future research**

All studies have limitations that must be considered. These limitations, in turn, can point to opportunities for future research. One of the main limitations of this research is the use of self-report measures. As concerns the TPB variables, it makes sense to use self-report measures, because these variables refer to subjective experiences. This may be different for creativity. Gauging creativity is a complex research issue, and there is no commonly accepted conceptualization or operationalization. The present study focused on self-perceived creative potential. A more objective measure would be to measure actual creative products or achievements (DiLiello & Houghton, 2008; Smith et al., 2016). However, it may be argued that university environments may not be the best places to stimulate creative output, and the



observation here that students perceive low university support for creativity may indicate that they do not find many opportunities to implement their creative potential. If an individual's creative output is inhibited by the environment, self-perceived creative potential is a valid measure, because the lack of creative output relates to environmental inhibition and the inability to utilize creative potential will most likely not be observable for others (DiLiello & Houghton, 2008). In addition, prior research has indicated that people honestly report on their creativity scores, and different creativity measures covary highly with each other (Silvia, Wigert, Reiter-Palmon, & Kaufman, 2012). Although students' self-perceived creativity/creative potential may be a valid predictor of entrepreneurial intention, actual creative output may play a more important role later on in the entrepreneurial process as a predictor of entrepreneurial success (Chen, Chang, & Lo, 2015), performance (Zhao et al., 2010), and innovation (Ahlin, Drnovšek, & Hisrich, 2014; Baron & Tang, 2011). Thus, researchers must always carefully consider what operationalization to use and match it to the criterion under study.

Second, students' attendance of entrepreneurship and creativity courses was analyzed, but the duration and contents of these courses were not further analyzed in much detail. The duration of course attendance varied from 1 to 200 hours. Moreover, only 30.1% of participants indicated they had attended a course about how to create a firm or what it means to be an entrepreneur, and only 16.6% indicated they had attended a course on how to foster creative techniques. In spite of these small percentages, course attendance positively related to self-perceived creativity and entrepreneurial intention. Attending a creativity course was only a background variable in the present study and evaluating the effectiveness of courses differing in content and duration was not the main goal of this study, but it would be an interesting topic of investigation for future research. To evaluate the effects of different courses, a randomised trial experimental design would be preferred.

Finally, cross-sectional studies do not enable inferences of causation. More longitudinal studies in this field are encouraged to investigate developments over time, such as the

relationship between entrepreneurial intention and entrepreneurial behaviour (Kautonen, van Gelderen, et al., 2015; Kautonen et al., 2013). The role of creativity along other stages of the entrepreneurial process could also be explored in greater depth.

## **6. CONCLUSION**

Despite its limitations, this study has implications for theory and practice. The results indicate that the premise of the TPB that attitudes, subjective norms, and self-efficacy or perceived behavioral control are sufficient to predict behavioral intention may be questionable. This provides leeway to investigate the role of additional variables and explanatory mechanisms in more detail. Self-perceived creativity appears to be one of such variables. Assuming that self-perceived creativity reflects a person's actual creative potential to some extent, this may, for example, relate to the identification of more potential business opportunities triggering entrepreneurial intention.

Regarding practical relevance, promoting entrepreneurial intention is desirable and feasible (Krueger et al., 2000). As a consequence, entrepreneurship education has rapidly expanded over the last few years. Along with this evolution, some concern has arisen about what should be taught and how it should be taught (Kuratko, 2005). Based on these results among students from a variety of higher educational backgrounds, it is concluded that teaching creativity contents and practice are a useful enrichment of entrepreneurship programs. Creativity can be fostered in university students (Perry & Karpova, 2017), and creativity skills acquired by students during training influence their self-perceptions of creativity.

Moreover, including creativity courses would also be relevant for other specialization programs in higher education. Creativity is considered a core competence for employees in a dynamic world, and a means by which organizations can create meaningful, lasting value (George, 2008). Europe may be a region with low levels of entrepreneurship but is highly competitive due to employee intrapreneurship (World Economic Forum and Global Entrepreneurship

Monitor, 2016). Employee intrapreneurship refers to “employees’ agentic and anticipatory behaviors aimed at creating new businesses or services for the organization and at enhancing an organization’s ability to react to internal and external developments” (Gawke et al., 2017, p. 89). Education supporting creativity may also stimulate intrapreneurship. Studies have shown entrepreneurship courses on creativity and innovation influenced students’ actual creative skills and self-perceived creativity, all of which transferred to their work teams (Gundry, Ofstein, & Kickul, 2014). Despite all of the benefits attributed to creativity, stimulating creativity receives little attention in our university educational systems, providing ample room for improvement (Edwards-Schachter et al., 2015).



**Capítulo 5. Percepción de la representación  
del emprendimiento en los medios de  
comunicación e intención emprendedora**

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Chapter 5. **Perceived representation of  
entrepreneurship in the mass media and  
entrepreneurial intention**



*What television also clearly does is help shape the broader climate within which these meanings and representations around issues of value and legitimacy get constructed and, in the case of the `entrepreneur`, help also to set an agenda for how that term is understood by the general public.*

Boyle and Kelly (2016, p. 132)

## **1. INTRODUCTION**

Entrepreneurs can be viewed as new cultural heroes (Malach-Pines et al., 2005). Thus, it is not surprising that successful entrepreneurs catch public attention. Book biographies and interviews both in press and television have flourished. Internet blogs and webpages have expanded in recent years. Entrepreneurship has increasingly become “a key object for public discourse” (Radu & Redien-Collot, 2008, p. 269), and the coverage of entrepreneurial activity and prominent entrepreneurs has experienced a notable increase since 2000 (Hang & van Weezel, 2007; Nicholson & Anderson, 2005; Radu & Redien-Collot, 2008). In 2007 the European Commission published the report “Promoting entrepreneurship on TV and in other audio-visual media” conducted by a group of experts who analyzed how European Union Member states might cooperate with the media to promote entrepreneurship and formulated a number of recommendations on how the media could help generate a more entrepreneurial culture in Europe. This report responded to a lower preference and less positive perception in Europe for entrepreneurship compared to the United States and aimed at analyzing the possibilities that television, radio, and internet offer for improving the image of entrepreneurship in Europe. It assumed that the media can present entrepreneurship and also provide factual information in an interesting and entertaining way. Additionally, role models can also be presented to attract more Europeans, especially the young. Different programs were proposed, such as reports with an entrepreneurial (and not just economic) content, documentaries (success stories of well-known entrepreneurs), information and advice

programs, movies or series in which characters who are entrepreneurs play an important role, docu-soaps about entrepreneurs, or contests of young or would-be entrepreneurs. Some of these formats adequately convey information (but do not reach large audiences) and others can be less informative but geared toward being inspiring or improving the image of entrepreneurs. In general, they vary on flexibility, information, entertainment, attitudes, legal constraints, and audiences. In fact, the media and social content can lead to business entertainment programs “becoming part of an everyday discourse that helps shape meanings around business and entrepreneurship, regardless of whether or not people actually tune in to watch” (Boyle & Kelly, 2016, p. 92). In this regard, several empirical studies support the important role of the media in perceived social legitimacy, desirability of entrepreneurship, and entrepreneurial intention (e.g., Levie, Hart, & Karim, 2010; Swail et al., 2014).

The media help create a discourse on entrepreneurship that conveys values and images ascribed to entrepreneurship (Hang & van Weezel, 2007). In this sense, the media can promote entrepreneurial practices and encourage entrepreneurship in the society. Television does not operate in isolation from broader cultural and political shifts; on the contrary, it amplifies cultural trends and reacts to an ever changing segment of the audience (Boyle & Kelly, 2016). In the United Kingdom, Boyle and Kelly have largely analyzed how the presentation of entrepreneurs in television has positively changed the social perception of entrepreneurship in that country and, as well, the role television plays in shaping public knowledge and understanding (Boyle & Kelly, 2010; Boyle & Kelly, 2016; Kelly & Boyle, 2011). Indeed, business issues are not only part of news but also of business entertainment-led factual programming (Kelly & Boyle, 2011), and some entrepreneurs have become celebrities due to their participation in television business entertainment shows (Boyle & Kelly, 2010). Business entertainment programs such as *Dragons’ Den* are not only entertaining formats, but also serve as educational and public knowledge providers with a learning or educative aim (Boyle & Kelly, 2016). For instance, they can present information on how to deliver a successful pitch or allow viewers to gain an understanding of the problems faced by (potential)



entrepreneurs. Further, they are expected to motivate some viewers to look for more information beyond the program. In this context, the neologism “entre-tainment” refers to “televisual media that stage and perform entrepreneurship for entertainment purposes” (Swail et al., 2014, p. 859). Although these formats are especially popular with young viewers, they are considered suitable for a range of age groups (Boyle & Kelly, 2016).

While interest in exploring the relationship between the media and participation in entrepreneurship has led to different studies (e.g., Hindle & Klyver, 2007; Levie et al., 2010; Swail et al., 2014), this issue is yet to be addressed in Spain. In Spain, entrepreneurship has inspired television programs such as *Tu Oportunidad (Dragons’ Den)*,<sup>28</sup> *Pesadilla en la Cocina (Kitchen Nightmares)*,<sup>29</sup> *El Aprendiz (The Apprentice)*,<sup>30</sup> *Emprende (Emprende TVE, Emprende Express, and Emprende Digital)*,<sup>31</sup> *Código Emprende*,<sup>32</sup> or *Fábrica de Ideas de TVE*.<sup>33</sup> Some of the first television shows broadcast in Spain were indeed the Spanish versions of popular television shows worldwide. For instance, *Dragons’ Den* comes from Japan and *The Apprentice* from the United States, but there are versions of these shows in most European countries. Together with these programs, it is also possible to watch other shows broadcasted in other countries, such as *The Secret Millionaire* (United Kingdom) or *America’s Next Great Restaurant* (United States). However, these shows were not as popular in Spain as in other countries; for instance, *Tu Oportunidad (Dragons’ Den)* was only broadcast in 2013 with about one million of television viewers. More popular is *Pesadilla en la Cocina (Kitchen Nightmares)* with six seasons, or *Fábrica de Ideas de TVE*, with nine seasons (more focused on interviews than a contest format).

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<sup>28</sup> <http://www.rtve.es/alicarta/videos/tu-oportunidad/>

<sup>29</sup> <https://www.atresplayer.com/lasexta/programas/pesadilla-en-la-cocina/>

<sup>30</sup> <https://www.lasexta.com>. One season (2009/2010).

<sup>31</sup> <http://www.rtve.es/television/emprende/>

<sup>32</sup> <http://www.rtve.es/television/codigo-emprende/>

<sup>33</sup> <http://www.rtve.es/television/fabricadeideasdetve/>

The aim of this study is to analyze the influence of two variables on the intention to become an entrepreneur: (a) the social legitimacy attached to entrepreneurship, and (b) the skills individuals believe they acquire when watching entrepreneurship. First, assuming that mass media reflect the social and cultural environment pertaining to entrepreneurship, it is important to explore how people perceive the media representing entrepreneurship in Spain and, as well, determine whether efforts to promote entrepreneurship are well reflected (for instance, recent legislation on entrepreneurship or initiatives to promote entrepreneurial mindsets through education). This is, the extent to which social legitimacy is attached to entrepreneurship and how it relates to entrepreneurial intention. Second, in the same vein, it explores whether or not people believe they learn relevant skills when watching entrepreneurship, and how this perception impacts their entrepreneurial intention. As research on the effect of media on entrepreneurship climate is scarce and such research could be useful in encouraging the entrepreneurial spirit (Hang & van Weezel, 2007), the present study tries to address this gap and expands previous research by building on a robust entrepreneurial model, the theory of planned behavior (TPB; Ajzen, 1991), which constitutes the most frequently used framework in the study of entrepreneurial intention (Liñán & Fayolle, 2015). While other authors (Swail et al., 2014) have investigated direct links between legitimacy and skills and entrepreneurial intention, the TPB posits a sufficiency hypothesis, according to which three antecedents (attitudes, subjective norms, and perceived behavioral control/entrepreneurial self-efficacy) are posited as the most relevant determinants of entrepreneurial intention. Other factors are theorized to only indirectly influence entrepreneurial intention through one or more of these elements (Ajzen, 2011). Thus, considering legitimacy and skills as distal antecedents in the TPB model may benefit from drawing on this framework. Following this reasoning, relationships are examined between these variables and entrepreneurial intention, both directly and as mediated by attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy. The model is tested in a group of non-entrepreneurs. Results have implications for designing political interventions and adequate entrepreneurship education programs.

## 2. THEORETICAL BACKGROUND

The perception that entrepreneurs have high status is linked to a more entrepreneurial self-description, a greater risk-taking tendency, and more involvement in entrepreneurial activity (Malach-Pines et al., 2005). This is in line with the data of the last international Global Education Monitoring (GEM) Report (Singer et al., 2018), where there are differences across countries and regions in entrepreneurial activity as well as in the percentage of the adult population aged 18–64 years who believe that high status is afforded to successful entrepreneurs. This latter percentage increases to 67.3% in Europe (vs. 74.7% in North America); and it is even lower in Spain (47.9%). In comparison to other regions, total early-stage entrepreneurial activity (TEA) rates are also the lowest in Europe (8.1%; 6.2% in Spain). According to this report, approximately 58.5% of people in Europe believe entrepreneurship is a good career choice (53.8% in Spain). This is the lowest belief in entrepreneurship as a good career choice across economies (76.2% in Africa, 64.3% in North America, 61.9% in Asia and Oceania, and 60.8% in Latin America and the Caribbean). In addition, Europeans support the lowest media publicity<sup>34</sup> for entrepreneurial activity (54.3%). In Spain, this percentage is even lower (50.9%).

The social cognitive theory of mass communication (Bandura, 2001) posits that “communications media promote changes by informing, enabling, motivating, and guiding participants” (p. 285). Although much social learning occurs in the immediate environment, the extensive modeling in the mass media environment conveys a vast amount of information about behavior patterns as well as human values and styles of thinking. In fact, much of the social construction of reality occurs through electronic acculturation, given that the symbolic environment occupies a major part of people’s lives. Bandura also points that, beyond

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<sup>34</sup> The percentage of the adult population aged 18–64 years who believe that there is a lot of positive media attention for entrepreneurship in their country.

observational learning and the acquisition of new behaviors, other actions can function as social prompts for previously learned behaviors. The media constitute sources of external influence (Chan, 1998; Hsu, Yen, Chiu, & Chang, 2006). For instance, mass media campaigns have small to moderate effects on health knowledge, beliefs, and attitudes as well as behaviors (Noar, 2006); changes in attitudes have been found to follow campaigns to reduce speeding (Stead, Tagg, MacKintosh, & Eadie, 2004), and the mass media has proved to be one of the major sources of social pressure regarding pro-environmental intention and behavior (Chan, 1998).

Regarding entrepreneurship, the discourse conveyed by the media (i.e., the message and knowledge) can educate, enhance, and affect entrepreneurship (Hang & van Weezel, 2007), particularly, by building the role models and influencing social attitudes toward entrepreneurship (e.g., Radu & Redien-Collot, 2008). Different studies have analyzed the social construction of entrepreneurship in the media, mainly in the press (Achtenhagen & Welter, 2011; Anderson & Warren, 2011; Nicholson & Anderson, 2005; Radu & Redien-Collot, 2008). They coincide in that entrepreneurship descriptions play an important role in how we think and learn about entrepreneurship. There is a consensus that the media transmit cultural values (e.g., Hang & van Weezel, 2007). Particularly, entrepreneurial discourses in the press impact desirability and feasibility beliefs (Radu & Redien-Collot, 2008). When new practices involve costs and risks, people may initially be reluctant until they see the advantages gained by others; models exemplify and legitimate practices and encourage others (Bandura, 2001). Narratives and portraits of entrepreneurs may enhance identification with them and facilitate learning about entrepreneurial processes (e.g., Fletcher, 2007; Radu & Redien-Collot, 2008). Business entertainment programs broadly encourage sections of the audience to become interested in entrepreneurial culture (Boyle & Kelly, 2016); in fact, they can “inspire those needing some encouragement to seek out more advice” (p. 153). The possibility of starting a business also appears more tangible for young people who grew up with these programs than for older generations. Moreover, the media coverage can complement the effectiveness of

policy initiatives to provide enterprise skills as well as support the creation of new businesses (Levie et al., 2010). Actually, some entrepreneurs recognize the media to be a major influence on their decision to start a business (Levie et al., 2010).

The media and other external sources have a profound impact on people, especially the youngest, so its effect on the stereotypes of entrepreneurs is a relevant factor to consider (e.g., Swail et al., 2014). However, the media both create and transmit culture (Nicholson & Anderson, 2005), and the image of the entrepreneur in the media is shaped by cultural norms and expectations (Anderson & Warren, 2011). Thus, results from other countries and cultures may not be directly applicable to Spain. It is therefore important to explore these variables specifically in each context. The present study is aimed at contributing in this understanding. For instance, the portrayal of entrepreneurship and the entrepreneur figure differs across countries and can be far from heroic (e.g., Kalden, Cunningham, & Anderson, 2017). Interestingly, Kalden et al. (2017) found ambiguity in the social construction of entrepreneurship in Germany as, while there exists an acknowledgement of entrepreneurship as a driver for the economy (and even society), the entrepreneur is often perceived as not serious, careless, overly optimistic, or imprudent. Although it is perceived in general that the media present entrepreneurship from a more positive than negative perspective (e.g., Radu & Redien-Collot, 2008), Kalden et al. conclude that an unappealing image of entrepreneurs may negatively impact an individual's desire to become an entrepreneur. On the other hand, Hindle and Klyver (2007) did not find significant direct associations between the volume of media stories about successful entrepreneurs and the rate of nascent or actual start-up activity, although they found a positive relationship with the volume of people running a young business and opportunity motivation. Their results, to some extent constrained by using a single item to gauge media story prevalence ("In your country, do the public media often have stories about successful new businesses?"), suggest that media stories only reinforce previous audiences' values and choice propensities. While enterprise campaigns and television business reality

programs may contribute to creating an entrepreneur-friendly culture, their immediate effect on entrepreneurial activity can be limited (Levie et al., 2010).

## **2.1. Social legitimacy attached to entre-tainment and entrepreneurial intention**

Entrepreneurship may be influenced by culture through social legitimation and promotion of positive attitudes related to business creation (Liñán et al., 2011). Cultural representations of entrepreneurship are likely to reflect and reproduce perceived social legitimacy (Swail et al., 2014). In this regard, entre-tainment is viewed as “a subset of popular media that will tend to impact positively on the degree of acceptance and legitimacy that individuals attach, both to the entrepreneur and to the practice of entrepreneuring in societies” (Swail et al., 2014, p. 864). For instance, to construct entrepreneurs’ legitimacy, the media have increasingly given a larger place to small business owners and stressed their central role (e.g., Radu & Redien-Collot, 2008). Particularly, television helps shape a social climate within which meanings and representations are constructed around value and legitimacy of entrepreneurship (Boyle & Kelly, 2016).

In their examination of the influence of the moral legitimacy of entrepreneurs on an individual’s engagement in early-stage entrepreneurship across 26 countries (including Spain), Kibler and Kautonen (2016) found that the perceived degree of moral legitimacy is positively related to the consideration of starting a business, beginning to prepare a business and, as well, to progress to actually founding and running the business. In the initial phase of early-stage entrepreneurship, individuals may use the evaluation of their concept of entrepreneurship in the context of social norms to judge whether becoming an entrepreneur is a desirable, feasible, and legitimate career choice. Moreover, once individuals begin to think about becoming entrepreneurs, they are expected to have a stronger sense of the moral legitimacy of entrepreneurs in society, which, in turn, may increase the move toward actually becoming an entrepreneur. Further, they found a stronger effect of moral legitimacy when one or both

parents of the respondent are self-employed. According to Busenitz, Gomez, and Spencer (2000), this normative dimension reflects the social opinion on entrepreneurial activity, which depends on the country's culture, values, beliefs, and norms. The normative environment, that is, the belief that starting a business is an acceptable and respected career path and that entrepreneurs are admired, relates to attempts to start or manage entrepreneurial businesses (Busenitz et al., 2000). Socio-cultural perceptions, that is, perceptions such as a high level of status and respect afforded entrepreneurs or the agreement that stories about successful new businesses are often featured in the public media, are positively related to entrepreneurial intention (Liñán et al., 2011).

Swail et al. (2014) specifically examine the relationship between perceptions of entre-tainment and entrepreneurial intention. Their results show a positive relationship between social legitimacy attached to this cultural media and entrepreneurial intention. As a socially approvable behavior is a source of self-pride (Bandura, 2001), following Swail et al. (2014) it can be argued that the higher the acceptance and legitimacy of entre-tainment, the higher the perception of its positive influence in society. In line with the prior research, the following hypothesis is formulated:

*Hypothesis 1:* The social legitimacy attached to entre-tainment positively relates to entrepreneurial intention.

## **2.2. Skills acquired through entre-tainment and entrepreneurial intention**

Business entertainment programs “do encourage a learning of ‘soft skills’ amongst audiences and while this may be more pronounced for younger viewers it also resonates across other age groups” (Boyle & Kelly, 2016, p. 154).<sup>35</sup> Swail et al. (2014) empirically find a positive

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<sup>35</sup> Soft skills refer to personal transversal competences “that are not directly connected to a specific task; they are necessary in any position as they mainly refer to the relationships with other people involved in the organization.” (Cimatti, 2016, p. 98). Examples of soft skills are social aptitudes, language and communication capability, and the ability to working in a team. Soft skills are usually considered complementary to hard skills (specific capabilities to perform a particular job).

relationship between the skills students believe they acquire when they watch entre-tainment and entrepreneurial intention. They base this view on the assumption that, if a person thinks they have the necessary skills to start a business, they are more likely to do so. When people are exposed to entrepreneurial behaviors through entre-tainment, they can observe a range of skills (e.g., communicating a business idea or evaluating risk). Thus, they receive tacit knowledge which potentially results in learning. In fact, entre-tainment can be a means to transfer or reinforce entrepreneurial skills. Particularly, they find that the perception of tacit transfer of knowledge and skill through viewing entre-tainment programs (rather than actual skills learned) results in increased entrepreneurial intention. While these authors focus on a single television program (*Dragons' Den*), it could be argued that this reasoning can be extended to other entre-tainment formats. This guides the following hypothesis:

*Hypothesis 2:* The skills which individuals believe they acquire when watching entre-tainment positively relate to entrepreneurial intention.

According to the focus group analyses of Boyle and Kelly (2016), the understanding and evaluation of entrepreneurship entertainment programs varies with the entrepreneurial background of the person. They distinguish between employees/unemployed with no experience in running their own business or desire to do so, people who are in the early stages of creating their business, and those who are already entrepreneurs or self-employed. Those who are in the early stages find these programs more informative and value them more positively. As no empirical studies have further explored these potential differences specifically for the variables considered (social legitimacy and perceived skills), there is not sufficient evidence to formulate the corresponding hypothesis. Thus, their study inspires the following research question:

*Research question:* Do people who are thinking of becoming an entrepreneur/self-employed (who have not taken any step yet or are currently taking some steps) perceive more social legitimacy and learning from media entrepreneurship programs



than those who have only occasionally or never thought about becoming an entrepreneur/self-employed?

Moreover, the present study goes a step further with respect to previous research by considering not only the direct effect on entrepreneurial intention but also the indirect effect through attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy. In so doing, this study draws on the TPB (Ajzen, 1991).

### **2.3. The role of the theory of planned behavior**

As indicated in previous chapters, entrepreneurial intention is the most commonly studied antecedent of new venture creation and the TPB has been widely used to study entrepreneurial intention. This theory posits that entrepreneurial intention depends on the influence of three components. The attitudes of a person comprise the strength of each belief they hold, combined multiplicatively with their subjective value. Each belief associates the behavior in question with certain outcomes or other attributes, for instance, the cost of performing that behavior (Ajzen, 1991). In this vein, favorable attitudes are developed toward behaviors with desirable consequences, and unfavorable attitudes arise toward behaviors with undesirable consequences.

Subjective norms refer to the likelihood of important referent individuals or groups approving or disapproving of a behavior (Ajzen, 1991). In the case of entrepreneurship, normative beliefs would relate to the perceived social pressure to create or not create a new venture. Subjective norms are proportional to the sum of the weights of each normative belief, multiplied by the individual motivation to meet each referent's expectations. The more positive the subjective norms, the higher the intention to become an entrepreneur.

Perceived control over the behavior will increase with the higher perceived availability of resources and opportunities and fewer obstacles or impediments. Perceived behavioral control combines aspects related to beliefs of controllability and self-efficacy (Ajzen, 2002). Following

previous research on entrepreneurial intention (Engle et al., 2010; Krueger et al., 2000; Moriano et al., 2012) entrepreneurial self-efficacy is the variable measured in the present study.

According to the TPB, attitudes toward a behavior, subjective norms, and self-efficacy contain the most substantive information about the determinants of a behavior, whereas other background factors and exposure to the media and other sources of information may indirectly influence entrepreneurial intention through one or more of these components (Ajzen, 2011). Therefore, the social legitimacy attached to entre-tainment and the perceived skills acquired through entre-tainment are expected to relate indirectly to entrepreneurial intention, through attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy. These, in turn, will have an influence on intention.

The media have an important role in creating stereotypes about the entrepreneur and its success, or the risk involved in becoming an entrepreneur, which can influence the attitudes and perceived self-efficacy of people along with the relevance of the opinion of others on this matter (subjective norms). Press discourses affect intention indirectly, rather than directly, through their impact on individuals' perceptions, attitudes, and beliefs (Radu & Redien-Collot, 2008). One of the mechanisms by which the media can impact on these variables and encourage entrepreneurship is through the presentation of role models (Bandura, 2001; Boyle & Kelly, 2016; Radu & Redien-Collot, 2008). In fact, stories of successful entrepreneurs conveyed by the media can be considered role models (Hang & van Weezel, 2007). According to Bandura (2001), "[i]n some instances the media both teach new forms of behavior and create motivators for action by altering people's value preferences, efficacy beliefs, outcome expectations, and perception of opportunity structures" (p. 286). For instance, watching television business reality programs is related to a more positive thought about entrepreneurs in general and more awareness of a career as an entrepreneur (Levie et al., 2010). Through framing, exposure, and interpretation of the social representation of entrepreneurs, the media

may render entrepreneurship as more or less desirable and feasible (Radu & Redien-Collot, 2008). While desirability is related to acceptability and legitimacy beliefs about entrepreneurs and their actions, feasibility is linked to efficacy and control beliefs about both the institutional support and the personal skills required to become a successful entrepreneur. Desirability of entrepreneurship depends on two complementary evaluations, its social worth and value (i.e., its perceived legitimacy) and personal favorableness of the outcomes (i.e., its instrumental perceived utility). Thus, desirability beliefs are connected to legitimacy assumptions relative to the nature and quality, conduct, and consequences of becoming an entrepreneur. The feasibility assessment of entrepreneurship also relies on two evaluations, the link outcome-expectation and the individual's self-efficacy. Feasibility beliefs may be connected to accessibility assumptions. Environmental cues concerning the easiness and controllability of the behavior could then influence these beliefs. Radu and Redien-Collot (2008) analyze the extent to which the French press conveys a social representation of entrepreneurs as legitimate actors (entrepreneurs' worthiness and perceived utility) and examine whether the press discourse provides "accessibility discourse" to impact perceptions and stimulate entrepreneurial intention. In their discourse analysis, the press can convey different information, such as coverage of entrepreneurial topics, social and economic utility attributions, values expressed and produced through entrepreneurial action, trait and motivation attributions, typicality and representativeness (gender and ethnic origin, professional background), attitudes and values, rewards, entrepreneurial competences, networking and institutional support, education and training, and emotional support (recommendations, suggestions, encouragements).

First, the image of entrepreneurship presented in the mass media may influence people's attitudes and affect their behavior (Hang & van Weezel, 2007). While positive images can promote entrepreneurship in the society, the lack of images may be a hindrance. Particularly, films affect attitude toward entrepreneurship, with the most effective factors being the source of the message and the length of the film (Zampetakis, Lerakis, Kafetsios, & Moustakis, 2015).

Indeed, there is strong support for change of attitudes occurring as a result of media exposure (e.g., Briñol & Petty, 2015; Petty, Briñol, & Priester, 2009). Regarding entrepreneurial skills, there is empirical evidence of their positive influence on personal attitudes (e.g., Liñán et al., 2013). With the aim of analyzing the mediational role of the components of the TPB, the following hypothesis is posited:

*Hypothesis 3:* Positive attitudes toward entrepreneurship will mediate the influence on entrepreneurial intention of: (a) the social legitimacy attached to entre-tainment, and (b) the skills individuals believe they acquire when watching entre-tainment.

Second, social valuation of entrepreneurship positively influences subjective norms (Liñán et al., 2013). Particularly, television business reality programs have a positive effect on social norms and values, and indirectly trigger entrepreneurial intention or behavior (Levie et al., 2010). Radu and Redien-Collot (2008) analyze the extent to which the French press portray entrepreneurs as a normative model and as an alternative to the employee (“normativity discourse”). In this regard, appropriateness perceptions may depend on “normative assumptions” relative to the social rules (how entrepreneurs are) and could be influenced by environmental cues concerning prescriptive values (how entrepreneurs should be and behave). Swail et al. (2014) treat social legitimacy in a similar manner to the opinions of significant others; thus, it could be supposed to be related to subjective norms, especially if programs are usually followed in the family as suggested by Boyle and Kelly (2016) and are commented with classmates and friends (Eisner, 2006). Further, entrepreneurial skills are significant predictors of subjective norms (Liñán et al., 2013). These aspects guide the following hypothesis:

*Hypothesis 4:* Subjective norms will mediate the influence on entrepreneurial intention of: (a) the social legitimacy attached to entre-tainment, and (b) the skills individuals believe they acquire when watching entre-tainment.

Third, many expectations of efficacy are derived from vicarious experience (Bandura, 1977). Media discourse can enhance perceived self-efficacy by providing information about entrepreneurial competences and behaviors, credible role models, networks and institutions engaged in entrepreneurship development as well as available training programs and entrepreneurship educational issues (Radu & Redien-Collot, 2008). In this regard, entrepreneurial skills have been shown to positively influence perceived behavioral control (Liñán et al., 2013). In the study by Levie et al. (2010), up to 40% of non-entrepreneurs acknowledge television business reality programs “had shown them the practical steps to start a new business” (p. 4). Further, efficacious modeling enhances the sense of personal efficacy (Bandura, 2001). Therefore, the following hypothesis is formulated:

*Hypothesis 5:* Entrepreneurial self-efficacy will mediate the influence on entrepreneurial intention of: (a) the social legitimacy attached to entre-tainment, and (b) the skills individuals believe they acquire when watching entre-tainment.

Figure 5.1 illustrates the theoretical model guiding this study and research hypotheses:

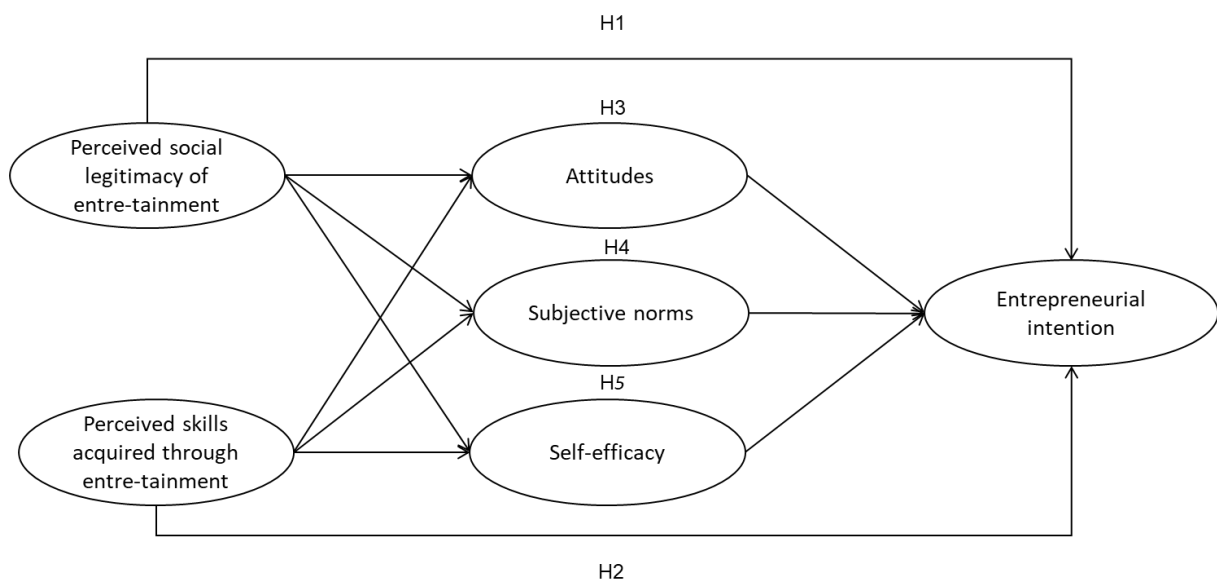


Figure 5.1. Theoretical model and hypotheses.

### **3. METHOD**

#### **3.1. Participants and procedure**

A total of 320 participants took part in this study (65.6% female; 34.4% male). The average age was 32.3 years ( $SD = 11.6$ , range 19–75). This sample consisted of students (69.1%),<sup>36</sup> unemployed participants (26.9%), and retirees (4.1%). Participants completed an online questionnaire. Completing the questionnaire took 19 minutes in average ( $SD = 9.4$ , minimum = 5.08 minutes, maximum = 56.7 minutes).

Almost one third (31.6%) of participants held a bachelor's or master's degree, and half of the participants (46.9%) had finished secondary education. Other education corresponded to vocational training (17.2%) and primary studies (4.4%). Work experience ranged between 0 and 50 years ( $M = 6.9$ ,  $SD = 9.5$ ; 98 participants, 30.6%, did not have work experience). None of the participants indicated they were an entrepreneur (solo or with partners). Over half of the participants (60.3%) reported they had at least one relative who was an entrepreneur, specifically: 3.4% father, 9.1% mother, 37.2% other relatives, and 10.6% more than one of the previous options. Additionally, 49.2% knew between one and three entrepreneurs in their environment (family, neighbors, friends, acquaintances, etc.), 24.8% indicated knowing between three and five entrepreneurs, 10.7% between five and ten entrepreneurs, and only 7.2% knew more than 10 entrepreneurs, while 8.2% of participants did not know anybody who has become an entrepreneur. Up to 34.7% of participants claimed having attended a course about how to create a firm or what it means to be an entrepreneur, 39.1% did so at their university, with a course duration of between 1 and 1200 hours ( $M = 50.2$ ,  $SD = 153.2$ ). Contents were mainly focused on theoretical topics (knowledge about entrepreneurship and entrepreneurial process), skills to become an entrepreneur (e.g., negotiation) or talks of

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<sup>36</sup> Type of education was not controlled (i.e., university or other educational levels). Most frequent areas of study were: Psychology (42.5%), Business (4.5%), Law (3.2%), and Nursing (2.3%).

entrepreneurs. Of the participants, 22.6% reported having experience in developing a business plan and 10.3% had experience in creating a firm.

Over half the participants (52.5%) indicated they had occasionally thought about becoming an entrepreneur or being self-employed, and 16.6% said they had never thought about becoming an entrepreneur or being self-employed. However, 23.8% were thinking of becoming an entrepreneur or being self-employed (although had not yet taken any step), and only up to 7.2% were currently taking some measures to become an entrepreneur or self-employed.

Table 5.1

*Frequency of activities related to following entrepreneurship topics on the mass media*

Correlate	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Watch television shows related to entrepreneurship or entrepreneurs	2.34	1.14						
2. Watch television series related to entrepreneurship or entrepreneurs	2.33	1.14	.77***					
3. Listen to radio programs related to entrepreneurship or entrepreneurs	1.81	1.01	.55***	.55***				
4. Watch films related to entrepreneurship or entrepreneurs	2.56	1.08	.62***	.70***	.49***			
5. Read press about entrepreneurship or entrepreneurs	2.37	1.17	.56***	.46***	.59***	.46***		
6. Read books about entrepreneurship or entrepreneurs	2.14	1.11	.57***	.52***	.54***	.45***	.64***	
7. Consult the internet and social networks for information about entrepreneurship or entrepreneurs	2.88	1.25	.58***	.48***	.48***	.44***	.62***	.62***

*Note.* *N* = 320. Scores range from 1 (*never*), 2 (*some time a year*), 3 (*several times a year*), 4 (*at least once a month*), to 5 (*several times in a month*). \*\*\**p* < .001.

Frequency of activities related to following entrepreneurship topics in the mass media (Table 5.1) varied between listening to radio programs on entrepreneurship and entrepreneurs (*M* = 1.81, *SD* = 1.01) and consulting the internet and social networks for information about

entrepreneurship or entrepreneurs ( $M = 2.88$ ,  $SD = 1.25$ ). The internet appears to have displaced television and radio as the primary source of information. Interestingly, watching films related to entrepreneurship or entrepreneurs was the second most frequent activity ( $M = 2.56$ ,  $SD = 1.08$ ). Correlations among the seven activities were quite high (range:  $r = .44$  to  $r = .77$ ,  $p < .001$ ). Following Radu and Redien-Collot (2008), who distinguish between “mainstream readers” (who show low involvement in entrepreneurial issues) and “engaged readers” (who exhibit high involvement in entrepreneurial issues), participants in this study may be divided into frequent users ( $n = 139$ , 43.4%), who once or several times in a month realized one or more than one of the seven activities proposed, and non-frequent users ( $n = 181$ , 56.6%) who are less engaged in entrepreneurial issues.

Finally, participants considered that entrepreneurs who appear in the mass media are mostly men ( $M = 64.15\%$ ,  $SD = 15.44$ ,  $n = 163$ ). To the contrary, participants asked about female entrepreneurs only indicated 40.01% (in average,  $SD = 18.70$ ,  $n = 156$ ).

### **3.2. Measures**

The Entrepreneurial Intention Questionnaire (EIQ; Moriano, 2005) was used to gauge intention to become an entrepreneur as well as the three components of the TPB (attitudes, subjective norms, and self-efficacy).

*Entrepreneurial intention* was assessed with a four-item scale measuring the perceived probability of different aspects about the creation of a firm, for instance, “With what probability do you anticipate creating your own business between now and in five years’ time?,” using a response format from 1 (*totally improbable*) to 5 (*totally probable*). The reliability of the scale was satisfactory (Cronbach’s alpha = .86; composite reliability = .91).

*Attitudes toward entrepreneurship* depend not only on beliefs but also on the assessment of these beliefs. Thus, this scale comprises: (a) a set of six items about what creating a new company or becoming an entrepreneur would mean for the participant, for example, response



options to “*Creating a new company or becoming an entrepreneur would mean for you...*” such as “*facing new challenges,*” in a five-point Likert response format from 1 (*totally improbable*) to 5 (*totally probable*); and (b) another set of six items about how desirable these aspects are for the participant, from 1 (*not at all desirable*) to 5 (*totally desirable*). To calculate the overall score, the score on each item of the first set is combined in a multiplicative fashion with the corresponding item of the second set. High scores indicate a positive attitude toward entrepreneurship. The reliability of the scale was adequate (Cronbach’s alpha = .78; composite reliability = .84).

*Subjective norms* were measured with the following: (a) a set of three items about the extent to which the participant considers that other significant people (family, friends, and colleagues) would agree if the participant decides to become an entrepreneur, using a five-point Likert response format from 1 (*not at all agree*) to 5 (*totally agree*); and (b) another set of three items about how the participant assesses the opinions of these significant people with respect to becoming an entrepreneur, from 1 (*not important*) to 5 (*very important*). This denotes the motivation to comply with expectations of these referent groups. The score on each item of the first set is combined multiplicatively with the corresponding item of the second set, and the overall score is then divided by five. The higher the global score, the more important the subjective norms. The reliability of this scale was also adequate (Cronbach’s alpha = .74; composite reliability = .85).

*Entrepreneurial self-efficacy* was measured with nine items using a five-point Likert response format from 1 (*totally ineffective*) to 5 (*totally effective*). Participants were asked, “If you were to create your own business, to what degree would you be able to complete the following tasks effectively?,” followed by rating items such as “define your business idea and strategy of your company,” or “develop relationships with key people who are connected to capital sources.” The reliability of the scale was adequate (Cronbach’s alpha = .84; composite reliability = .87).

The *perceived social legitimacy of entre-tainment* was measured by an adaptation of the four items developed by Swail et al. (2014). As the term “celebrity entrepreneurs” is not common in Spain, it was substituted by “famous entrepreneurs”. Additionally, the name of a specific television program was omitted. The four items included in the questionnaire were: “famous entrepreneurs have a positive impact on the economy of their countries,” “programs about entrepreneurship on the mass media have a positive impact on the economy,” “programs about entrepreneurship on the mass media encourage entrepreneurship,” and “famous entrepreneurs encourage entrepreneurship.” The response format follows a five-point Likert-scale, ranging from 1 (*not at all agree*) to 5 (*totally agree*). The exploratory factor analysis conducted showed the unidimensionality of the scale. A single factor explained 52.48% of the variance. The reliability of the scale was adequate (Cronbach’s alpha = .81; composite reliability = .87).

The *skills that the respondent perceives to learn through the media* (television, newspapers, radio) and other sources (e.g., books about entrepreneurship) is a translation into Spanish of the list of 10 items also developed by Swail et al. (2014) on perceived skills learned by watching an episode of *Dragons’ Den*. This scale is comprised of ten items with a five-point Likert response format from 1 (*not at all agree*) to 5 (*totally agree*). These items in response for “To what extent do you think the mass media (television, press, radio) and other sources (blogs on entrepreneurship, etc.) can help you learn...?” are: “... about how to generate business ideas,” “...about how to communicate business ideas,” “...about how to commercialize business ideas,” “...about business operations,” “...about how to network,” “...about how to negotiate,” “...about how to grow a business,” “...about how to evaluate risk,” “...about the financial aspects of business,” and “...about the marketing aspects of business.” The exploratory factor analysis conducted showed the unidimensionality of the scale. A single factor explained up to 51.40% of the variance. The reliability of the scale was satisfactory (Cronbach’s alpha = .91; composite reliability = .92).

The scale of *frequency of accomplishing activities related to following entrepreneurship topics on the mass media* was developed ad hoc for this study and is comprised of seven items with a five-point Likert response format from 1 to 5 with 1 (*never*), 2 (*some time a year*), 3 (*several times a year*), 4 (*at least once a month*), and 5 (*several times in a month*). These items are: “watch television shows related to entrepreneurship or entrepreneurs,” “watch television series related to entrepreneurship or entrepreneurs,” “listen to radio programs related to entrepreneurship or entrepreneurs,” “watch films related to entrepreneurship or entrepreneurs,” “read press about entrepreneurship or entrepreneurs,” “read books about entrepreneurship or entrepreneurs,” and “consult the internet and social networks for information about entrepreneurship or entrepreneurs.”

One question explored different levels of early-stage entrepreneurial engagement, with the following four response options (participants have to choose only one): (1) “I have never thought about becoming an entrepreneur or being self-employed,” (2) “I have occasionally thought about becoming an entrepreneur or being self-employed,” (3) “I am thinking of becoming an entrepreneur or being self-employed but I have not taken any step yet,” and (4) “I am currently taking some steps to become an entrepreneur or be self-employed.”

Finally, socio-demographic background questions covered participants’ gender, age, education, work experience, entrepreneurial environment (“How many people do you know who have become entrepreneurs in your environment -family, neighbours, friends, acquaintances, etc.-?” with response options of “nobody,” “between 1 and 3,” “between 3 and 5,” “between 5 and 10,” and “more than 10 people”), and entrepreneurial family models (“Does anyone in your family have their own company?” with response options of “my mother,” “my father,” “other relatives,” or “no one”). A group of questions about attendance of entrepreneurship courses (if yes, participants indicated the duration, organizer, and main contents), experience in preparing a business plan, and/or experience in starting a firm were collected as well. These variables are operationalized as dichotomous variables: gender

(1 = *male*, 2 = *female*), course attendance, experience in preparing a business plan, and/or experience in starting a firm, entrepreneurial environment, and family model (for these cases, 0 = *no*, 1 = *yes*). Age and work experience were included in the model as continuous variables. Lastly, participants were asked “Of the entrepreneurs who appear or are spoken about in the mass media, which percentage would you say are men/women?,” with the options men or women randomly showed (0–100%).

### **3.3. Data analysis**

Data were analyzed using SPSS 22 (descriptive statistics and correlations) and SmartPLS v3.0 software (Ringle et al., 2015). Partial least squares structural equation modeling (PLS-SEM) is a useful technique in cases where complex mediation models are analyzed with a large number of indicators and relationships (Hair et al., 2017). This approach is recommended when the main objective is the exploration and development of new theories, rather than confirmation of previously proposed models. Furthermore, PLS-SEM is a nonparametric technique that allows for the incorporation of reflective and formative measurement models (Hair et al., 2017). Formative models cover the construct domain under study through the aggregation of different indicators, while indicators in reflective models are the effects of the construct. In the present research, the constructs of social legitimacy, perceived skills, attitudes, subjective norms, and entrepreneurial self-efficacy were measured by means of formative indicator scales. In contrast, a reflective indicator scale was used for gauging entrepreneurial intention. The confirmatory tetrad analysis (CTA-PLS) empirically supported this measurement model specification, as non-redundant tetrads were found significantly different from zero in the constructs of social legitimacy, perceived skills, attitudes, and entrepreneurial self-efficacy, while all the tetrads were not significant only in the case of entrepreneurial intention. Only constructs with at least four items were entered in the CTA-PLS.

The bootstrapping procedure was used with 5,000 samples and casewise deletion for missing data. All of the relationships between the reflective indicators and the construct of entrepreneurial intention were significant ( $p < .001$ ) and the outer loadings were above the recommended value of .60 (Hair et al., 2017). Average Variance Extracted (AVE = .71) and composite reliability ( $\rho_c = .91$ ) values achieved the critical thresholds, .50 and .60, respectively (Bagozzi & Yi, 1988), indicating good convergent validity.

To determine the significance of the relationship between each formative indicator and its latent construct, a bootstrapping analysis with 5,000 subsamples was used. Most item weights were significant or their loadings achieved the minimum cut-off value of .50 (Hair et al., 2017). Only three items had a factor loading below .45: attitudes (*Creating a new company or becoming an entrepreneur would mean for you...* “Creating new jobs for other people” and “Obtaining high incomes”) and self-efficacy (*To what degree would you be able to complete the following tasks effectively?* “Complete the necessary and administrative and bureaucratic work to create your own business”). Although it would have been advisable to delete these three items from the model, they were kept to maintain consistency with the scales of the other studies. Regarding multicollinearity, the maximum values of Variance Inflation Factors (VIF) stayed under the recommended value of 5.

#### 4. RESULTS

First, mean scores and correlations between the variables were calculated (Table 5.2). Pearson correlations revealed, as expected, that entrepreneurial intention was positively related to social legitimacy attached to entre-tainment ( $r = .18, p = .001$ ) and perceived skills that are acquired through entre-tainment ( $r = .23, p < .001$ ). These variables were also positively related to attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy except for social legitimacy, whose correlation with subjective norms was not significant ( $r = .08, p = .14$ ). Participants scored relatively low on entrepreneurial intention

Table 5.2

*Descriptive statistics and correlations of study and control variables*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Criterion variable																
1. Entrepreneurial intention	3.03	1.10	-													
Mediator variables																
2. Attitudes	3.16	0.85	.45***	-												
3. Subjective norms	2.77	1.00	.27***	.38***	-											
4. Entrepreneurial self-efficacy	3.43	0.67	.44***	.49***	.30***	-										
Predictor variables entre-tainment																
5. Social legitimacy	3.62	0.79	.18**	.24***	.08	.31***	-									
6. Skills	3.24	0.78	.23***	.29***	.15**	.39***	.43***	-								
Control variables																
7. Gender (1 = Male, 2 = Fem)	-	-	.01	.06	.09	.02	.15*	.12*	-							
8. Age	32.29	11.56	.10	-.28***	-.16**	-.08	.08	.01	-.10	-						
9. Frequency activities (0, 1)	-	-	.32***	.31***	.17**	.43***	.42***	.29***	-.03	.05	-					
10. Business plan (0, 1)	-	-	.31***	.09	.06	.23***	-.00	.05	-.13*	.12*	.12*	-				
11. Work experience	6.90	9.55	.12*	-.30***	-.12*	-.08	.01	-.05	-.18**	.84***	.01	.13*	-			
12. Entrepren.experience (0, 1)	-	-	.19***	.02	.00	.09	.05	.06	-.14*	.27***	.06	.43***	.26***	-		
13. Family entrepreneur (0, 1)	-	-	.14*	.14*	.11*	.22***	.15*	.02	.04	.06	.09	.07	.10	-.08	-	
14. Know entrepreneurs (0, 1)	-	-	.17**	.01	.12**	.17**	.06	.08	-.01	.18**	.09	.13*	.16**	-.13*	.41***	-
15. Entrepreneur. course (0, 1)	-	-	.23***	.09	-.03	.23***	.05	.06	-.10	.10	.20***	.35***	.06	-.23***	.11	.13*

Note. *N* = 320. Scales range from 1 to 5. \**p* < .05. \*\**p* < .01. \*\*\**p* < .001.

( $M = 3.03$ ,  $SD = 1.10$ ) and slightly higher in social legitimacy ( $M = 3.62$ ,  $SD = 0.79$ ) and perceived skills ( $M = 3.24$ ,  $SD = 0.78$ ).

Regarding control variables, the variables' frequency of activities related to information about entrepreneurship or entrepreneurs, experience in developing a business plan, work experience, experience in creating a company, having a relative who is an entrepreneur, knowing entrepreneurs, and attendance of an entrepreneurship course were significantly related to entrepreneurial intention. However, participants' gender and age were not significant.

A step-by-step analysis of the structural model was accomplished to test the hypotheses. First, only distal antecedents (social legitimacy and perceived skills) and entrepreneurial intention were considered (hypotheses  $H_1$  and  $H_2$ ), as well as control variables (Figure 5.2). Second, the three components of the TPB (attitudes, subjective norms, and entrepreneurial self-efficacy) were introduced as mediators to assess the full model ( $H_3$ ,  $H_4$ , and  $H_5$ , Figure 5.3).

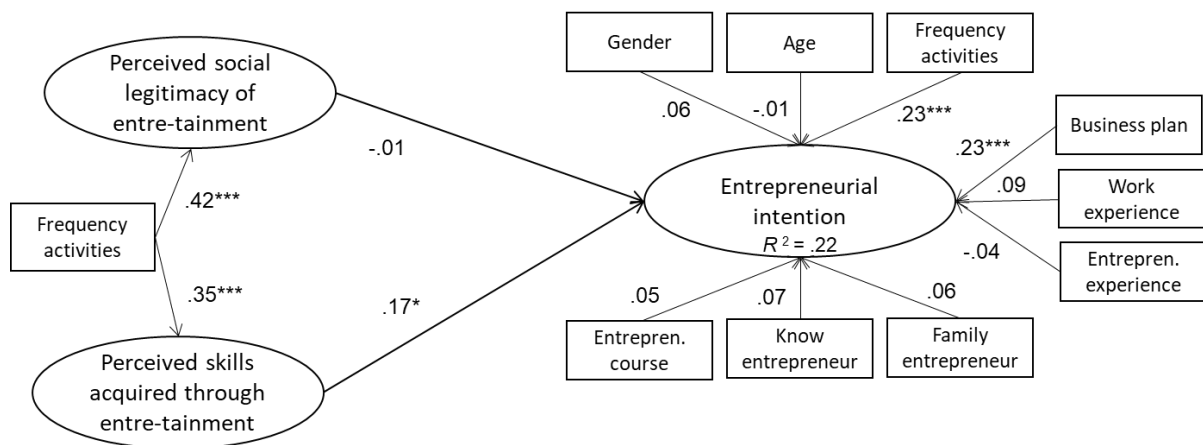


Figure 5.2. Structural model: Perceived social legitimacy of entre-tainment and perceived skills acquired through entre-tainment and entrepreneurial intention (direct links).  $*p < .05$ .  $***p < .001$ .

Figure 5.2 illustrates the influence of the variables related to entre-tainment (social legitimacy and perceived skills), as well as control variables, on entrepreneurial intention. This direct model explained 21.8% of the variance of entrepreneurial intention. While perceived skills had

a significant influence on entrepreneurial intention ( $\beta = .17, p = .02$ ), thus supporting  $H_2$ , the path of social legitimacy was not significant ( $\beta = -.01, p = .88, H_1$  rejected), contrary to expectations. The results of this first model showed that the higher the frequency of activities accomplished related to information about entrepreneurship or entrepreneurs, the higher the scores in social legitimacy and perceived skills. With respect to control variables, only the frequency of activities and having experience in developing a business plan were significant.

A one-way analysis of variance (ANOVA) was conducted to answer the research question about differences in perceived social legitimacy and skills learned through entrepreneurship depending on the position in the entrepreneurial cycle (never thought about becoming an entrepreneur or self-employed, occasionally thought about becoming an entrepreneur or self-employed, thinking of becoming an entrepreneur or self-employed although have not taken any step yet, and currently taking some steps to become an entrepreneur or self-employed). The results revealed differences with respect to perceived skills,  $F(3, 316) = 4.717, p = .003$ , although they were not significant in the case of social legitimacy  $F(3, 316) = 2.142, p = .095$ . Bonferroni post hoc comparisons revealed that only participants who had never thought about becoming an entrepreneur or being self-employed ( $M = 2.89, SD = 0.84, n = 53$ ) differed significantly from the other groups by perceiving a lower learning than those who occasionally thought about becoming an entrepreneur or self-employed ( $p = .008; M = 3.28, SD = 0.71, n = 168$ ), those who were thinking of becoming an entrepreneur or self-employed ( $p = .007; M = 3.34, SD = 0.76, n = 76$ ), and those who were currently taking some steps to become an entrepreneur or self-employed ( $p = .033; M = 3.42, SD = 0.99, n = 23$ ).

In the second model (Figure 5.3), the three antecedents of the TPB were introduced as mediators. All the coefficients of these latent variables were significant except for subjective norms ( $\beta = .07, p = .16$ ). Further, the coefficient of determination of subjective norms ( $R^2 = .03$ ) did not achieve a minimum value of .10 (Falk & Miller, 1992). The other coefficients of determination presented low to moderate values ( $R^2 = .11$  for attitudes, and  $R^2 = .23$  for



entrepreneurial self-efficacy), underpinning the predictive validity of this model. While attitudes and self-efficacy mediated the social legitimacy – intention and perceived skills – intention relationships, subjective norms were not significant in this model. Regarding control variables, only having experience in creating a business plan and work experience were significant. This overall model explained 45.2% of the variance of entrepreneurial intention.

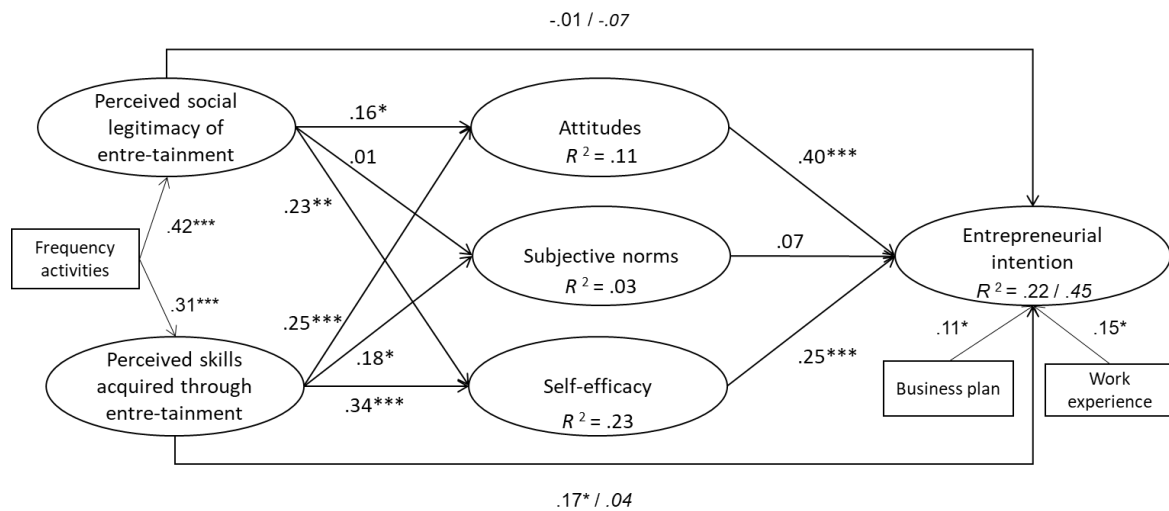


Figure 5.3. Structural model: Perceived social legitimacy of entre-tainment and perceived skills acquired through entre-tainment and entrepreneurial intention (mediated links TPB).

Note. Non-significant paths regarding control variables have been omitted. Mediated relationships are shown in italics. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## 5. DISCUSSION

The aim of this study was to increase the understanding of the relationship between social legitimacy attached to entre-tainment and perceived skills learned through entre-tainment with respect to entrepreneurial intention in a sample of Spanish participants. While skills positively related to entrepreneurial intention ( $H_2$ ), social legitimacy was not a significant factor ( $H_1$  rejected). These findings partially attest to the generalizability of the findings of a previous study conducted in the United Kingdom by Swail et al. (2014), which showed that both social legitimacy and perceived skills predicted entrepreneurial intention. These differences in the findings may relate to cultural factors as well as the characteristics of the present sample.

Given the cultural influence of the mass media (Anderson & Warren, 2011; Boyle & Kelly, 2016; Hang & van Weezel, 2007; Radu & Redien-Collot, 2008), replicating previous findings is important for shedding light on this issue. This study, then, supposes a first step to further explore the influence of the media in entrepreneurship in Spain. On the other hand, Swail et al. (2014) focused on a sample of university students, while the present study sample, although mainly comprised of students, was more diverse and considered a broader population (19–75 years of age). In line with Boyle and Kelly (2016), people who were thinking of becoming an entrepreneur or being self-employed (at least occasionally) found entertainment programs to be more useful for acquiring entrepreneurial skills than those who had never thought of becoming an entrepreneur. This result points to an impact of personal interest on the perception of entertainment. While some audiences seek enjoyment, others seek information and entertainment (Boyle & Kelly, 2016). However, there seems to be no difference in the perceived social legitimacy across groups. Interestingly, social legitimacy is the study variable with the highest mean score ( $M = 3.62$ ,  $SD = 0.78$ ), which denotes a positive view of entrepreneurship and entrepreneurs.

Regarding the mediating role of the TPB antecedents (attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy), the results show that the perceived social legitimacy – entrepreneurial intention and perceived skills – entrepreneurial intention relationships are mediated by positive attitudes toward entrepreneurship and entrepreneurial self-efficacy. However, subjective norms were not significant in this model. Perceived skills proved to have the strongest link to attitudes, subjective norms, and entrepreneurial self-efficacy while social legitimacy exhibited lower relationships. Moreover, the perceived social legitimacy ascribed to entrepreneurs in a society was positively related to attitudes and self-efficacy but, contrary to expectations, did not relate to subjective norms. Further, attitudes showed the strongest link with entrepreneurial intention. These results highlight that the mass media have a strong influence on attitudes. On the contrary, subjective norms appear to be the weakest predictor of entrepreneurial intention. This is consistent with previous research

(Ajzen, 1991; Armitage & Conner, 2001). In the field of entrepreneurial intention, not all studies found a significant relationship (Krueger et al., 2000). These results support the “sufficiency hypothesis” of the TPB by showing that distal antecedents only indirectly influence entrepreneurial intention through one or more of these elements (Ajzen, 2011; Liñán & Chen, 2009). The overall model explained 45.2% of the variance in the intention to become an entrepreneur, more than double than the variance explained only by social legitimacy, perceived skills, and control variables (21.8%).

Despite its limitations, this study offers implications for theory and practice. First, the study of perceived social legitimacy and perceived skills may benefit from considering a robust theoretical framework such as the TPB. Beyond a direct relationship to entrepreneurial intention, the TPB model offers possible explanatory mechanisms. For instance, attitudes were the most relevant predictor of entrepreneurial intention. Thus, the mass media can play a determinant role on attitude change to a more favorable perception of entrepreneurship and entrepreneurs to promote entrepreneurial mindsets. Although participants’ age was not significant, young people are considered to be more open to the mass media influence. In fact, traditional formats such as television and radio appeared to be displaced by the internet.

Second, this study also offers practical implications. Television and radio programs and other formats can be included in entrepreneurship education as well as in campaigns to encourage entrepreneurship. Teachers have included film, music, television, and other media to enhance the classroom experience for decades (Putman, 2013). Indeed, contents can successfully be integrated into teaching and encourage critical thinking in the students. Specifically in the field of entrepreneurship, Zampetakis et al. (2015) propose that films, following different characteristics, can be useful in the design of entertainment education programs for the promotion of entrepreneurship as a career choice. They suggest that entertainment education for entrepreneurship may represent an alternative to classroom training and can both inspire

students to become more interested in entrepreneurship and, as well, initiate more business start-ups.

Eisner (2006) analyzed *The Apprentice* as a pedagogical tool to engage students. This tool appeared to be constructive. She summarizes some of the lessons learned which have been reported by the American Management Association, such as “managing a budget” or “selling persuasively.” This kind of material was used as a task for class preparation and afterwards in class for critical thinking, analysis, and application. Essay answers in final exams showed individual learning as well as reflection enhanced by the assessment process itself. In a survey conducted to explore students’ view of the impact of this reality television series as a teaching tool, almost three quarters (73.1%) of respondents agreed that they “[l]earned a lot about how to succeed in business, having watched *The Apprentice*,” and over one-half (58.5%) agreed that they “[b]etter understand how the business world really works, having watched *The Apprentice*.” On the other hand, when these programs are broadcast to the general public, it is advisable to test how they influence attitudes, subjective norms, and self-efficacy, in a similar way to studies that analyze traffic campaigns (e.g., Stead et al., 2004). In both cases, to take full advantage of the model, media campaigns and education programs should be based on the TPB. Further, media persuasion might be not straightforward; other psychological processes, such as elaboration and validation (Briñol & Petty, 2015; Petty et al., 2009), should be explored in the specific entrepreneurial context.

### **5.1. Limitations and future research**

Limitations of this study point to opportunities for future research. First, the use of self-report scales should be complemented by other measures. Although perceived social legitimacy and perceived skills have been gauged with scales developed in the United Kingdom, both scales showed validity and reliability in the Spanish sample; however, other cross-cultural studies are encouraged to broaden the validity of these scales. Second, participants were not asked about specific television/radio programs or sources of information. Perceived skills may vary

depending on the specific source and can be explicitly mentioned (e.g., Swail et al., 2014). Third, this study puts the emphasis on perceived social legitimacy (normative dimension) and perceived skills (cognitive dimension), while future studies can additionally consider other dimensions, such as the regulatory dimension, that is, government policies and regulations that support new business (e.g., Busenitz et al., 2000), which can vary cross-culturally. Fourth, the sample is mainly comprised of students, and a more diverse population is advisable. Finally, cross-sectional studies do not enable inferences of causation. More longitudinal studies in this field are encouraged to investigate developments over time (e.g., Kautonen, van Gelderen, et al., 2015; Kautonen et al., 2013). Particularly, attention should be paid to the impact of campaigns related to entrepreneurship or new TV programs (or other formats) by surveying before and after broadcasting their attitudes toward entrepreneurship, subjective norms, entrepreneurial self-efficacy, and entrepreneurial intention among population. This kind of analysis can both show the impact of the measure and the best practices to design future initiatives. Qualitative studies such as that accomplished by Boyle and Kelly (2016) in the United Kingdom would also provide valuable information about the role on mass media on entrepreneurship perception in Spain.



**Capítulo 6. “Think entrepreneur – Think male”: la influencia de los estereotipos de género en la intención emprendedora**

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Chapter 6. “Think entrepreneur – Think male”: The influence of gender stereotypes on entrepreneurial intention





*I hesitated a long time before writing a book on woman. The subject is irritating, especially for women; and it is not new.*<sup>37</sup>

Simone de Beauvoir, *Le deuxième sexe* (1949)

## 1. INTRODUCTION

The rate of entrepreneurial activity in women is lower than the rate in men across most countries worldwide. Out of 54 economies analyzed in the last Global Entrepreneurship Monitor report (Singer et al., 2018), only in three (Ecuador, Vietnam, and Brazil) women reported equal or higher entrepreneurship rates than men. In the factor-driven economies (e.g., Latin America and the Caribbean) the average female rates are higher (16.7%) than in the innovation-driven economies such as North America (12.8%) and Europe (6.1%). In Europe female engagement in early-stage entrepreneurial activity and gender parity are particularly low; there are only six women involved in early-stage entrepreneurship for every ten-male entrepreneur. In Spain, the percentage of female self-employed (% of female employment) in 2015 was as high as 12.81% while the percentage of male self-employed (% of male employment) was 20.99% (World Bank, 2017).

Entrepreneurship has been proposed to be one possible career path that alleviates problems women face in the traditional workplace, for example, work-family conflict, barriers to their advancement based on stereotypical beliefs, negatively skewed performance evaluations when compared to men, glass ceiling, poorer chances of being promoted than their male counterparts, penalization for their success by being disliked and interpersonally derogated, backlash against successful women, or less available opportunities for mentorship and networking within organizations compared to men (Heilman & Chen, 2003). Indeed, women

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<sup>37</sup> Translation into English by Constance Borde and Sheila Malovany-Chevallier in "Extracts from the second sex" (2015, p. 3). London, England: Vintage Classics.

are more likely to start businesses triggered by necessity (no other options for work) rather than pursuing an opportunity as a basis for their entrepreneurial motivation (Singer et al., 2018; van der Zwan et al., 2016). However, entrepreneurship presents also barriers for women and does not protect from stereotyping, particularly at the very beginning (Brush, Greene, et al., 2018; Heilman & Chen, 2003). Entrepreneurship ecosystem factors have different influence on men and women, that is, women do not have equal access to resources, participation, networks of growth capital finance, support, or chance of a successful venture start-up (Brush, Edelman, Manolova, & Welter, 2018). For instance, although female entrepreneurs have made some progress in attracting venture capital over the past decade, a significant gender gap still exists (Brush, Greene, et al., 2018). Moreover, network connectivity and social capital distribution differ significantly between male and female entrepreneurs (Neumeyer, Santos, Caetano, & Kalbfleisch, 2018).

Gender, feminine and masculine, is a cultural construct that comprises beliefs about the characteristics that are differentially associated to women and men, respectively (e.g., López-Sáez, 1994). The masculine stereotype is related to instrumental-agentic traits (e.g., competent, independent or assertive) while the feminine stereotype is related to expressive-communal traits (e.g., warm or care of others). Gender identity is relatively stable, women tend to identify with traditionally feminine stereotypes and men identify with masculine stereotypes. However, individuals' self-perception can vary as a function of the situation in which they find themselves (López-Sáez, Morales, & Lisbona, 2008). For instance, men and women identify more with instrumental traits in professional situations. Stereotypes, as generalizations about groups of people, can lead to the mistreatment of individuals due to the group they belong rather than who they are or what they have done (Heilman & Chen, 2003); stereotypes also perpetuate themselves by disconfirming information prompting a revision of the stereotype. Furthermore, stereotype-based expectations act to create a self-fulfilling prophecy and information inconsistent with stereotype-based expectations is often ignored, distorted, or interpreted to be consistent with the expectations (Heilman & Chen, 2003).

Stereotypes play an important role in organizing and structuring information, and that is not different regarding gender stereotypes. Despite societal changes, gender stereotyping persists nowadays (Haines, Deaux, & Lofaro, 2016) and still unconsciously influence perceptions and behaviors (Bird & Brush, 2002). In the past decades, different terms have been developed such as "glass ceiling," which describes the invisible barriers that impede qualified women in reaching or being promoted in executive positions (Barreto, Ryan, & Schmitt, 2009). Some of the main factors explaining this discrimination are descriptive (how men and women are) and prescriptive aspects (how men and women should be) of gender stereotypes (e.g., Eagly & Karau, 2002).

Gender stereotypes have also an influence when choosing occupations and area of studies (López-Sáez, 1994). In this regard, certain occupations may be considered typically feminine or typically masculine, and the higher the percentage of women in the occupation, the higher the association of women's traits with the traits of a successful professional (e.g., Carli, Alawa, Lee, Zhao, & Kim, 2016). For instance, gender stereotypes related to Science, Technology, Engineering, and Mathematics (STEM) have the potential to undermine girls' and women's interest in pursuing a career in counter-stereotypic (masculine) disciplines (Ehrlinger et al., 2018; Smeding, 2012). Additionally, occupation titles convey gender stereotypes as well as a set of expected skills and traits associated with people who hold that occupation (Forsman & Barth, 2017). Male-typed jobs are often evaluated higher and provided better remuneration than female-typed jobs (Gupta & Turban, 2012; Horvath, Merkel, Maass, & Sczesny, 2016). Thus, professions are gendered, and so is entrepreneurship (Ahl, 2006). The descriptions of entrepreneurs' activities have been traditionally masculine (Bird & Brush, 2002), and entrepreneurs are perceived to have predominantly masculine characteristics (Gupta et al., 2009). As Ahl (2006) points out, it is not only the frequent use of the male pronoun, but also the way the entrepreneur is described. The particularities of each language are relevant at this respect. Languages such as Spanish or German use different words for a male or female entrepreneur, but the most used term is the masculine for referring to a gender unspecified

entrepreneur. Hechavarría et al. (2018) have empirically demonstrated that in those countries in which the dominant language's structure incorporates sex-based systems and gender-differentiated pronouns, there exists a greater gender gap in entrepreneurial activity (GEM total early-stage entrepreneurial activity). After analyzing a sample of 105 countries (55 languages), Hechavarría et al. (2018) suggest that gendered linguistic structures reinforce gender stereotypes and discourage women's entry into entrepreneurship.

According to Ahl (2006), it could be argued that entrepreneurship is male gendered because entrepreneurs have traditionally been men. However, she also collects the claims of other scholars with respect to female entrepreneurs made invisible in research and media. In fact, the image that emerges from some of the foundational texts in the field of entrepreneurship is that of the heroic self-made man (Ahl, 2006), and entrepreneurship as a "man's" domain (Bird & Brush, 2002). Media representations of entrepreneurship are dominated by male entrepreneurs (Achtenhagen & Welter, 2011; Hamilton, 2013). In their analysis of 4,955 newspaper articles on female entrepreneurs and female business founders published in Germany between 1995 and 2004, Achtenhagen and Welter (2011) found that female are underrepresented in the public discourse on entrepreneurship. Due to this representation of entrepreneurship as male gendered, women have less opportunities to find sources of identification. Further, female entrepreneurs are described more in terms of look, clothes, or family situation than male entrepreneurs. Thus, both traditional gender stereotypes and role models are reinforced. Men and women are then exposed to a large number of male entrepreneurs as a consequence of being entrepreneurship a male-dominated occupation. This exposition leads both men and women to perceive a similarity between masculine and entrepreneurial characteristics (Gupta et al., 2009). Tycoon histories focus on successful businessmen such as Bill Gates or Henry Ford, and entrepreneurship theories have been developed and tested based on male samples (Bird & Brush, 2002). Ahl (2006) accomplishes a discourse analysis concluding that entrepreneur is a masculine concept rather than gender neutral. However, while both men and women perceive entrepreneurs to have characteristics

similar to those of males (masculine gender-role stereotype), women also perceive entrepreneurs and females as having similar characteristics (feminine gender-role stereotype). Nonetheless, this relationship between females and entrepreneurs is weaker than the perceived relationship between males and entrepreneurs (Gupta et al., 2009).

Specifically, many scholars argue that the typical characteristics of women (feminine) and men (masculine), as well as their traditional roles (men as providers vs. women as homemakers) spill over into the workplace, leading to discrimination against women in leadership positions (Eagly, 1987) or in entrepreneurship (e.g., Bigelow et al., 2014; Brush, Greene, et al., 2018). For decades, research on gender and leadership has shown that the persistent link between successful managerial stereotypes and masculine traits or the task-oriented leadership style ("*think manager – think male*" stereotype, Schein, 1973) has a negative impact on perception and evaluation of female leaders. As with research in managerial jobs, entrepreneur's activities have also been traditionally associated to masculine traits ("*think entrepreneur – think male*" paradigm, e.g., de Pillis and Meilich 2006; Gupta et al., 2009) or to the directive leadership style (Gupta, Javadian, & Jalili, 2014). In fact, research on this perspective has shown that gender stereotypes have a negative impact on women's intention to bind their professional career to entrepreneurship (Gupta, Turban, & Bhawe, 2008; Gupta et al., 2009). It may also explain a lower percentage of women than men to believe themselves to have the required knowledge and skills to start a business (Allen et al., 2007) as well as it may affect decision-making of suppliers, clients, and other members of entrepreneurs' networks (de Pillis & Meilich, 2006; Heilman & Chen, 2003), or make financing and growing women's businesses more difficult (Alsos et al., 2006; Gatewood et al., 2009).

### **1.1. Gender stereotypes in work settings and the "think manager – think male" phenomenon**

Psychosocial and organizational research has revealed the impact of gender stereotypes (socially consensual beliefs about typical traits of women and men) on evaluations about

professional men and women (Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972). Burgess and Borgida (1999) distinguish two dimensions on which women may be evaluated, and therefore are important to consider, the competency cluster and the interpersonal cluster. Women in male-typed occupations receive more negative evaluations on the competency dimension than their male peers. According to the lack of fit model in work settings (Heilman, 2001), stereotyped views of what women are like and the male sex typing of roles and positions combine to elicit gender bias from evaluators. The perceived fit between the individual's attributes and the job's requirements determines performance expectations which, positive (good fit) or negative (poor fit), profoundly affect evaluation processes. Particularly, there is a perceived lack of fit of the attributes that are required to succeed in managerial roles and the attributes that are ascribed to women as a group (Heilman & Chen, 2003). The resulting bias fosters the expectation that the individual who is a member of this group will not be competent ("lack of fit"); to the contrary, they are likely to be placed in jobs that are believed to "fit" their perceived skills and attributes, jobs that are peripheral to the enterprise.

Since the 1970s, the "think manager – think male" paradigm dominates the research on gender-typed perceptions of the managerial role (Schein, 1973). The "think manager – think male" phenomenon has been proposed to foster bias against women in different career moments: managerial selection, placement, promotion, and training decisions, and sex role stereotyping is considered a major psychological barrier to the advancement of women (Schein, 2001). Research on this perspective has consistently proved that characteristics, attitudes, and temperaments of successful middle managers are more commonly ascribed to men in general than to women (Schein, 1973, 1975) in countries as different as the United States, Japan, China, or European countries (Koenig, Eagly, Mitchell, & Ristikari, 2011; Schein & Mueller, 1992; Schein, Mueller, Lituchy, & Liu, 1996).

Diverse instruments have been developed to measure stereotypical attitudes toward professional women. Nevertheless, the scale developed by Schein (Schein Descriptive Index, SDI; Schein, 1973) marked the "think manager – think male" stereotype. A decade later, two important findings have taken place within this framework. First, it was found that female managers and female students perceive women and men to possess similarly characteristics required of successful management while male managers and male students maintain the same perspective that was found in the first studies in the 1970s (Booyesen & Nkomo, 2006; Brenner, Tomkiewicz, & Schein, 1989; Deal & Stevenson, 1998; Schein, 2001). Second, when explicit statement of success was provided (successful men/women managers vs. men/women managers), the perceived dissimilarity between men and women as managers diminished (Heilman, Block, Martell, & Simon, 1989).

Most studies have analyzed the "think manager – think male" stereotype using scales exclusively based on personality traits (e.g., Booyesen & Nkomo, 2006, 2010; Cuadrado, García-Ael, & Molero, 2015). Nonetheless, during the last several years, research has focused on what style of leadership (task- and relationship-oriented) is considered more characteristic of the leadership role and whether there are gender differences in the perception of leadership styles of male, female, and gender-neutral leaders. Results have indicated that women's perceptions reflect a progressive evolution toward a more androgynous perspective of the "think manager – think male" stereotype (see meta-analysis, Koenig et al., 2011). In particular, female evaluators perceive that female leaders are as task-oriented as male or gender-neutral leaders (Duehr & Bono, 2006; Sczesny, 2003), even sometimes more task-oriented than men (García-Ael, Cuadrado, & Molero, 2012, 2013; Sczesny, Bosak, Neff, & Schyns, 2004; Sümer, 2006). On the other side, female evaluators also perceive that female leaders (and gender-neutral managers) exhibit more relationship-oriented traits (Sczesny et al., 2004) and transformational leadership characteristics (Duehr & Bono, 2006) than do male leaders.

## **1.2. The “think entrepreneur – think male” phenomenon**

Similarly to management, entrepreneurship is sex typed as a male occupation (Ahl, 2006; Bird & Brush, 2002). Studies within the “think entrepreneur – think male” paradigm (e.g., Ahl, 2006; Gupta & Fernández, 2009; Gupta et al., 2009; Hancock et al., 2014; Marlow, 2002) have consistently reported that the stereotype of a successful entrepreneur is more associated to masculine characteristics (e.g., competitive, self-confident) than to feminine ones (e.g., kind, sensible), by both male and female evaluators. What is more, although men and women perceive entrepreneurs to have characteristics similar to those of males (masculine gender-role stereotype), women also perceive entrepreneurs and females as having similar characteristics (feminine gender-role stereotype; de Pillis & Meilich, 2006; Gupta et al., 2009). Notably, stereotypical feminine characteristics such as “helpful,” “aware of feelings of others,” or “understanding” are also perceived to be typical of entrepreneurs; however, this is seen to a lesser degree (Gupta & Fernández, 2009). That is, like research on the “think manager – think male” stereotype, this relationship between females and entrepreneurs is weaker than the perceived relationship between males and entrepreneurs.

As with the “think manager – think male” paradigm, perceptions about entrepreneurs are often influenced by gender, such that male and female entrepreneurs are perceived to be significantly different in managing and growing new business ventures (Marlow & McAdam, 2012). For example, female entrepreneurs tend to be more focused on developing relationships (Daniel, 2004). Nevertheless, traits as assertiveness or decisiveness are also perceived as positive attributes for female entrepreneurs (Baron, Markman, & Hirska, 2001), even though they are not viewed as typical for women (Prentice & Carranza, 2002). In the last decades, researchers have begun to analyze to what extent leadership styles in entrepreneurship vary across genders as well. In this vein, research has shown that female entrepreneurs are more likely to make use of a more feminine and participative leadership style or tend to delegate more tasks than male entrepreneurs (Minniti, 2009; Verheul & Thurik,



2001). Nevertheless, they are perceived as more effective when they use a directive leadership style, associated with dominance and assertiveness (Snively & McNeill, 2008), than a participative one, whereas leadership style does not appear to matter for attitudes toward male entrepreneurs (Gupta, Javadian, et al., 2014).

According to Baron et al. (2001), as the stereotype of entrepreneurs is heavily weighted toward traits traditionally viewed as masculine (more assertive, achievement oriented, confident, and having greater risk-taking propensity than managers), it would be possible that women were viewed as even more unsuited for the role of entrepreneur than they are viewed for the role of manager. Even when women have a successful performance in traditionally male work domains, women may not be viewed as competent but their success as an exception (Heilman, 2001). However, in comparison to female managers, female entrepreneurs receive a better assessment due to the major obstacles perceived to become entrepreneurs and are perceived as less stereotypically feminine (Baron et al., 2001).

The association between sex role stereotypes and perception of requisite entrepreneurial characteristics may limit the number of women that pursue a career as entrepreneurs. Men (compared to women) report higher entrepreneurial intention when no mention of gender or gender differences in entrepreneurship is provided while, on the contrary, when entrepreneurship is presented in a gender-neutral manner, both men and women indicate similar levels of entrepreneurial intention (Gupta et al., 2008). And once women decide to become entrepreneurs, gender stereotypes can hinder the financing and growth of their businesses. Businesses created by women tend to have a smaller size and growth rate, and are often located in sectors considered less attractive for potential financing (Gatewood et al., 2009). Thus, female entrepreneurs represent a minority in the technology sector whereas they mostly operate in the service sector. In fact, women participate mainly in the consumer-oriented sector which is easy to enter due to low entry barriers but, at the same time, difficult to keep up due to high competitiveness (Kelley et al., 2015).

What is more, the “think entrepreneur – think male” phenomenon can reduce the opportunity to obtain capital from potential investors or financial entities (Alsos et al., 2006; Gatewood et al., 2009), a phenomenon termed “green ceiling” (e.g., Bigelow et al., 2014). Although female entrepreneurs have made progress in attracting venture capital over the past decade, there is still a significant gender gap (Brush, Greene, et al., 2018). Even controlling other factors in an experimental design, firms headed by a female CEO are disproportionately disadvantaged in their ability to attract growth capital when being evaluated by MBA students, that is, they are perceived as less capable than their male counterparts, and their firms less attractive investments than those led by a male CEO, *ceteris paribus* (Bigelow et al., 2014). There are also some differences in the loan application processes used by male and female bank loan officers in their consideration of male and female loan applications when evaluating the same case of an individual seeking bank finance to purchase an ongoing restaurant business, only varying the name of the applicant, Emma vs. Jack (Carter et al., 2007). Differences have also been reported in the assessment of entrepreneurs’ attributes and subsequent governmental funding distributions between female and male entrepreneurs (Malmström et al., 2017); as a result, women’s potential is undermined while men’s potential turns underpinned. Thus, financiers’ perceptions and practices might unconsciously disadvantage and discriminate against female entrepreneurs. Rather than deliberate discrimination, gender bias and unconscious stereotypes can affect decision-making (Bigelow et al., 2014; de Pillis & Meilich, 2006). Be that as it may, it should be noted that not all studies find that female entrepreneurs have more problems to obtain financing. For instance, Eddleston et al. (2016) found that gender of the entrepreneur did not directly affect the amount of financing received from banks. However, gender moderated other relevant variables. Hence, male entrepreneurs are given more funding than female entrepreneurs on the basis of number of employees and past performance. Additionally, stereotypes can play a relevant role in other aspects. For example, entrepreneurs must usually pitch their business to an audience of investors to raise money. As

successful entrepreneurs are perceived to be male, this stereotype becomes a hurdle for women especially when they are in the pitch situation (Brush, Greene, et al., 2018).

### 1.3. Present research

Two studies are presented to deepen the understanding of the "think entrepreneur – think male" phenomenon: (a) the influence of activation of a successful female entrepreneur role model on women' entrepreneurial intention (Study 4), and (b) the link between self-perceived task and relationship orientation and entrepreneurial intention (Study 5). While Study 4 focuses on the characteristics and behaviors ascribed to entrepreneurs in general, female entrepreneurs, and male entrepreneurs, Study 5 analyzes whether the self-attribution of task and relationship characteristics and behaviors have an impact on participants' reported entrepreneurial intention and its antecedents according to the theory of planned behavior.

Most measuring instruments used in the studies of the "think entrepreneur – think male" paradigm have focused on a combination of feminine and masculine characteristics to demonstrate the effect of gender stereotypes in entrepreneurship (de Pillis & Meilich, 2006; Gupta et al., 2009; Hancock et al., 2014). Nevertheless, personality traits can be irrelevant and the feminine characteristics do not well describe entrepreneurs (Ahl, 2006). Consequently, those instruments do not take into account that entrepreneurs have specific competencies, understood as the sum of skills and abilities to create and manage a new business (Man, Lau, & Snape, 2008; Mitchelmore & Rowley, 2013). For this reason, the first step was to validate the "Entrepreneurial Task and Relationship" (ETR) scale, which is an adaptation of a scale to measure gender stereotypes from the "think manager – think male" framework (García-Ael et al., 2013) into entrepreneurship. The validation of the "Entrepreneurial Task and Relationship" is presented in Appendix E. This 13-item instrument is then used in the subsequent two studies.

## **2. INFLUENCE OF ACTIVATION OF A SUCCESSFUL FEMALE ENTREPRENEUR ROLE MODEL ON ENTREPRENEURIAL INTENTION**

As entrepreneurship is related to economic growth and job creation, policymakers, and institutions are working to fuel entrepreneurial mindsets. Despite these efforts, self-employment rates are low in comparison to being an employee (World Bank, 2017) and, most importantly, the number of female entrepreneurs keeps lagging behind the number of male entrepreneurs in most countries (Singer et al., 2018) for both early stage entrepreneurial participation and established business ownership (e.g., Allen et al., 2007); what is probably most important, women also tend to exhibit lower scores on entrepreneurial intention than do men (e.g., Gupta et al., 2008; Sieger et al., 2014; Singer et al., 2018).

For decades, organizational research has consistently shown to what extent gender stereotypes affect perceptions of (male and female) entrepreneurs (e.g., Bigelow et al., 2014; Brush, Greene, et al., 2018) by showing that entrepreneurs are perceived to have predominantly masculine characteristics, that is, conform to the “think entrepreneur – think male” paradigm (de Pillis & Meilich, 2006; Gupta et al., 2009). Furthermore, it has been reported that gender stereotypes impact negatively on women’s intention to develop their professional career into entrepreneurship (Gupta et al., 2008; Gupta et al., 2009) as well as women’s opportunities to attract capital (Brush, Greene, et al., 2018; Malmström et al., 2017) and women’s business growth intention (Zampetakis, Bakatsaki, Kafetsios, & Moustakis, 2016). Additionally, compared to men, women tend to exhibit fewer positive attitudes toward entrepreneurship (Zampetakis et al., 2017), lower entrepreneurial self-efficacy (Wilson, Kickul, Marlino, Barbosa, & Griffiths, 2009) and greater likelihood of starting a business out of necessity vs. opportunity motivation (Singer et al., 2018; van der Zwan et al., 2016).

Nevertheless, not yet studied are which leadership styles (task and relationship orientation) are ascribed to male and female entrepreneurs, and whether activation of the female entrepreneur’s stereotype can positively affect women’s entrepreneurial intention and other

antecedent variables. The aim of this study is thus threefold. First, from the "think entrepreneur – think male" paradigm, it is examined to what extent the task and relationship leadership styles are perceived to be typical of successful entrepreneurs in general, successful female entrepreneurs, and successful male entrepreneurs, and whether there are gender differences in men's and women's perceptions of these leadership styles. Second, it is investigated whether activation of the leadership style of a successful female entrepreneur, through the mere assignment of participants to the successful female entrepreneurs condition, influences women's entrepreneurial intention as well as other antecedents such as attitudes toward entrepreneurship, subjective norms, entrepreneurial self-efficacy, and necessity vs. opportunity motivation. Third, it is analyzed whether there exists a recall bias of the target, that is, a tendency to recall a male entrepreneur regardless of the condition as the proportion of male entrepreneurs is higher than that of female entrepreneurs, and whether female participants better recall female entrepreneurs. This study contributes to prior research by testing if task and relationship leadership styles are linked to the stereotype of successful entrepreneurship. Leadership is currently considered a mature field, and considering the conceptual intersections between leadership and entrepreneurship, entrepreneurship might benefit from the challenges and successes of leadership research (Cogliser & Brigham, 2004). Furthermore, this study goes a step beyond and try to shed more light on the influence on other relevant variables related to entrepreneurial intention.

## **2.1. The approach to the "think entrepreneur – think male" phenomenon in the present study**

Although there has been significant progress recently (see Section 1.2. The "think entrepreneur – think male" phenomenon), there are some factors not yet well studied. Unlike research on the "think manager – think male" stereotype, research on the "think entrepreneur – think male" concept has focused more on traits linked to successful entrepreneurs (e.g., Gupta et al., 2009) than on perceptions of entrepreneurs' leadership styles (e.g., Gupta,

Javadian, et al., 2014). However, this is an important issue, given that personality traits can be seen as irrelevant or even misleading, not only in the field of leadership (Sczesny, 2003), but also in entrepreneurship. Feminine characteristics do not readily describe entrepreneurs, or they are just the opposite of the entrepreneurship domain (Ahl, 2006). Further, most of the studies analyze the directive or the transformational leadership style (e.g., Gupta, Javadian, et al., 2014) without bearing in mind that task and relationship leadership styles are associated with masculine and feminine traits, respectively (e.g., Cann & Siegfried, 1990). On the other hand, although a few studies have focused on the gendered nature of entrepreneurial leadership, they show gender differences; for instance, successful female business owners describe themselves as better in task-focused behaviors, while male entrepreneurs perceive themselves better at problem solving (Leahy & Eggers, 1998). Along these lines, male entrepreneurs are generally perceived as more effective than female entrepreneurs regardless of whether they use a directive or a participative leadership style, while female entrepreneurs are perceived to be more effective when using a directive (as opposed to a participative) management style (Gupta, Javadian, et al., 2014). Nevertheless, female entrepreneurs are also perceived as a combination of masculine and feminine stereotypes. In this regard, research has reported that entrepreneurial women adopt an achievement-oriented leadership style high in both initiating structure and consideration (Li, Bao, & Jiang, 2013). Similarly, several studies have reported that female entrepreneurs are best described using relational dimensions (e.g., collaboration, sharing of information; Buttner, 2001) or that female employees give greater weight to feminine attributes (e.g., warmth, being understanding, helpful to others, aware of others' feelings), especially when working in women-owned businesses (Fagenson & Marcus, 1991).

Finally, except for the study of de Pillis and Meilich (2006) showing that a male entrepreneur is considered more similar to a gender-unspecified entrepreneur and a female entrepreneur is perceived dissimilar to these two categories, there are few studies analyzing the stereotype of male and female entrepreneurs in comparison with a gender-neutral entrepreneur. It is

important to analyze this topic because using the stereotype of a gender-neutral entrepreneur as a target of comparison could weaken the stereotypical judgments of male and female entrepreneurs by eliminating (or reducing) the covariance between sex and role (Eagly & Steffen, 1984).

For these reasons, the first objective was to analyze to what extent task and relationship characteristics and behaviors are perceived to be typical of successful entrepreneurs in general, successful female entrepreneurs, and successful male entrepreneurs, and whether there are gender differences in men's and women's perceptions of these leadership styles. In accord with the aforementioned studies, the following hypotheses are proposed:

*Hypothesis 1a:* Successful entrepreneurs (in all three conditions: successful entrepreneurs in general, successful female entrepreneurs, and successful male entrepreneurs) will be perceived as more task-oriented (stereotypically masculine) than relationship-oriented (stereotypically feminine).

*Hypothesis 1b:* Successful entrepreneurs in general and successful male entrepreneurs will be perceived as more task-oriented than successful female entrepreneurs, especially by male participants.

*Hypothesis 1c:* Successful entrepreneurs in general and successful male entrepreneurs will be perceived as less relationship-oriented than successful female entrepreneurs, especially by female participants.

## **2.2. Entrepreneurial intention and gender**

Research has shown that entrepreneurial intention is a significant predictor of subsequent entrepreneurial behavior (e.g., Kautonen, van Gelderen, et al., 2015). That is, intentions are the best predictor of any type of planned behavior, especially when the behavior is hard to observe (Krueger et al., 2000). Regarding the requisites that are necessary to start a business,

entrepreneurship can be considered a planned behavior where intention models are suitable within this research area.

Research on entrepreneurial intention has also highlighted gender differences. In this vein, several studies (e.g., Gupta et al., 2008; Singer et al., 2018) have found that females tend to report a lower intention to become an entrepreneur than males. One possible explanation relates to stereotype threat (Gupta et al., 2008). Stereotype threat suggests that stereotypes about capacities of certain groups (race, gender, etc.) can affect their performance in tasks that evaluate those capacities when such stereotypes are activated (Steele, Spencer, & Aronson, 2002). In the case of women, the activation of their stereotype can persuade women to avoid leadership roles in favor of nonthreatening subordinate roles (Davies, Spencer, & Steele, 2005). In the entrepreneurship field, a set of studies has shown that activation of a masculine stereotype about entrepreneurs reduces women's entrepreneurial intention, compared to men (e.g., Gupta et al., 2008). Nevertheless, when entrepreneurship was presented as gender neutral (e.g., well-informed, steady), differences in entrepreneurial intention between women and men disappeared.

In the present study, participants were asked to assess the typicality of successful entrepreneurs in general, successful female entrepreneurs, or successful male entrepreneurs on task- and relationship-oriented attributes and behaviors. With this manipulation it was aimed to make participants think about the stereotype of their entrepreneur condition. For female participants, drawing on the "think entrepreneur – think male" phenomenon, the conditions related to successful entrepreneurs in general and successful male entrepreneurs were expected to be those of stereotype threat, while the successful female entrepreneurs condition would convey salient counter-stereotypic exemplars from their in-group. These aspects guide the following hypothesis:

*Hypothesis 2:* Female participants assigned to the successful female entrepreneurs condition will present a higher entrepreneurial intention (in comparison to participants



assigned to the successful entrepreneurs in general or successful male entrepreneurs conditions).

As indicated in the previous chapters, the theory of planned behavior (TPB; Ajzen, 1991) constitutes the most used model in the study of entrepreneurial intention (e.g., Liñán & Fayolle, 2015). To better understand the role of gender stereotypes, the present study does not only consider entrepreneurial intention, but also sheds light on the role of the antecedents of entrepreneurial intention, that is, attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy. Because this approach is exploratory, the following research question is established:

*Research question 1:* Female participants assigned to the successful female entrepreneurs condition (in comparison to participants assigned to the successful entrepreneurs in general or successful male entrepreneurs conditions) will present more positive attitudes toward entrepreneurship (RQ1a), more supporting subjective norms (RQ1b), and higher entrepreneurial self-efficacy (RQ1c).

In addition to the TPB variables that predict entrepreneurial intention, it is relevant to explore whether the decision to start a new business is triggered by necessity (push motivation or negative factors) or opportunity (pull motivation or positive factors) (van der Zwan et al., 2016). Although most entrepreneurs choose pursuing an opportunity as a basis for their entrepreneurial motivation, rather than triggered by necessity (no other options for work), diverse studies have shown that women, compared to men, are more likely to start businesses out of necessity (Singer et al., 2018; van der Zwan et al., 2016). Thus, in a similar vein to RQ1, the following research question is proposed:

*Research question 2:* Female participants assigned to the successful female entrepreneurs condition (in comparison to participants assigned to the successful entrepreneurs in general or successful male entrepreneurs conditions) will present a higher opportunity motivation (rather than necessity motivation).

### **2.3. Differences in recalling the target**

If the entrepreneur stereotype is male, when gender of the entrepreneur is not specified, participants tend to assume that the entrepreneur is male (de Pillis & Meilich, 2006). Moreover, even when indicating a successful female entrepreneur, a strong male stereotype leads to a more accessible male entrepreneur image (instead of a female entrepreneur). The empirical findings of de Pillis and Meilich (2006), who asked participants to rate one of three conditions (successful entrepreneur, successful female entrepreneur, and successful male entrepreneur) and included one item at the end of the survey asking whether the participant had been envisioning a male or female entrepreneur, pointed out that envisioning a female entrepreneur was highly related to the participant being female. In the same vein, Sczesny et al. (2004) found that the male participants of three investigated countries (German, Australia, and India) as well as German female participants imagined mainly male executives when leader's gender was not mentioned, while the stereotype was less pronounced in Australian and Indian female participants. These studies guide the following hypothesis:

*Hypothesis 3a:* Both female and male participants assigned to the successful entrepreneurs in general condition will tend to recall a male entrepreneur.

*Hypothesis 3b:* The proportion of female participants assigned to the successful female entrepreneurs condition who recall a female entrepreneur will be greater than the proportion of male participants (in the same condition).

### **2.4. Method**

#### **2.4.1. Design and procedure**

The present study was based on a 3 (successful entrepreneurs' gender: successful entrepreneurs in general, successful female entrepreneurs, and successful male entrepreneurs) x 2 (participant's gender: female vs. male) between-participants design. Participants were randomly assigned to one of three conditions: successful entrepreneurs in

general, successful female entrepreneurs, and successful male entrepreneurs. They were asked to assess to what extent they considered that two types of characteristics and behaviors (task- and relationship-oriented) were typical of their condition. An online questionnaire was administered. In this way, the participants only responded to the block of characteristics and behaviors corresponding to the assigned condition. Responding to the questionnaire took between four and 30 minutes ( $M = 11.25$ ,  $SD = 4.53$ ) and there were no differences among conditions ( $p = .364$ ). Afterwards, all participants completed the Entrepreneurial Intention Questionnaire (EIQ) and demographic data.

### 2.4.2. Participants

The sample consisted of 902 participants (55.9% females), 18 – 44 years old ( $M = 31.04$ ,  $SD = 6.89$ ). Participants were randomly assigned to one of three conditions: successful entrepreneurs ( $N = 309$ , 55% females,  $M = 30.41$  years old,  $SD = 6.71$ ), successful female entrepreneurs ( $N = 305$ , 59.7% females,  $M = 31.42$  years old,  $SD = 7.11$ ), and successful male entrepreneurs ( $N = 288$ , 52.8% females,  $M = 31.30$  years old,  $SD = 6.84$ ). Chi-square tests did not reveal differences across conditions regarding participants' gender ( $p = .224$ ) or work status ( $p = .579$ ), and one-way ANOVA did not reveal differences with respect to age ( $p = .140$ ). None of the participants indicated they were an entrepreneur (solo or with partners). Most of them lived in Madrid (27.7%), Zaragoza (10.9%), Barcelona (6.9%) and Valencia (5.5%); the rest of the sample was distributed around the Spanish geography.

### 2.4.3. Measures

#### *Task and relationship orientation*

The "Entrepreneurial Task and Relationship" (ETR) 13-item scale, an adaptation to entrepreneurship of García-Ael et al.'s (2013) scale, was used<sup>38</sup>. Participants rated the

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<sup>38</sup> The adaptation and validation of the ETR scale is presented in Appendix E. Validation of a task and relationship scale to measure gender stereotypes in entrepreneurship.

characteristics and behaviors of targets in response to the question, “In your opinion, how typical are the following characteristics and behaviors of (condition = successful entrepreneurs in general / successful female entrepreneurs / successful male entrepreneurs)?” These attributes may be grouped into two dimensions: (a) task orientation (eight items, e.g., make decisions easily, self-confident), and (b) relationship orientation (five items, e.g., sensitive to the needs of their clients, agreeable). Scale ranged from 1 (*not at all typical*) to 5 (*very typical*). The reliability of both dimensions was satisfactory (task orientation: Cronbach’s alpha = .81; relationship orientation: Cronbach’s alpha = .80).

#### *Entrepreneurial Intention Questionnaire*

The Entrepreneurial Intention Questionnaire (EIQ; Moriano, 2005; Moriano et al., 2012) was used to measure intention to become an entrepreneur as well as the three components of the TPB (attitudes, subjective norms, and entrepreneurial self-efficacy). In the following sections, each one of the subscales is described.

*Entrepreneurial intention.* To assess entrepreneurial intention, a four-item scale measures the perceived probability of different aspects about the creation of a firm, for instance, “With what probability do you consider creating your own business from the present to five years from now?” with a response format from 1 (*totally improbable*) to 5 (*totally probable*). The reliability was satisfactory (Cronbach’s alpha = .88).

*Attitudes toward entrepreneurship.* Attitudes were measured with: (a) a set of six items about what creating a new company or becoming an entrepreneur would mean for the participant in a five-point Likert response format from 1 (*totally improbable*) to 5 (*totally probable*), for instance, “being my own boss (independence);” and (b) another set of six items about how desirable these aspects are for the participant, from 1 (*not at all desirable*) to 5 (*totally desirable*). To calculate the overall score, the score on each item of the first set is combined in a multiplicative way with the corresponding item of the second set. High scores indicate a

positive attitude toward entrepreneurship. The reliability of this scale was acceptable (Cronbach's alpha = .79).

*Subjective norms.* Subjective norms comprise: (a) a set of three items about to what extent the participant considers that other significant people (family, friends, and colleagues) would agree if the participant decided to become an entrepreneur, using a five-point Likert response format from 1 (*not at all agree*) to 5 (*totally agree*); and (b) another set of three items about how the participant assessed the opinions of these significant others with respect to becoming an entrepreneur, from 1 (*not important*) to 5 (*very important*), which denotes the motivation to comply with expectations of these referent groups. The score on each item of the first set is combined in a multiplicative way with the corresponding item of the second set. The reliability of this scale was also adequate (Cronbach's alpha = .79).

*Entrepreneurial self-efficacy.* This scale is comprised of nine items (e.g., to define the business idea, to write the business plan or to complete the necessary administrative and bureaucratic work to create one's own business) with a five-point Likert response format from 1 (*totally ineffective*) to 5 (*totally effective*). The reliability was satisfactory (Cronbach's alpha = .85).

#### *Necessity vs. opportunity motivation*

Motivation to become an entrepreneur was measured by a single item, "If you finally decided to create your own business, you would do it mainly due to:" with a five-point answering option from 1 (*lack of a better labor alternative*) to 5 (*innovative business opportunity*).

#### *Recall question*

At the end of the questionnaire, a question was included "Finally, when you have previously answered questions about the typical characteristics of successful entrepreneurs, were you thinking about ...?" with responding options: 1) a person entrepreneur, 2) a male entrepreneur, 3) a female entrepreneur, 4) I do not remember, and 5) other cases (i.e., free answer, for instance, "family").

Socio-demographic and employment data

Participants indicated their gender, age, educational level, city, and labor status.

2.5. Results

Task and relationship orientation

First, Table 6.1 illustrates task and relationship orientation means and standard deviations. Consistent with Hypothesis 1a, entrepreneurs (in all conditions) were perceived as more task-oriented, stereotypically masculine, than relationship-oriented, stereotypically feminine (paired *t*-Student *p*-value < .001). The mean score in task orientation (*M* = 4.23, *SD* = 0.50) was significantly higher than the mean score in relationship orientation (*M* = 3.34, *SD* = 0.73).

Table 6.1

Perceived task and relationship orientation across conditions

	Successful entrepreneurs in general ( <i>n</i> = 309)		Successful female entrepreneurs ( <i>n</i> = 305)		Successful male entrepreneurs ( <i>n</i> = 288)	
	<i>M</i> ( <i>SD</i> )		<i>M</i> ( <i>SD</i> )		<i>M</i> ( <i>SD</i> )	
Task orientation	4.27 (0.45)		4.17 (0.55)		4.25 (0.48)	
Relationship orientation	3.30 (0.72)		3.59 (0.71)		3.11 (0.67)	
Task and orientation mean differences	<i>t</i> (308) = 24.418, <i>p</i> < .001		<i>t</i> (304) = 13.355, <i>p</i> < .001		<i>t</i> (287) = 28.089, <i>p</i> < .001	
	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>
	( <i>n</i> = 139)	( <i>n</i> = 170)	( <i>n</i> = 123)	( <i>n</i> = 182)	( <i>n</i> = 136)	( <i>n</i> = 152)
Task orientation	4.24	4.30	<b>4.03</b>	<b>4.26</b>	4.20	4.30
Relationship orientation	<b>3.20</b>	<b>3.38</b>	<b>3.44</b>	<b>3.69</b>	3.17	3.06

Note. Scales range from 1 to 5. *F* = Female participants. *M* = Male participants. In bold, significant differences between female and male participants (*t*-Student test, *p* < .05) within each condition.

Subsequently, two 3 (condition - successful entrepreneurs' gender: in general entrepreneurs, female entrepreneurs, or male entrepreneurs) x 2 (participants' gender: female vs. male) univariate analysis of variance (ANOVA) were conducted on the task and relationship orientation. Tukey tests were applied to analyze multiple comparisons.

Regarding task orientation, results confirmed Hypothesis 1b (Figure 6.1). Specifically, the data indicated a main effect of condition,  $F(2, 896) = 5.564, p = .004, \eta_p^2 = .012$ , such that successful female entrepreneurs ( $M = 4.17, SD = 0.55$ ) were rated significantly lower in task orientation than successful entrepreneurs in general ( $M = 4.27, SD = 0.45, p = .002$ ) and successful male entrepreneurs ( $M = 4.25, SD = 0.48, p = .010$ ). Results also revealed a main effect of participants' gender,  $F(1, 896) = 16.054, p < .001, \eta_p^2 = .018$ , such that female participants ( $M = 4.29, SD = 0.47$ ) ascribed to entrepreneurs higher task orientation than did male participants ( $M = 4.16, SD = 0.52$ ). Although the interaction effect did not achieve significance ( $p = .071$ ), a further analysis revealed that male participants assigned lower rates to successful female entrepreneurs ( $M = 4.03, SD = 0.57$ ) than to successful entrepreneurs in general ( $M = 4.24, SD = 0.46, p < .001$ ) and successful male entrepreneurs ( $M = 4.20, SD = 0.50, p = .004$ ). However, female participants did not show differences across conditions.

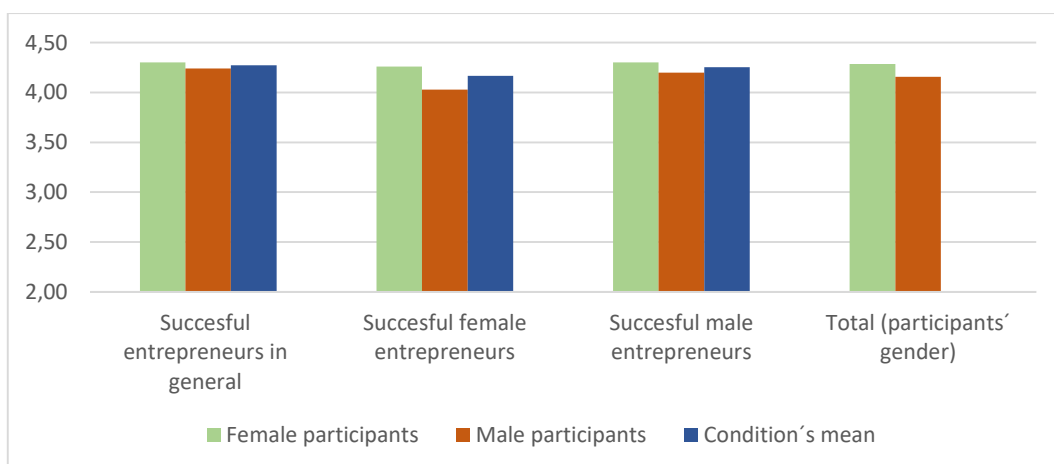


Figure 6.1. Task orientation: Means across conditions and participants' gender.

With respect to relationship orientation (Figure 6.2), results yielded a main effect of entrepreneurs' gender,  $F(2, 896) = 30.964, p < .001, \eta_p^2 = .065$ , such that a higher relationship orientation was attributed to successful female entrepreneurs ( $M = 3.59, SD = 0.71$ ) than to successful entrepreneurs in general ( $M = 3.30, SD = 0.72, p < .001$ ) and successful male entrepreneurs ( $M = 3.11, SD = 0.67, p < .001$ ). Successful entrepreneurs in general were also perceived to possess a higher relationship orientation than successful male entrepreneurs ( $p = .002$ ). A main effect of participants' gender was found,  $F(1, 896) = 5.281, p = .022, \eta_p^2 = .006$ , such that female participants ( $M = 3.39, SD = 0.73$ ) ascribed more relationship orientation to entrepreneurs than did male participants ( $M = 3.26, SD = 0.72$ ). Additionally, the interaction between entrepreneurs' gender and participants' gender was significant,  $F(2, 896) = 5.462, p = .004, \eta_p^2 = .012$ , such that female participants considered as more characteristic the relationship orientation for successful female entrepreneurs ( $M = 3.69, SD = 0.73$ ) than for successful entrepreneurs in general ( $M = 3.38, SD = 0.71, p < .001$ ) or successful male entrepreneurs ( $M = 3.06, SD = 0.60, p < .001$ ). On the other hand, male participants considered successful female entrepreneurs ( $M = 3.44, SD = 0.65$ ) to exhibit higher relationship orientation than successful entrepreneurs in general ( $M = 3.20, SD = 0.73, p = .005$ ) and successful male entrepreneurs ( $M = 3.17, SD = 0.63, p = .002$ ). These results give support to Hypothesis 1c.

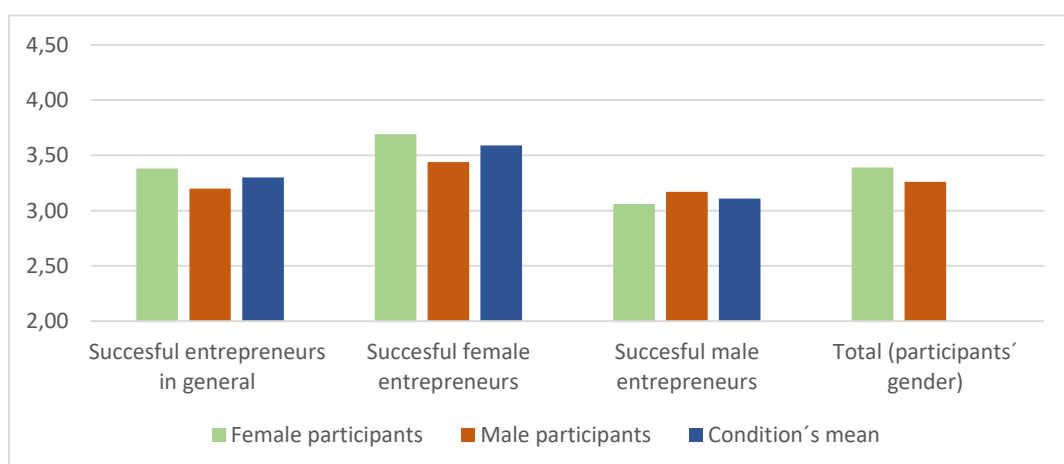


Figure 6.2. Relationship orientation: Means across conditions and participants' gender.



*Entrepreneurial intention and gender*

Similarly, five 3 (condition - successful entrepreneurs' gender: in general entrepreneurs, female entrepreneurs, or male entrepreneurs) x 2 (participants' gender: female vs. male) ANOVAs were conducted on the self-reported variables (entrepreneurial intention, attitudes toward entrepreneurship, subjective norms, entrepreneurial self-efficacy, and necessity vs. opportunity motivation). To analyze multiple comparisons, Tukey tests were applied. Table 6.2 exhibits mean scores and standard deviations in these self-reported variables.

Table 6.2

*Means and standard deviations across conditions of entrepreneurial intention, attitudes, subjective norms, self-efficacy, and necessity vs. opportunity motivation*

	Successful entrepreneurs in general ( <i>n</i> = 309) <i>M</i> ( <i>SD</i> )	Successful female entrepreneurs ( <i>n</i> = 305) <i>M</i> ( <i>SD</i> )	Successful male entrepreneurs ( <i>n</i> = 288) <i>M</i> ( <i>SD</i> )			
Entrepreneurial intention	2.89 (1.15)	3.03 (1.15)	2.75 (1.15)			
Attitudes	2.92 (0.85)	2.96 (0.88)	2.89 (0.83)			
Subjective norms	2.78 (1.04)	2.63 (1.05)	2.63 (1.03)			
Entrepreneurial self-efficacy	3.50 (0.61)	3.49 (0.66)	3.42 (0.66)			
Necessity vs. opportunity	3.23 (1.57)	3.21 (1.50)	2.99 (1.58)			
	<i>M</i> ( <i>n</i> = 139)	<i>F</i> ( <i>n</i> = 170)	<i>M</i> ( <i>n</i> = 123)	<i>F</i> ( <i>n</i> = 182)	<i>M</i> ( <i>n</i> = 136)	<i>F</i> ( <i>n</i> = 152)
Entrepreneurial intention	<b>3.08</b>	<b>2.73</b>	3.04	3.02	2.85	2.67
Attitudes	3.02	2.84	2.97	2.95	2.98	2.82
Subjective norms	2.82	2.74	2.61	2.65	2.61	2.65
Entrepreneurial self-efficacy	<b>3.61</b>	<b>3.40</b>	3.46	3.51	3.50	3.36
Necessity vs. opportunity	<b>3.48</b>	<b>3.03</b>	3.25	3.18	<b>3.18</b>	<b>2.81</b>

*Note.* Scales range from 1 to 5. *F* = Female participants. *M* = Male participants.

In bold, significant differences between female and male participants (*t*-Student test,  $p < .05$ ) within each condition.

Regarding entrepreneurial intention (Figure 6.3), results revealed a main effect of condition (entrepreneurs' gender),  $F(2, 896) = 4.158, p = .016, \eta_p^2 = .009$ , such that participants assigned to the successful female entrepreneurs condition ( $M = 3.03, SD = 1.15$ ) reported significantly higher entrepreneurial intention than participants assigned to the male entrepreneurs condition ( $M = 2.75, SD = 1.15, p = .004$ ). There was no significant difference between these conditions and those participants assigned to the successful entrepreneurs in general condition ( $M = 2.89, SD = 1.15, p = .182$  and  $p = .114$ , respectively). Results also yielded a main effect of participants' gender,  $F(1, 896) = 5.700, p = .017, \eta_p^2 = .006$ , such that male participants ( $M = 2.99, SD = 1.16$ ) exhibited a higher entrepreneurial intention than did female participants ( $M = 2.82, SD = 1.14$ ). Although the interaction effect was not significant ( $p = .188$ ), more specifically, the ANOVA only for female participants revealed that those assigned to the successful female entrepreneurs condition ( $M = 3.02, SD = 1.16$ ) exhibited higher entrepreneurial intention than those assigned to the other conditions, successful entrepreneurs in general ( $M = 2.73, SD = 1.11, p = .016$ ) and successful male entrepreneurs ( $M = 2.67, SD = 1.13, p = .005$ ), supporting Hypothesis 2.

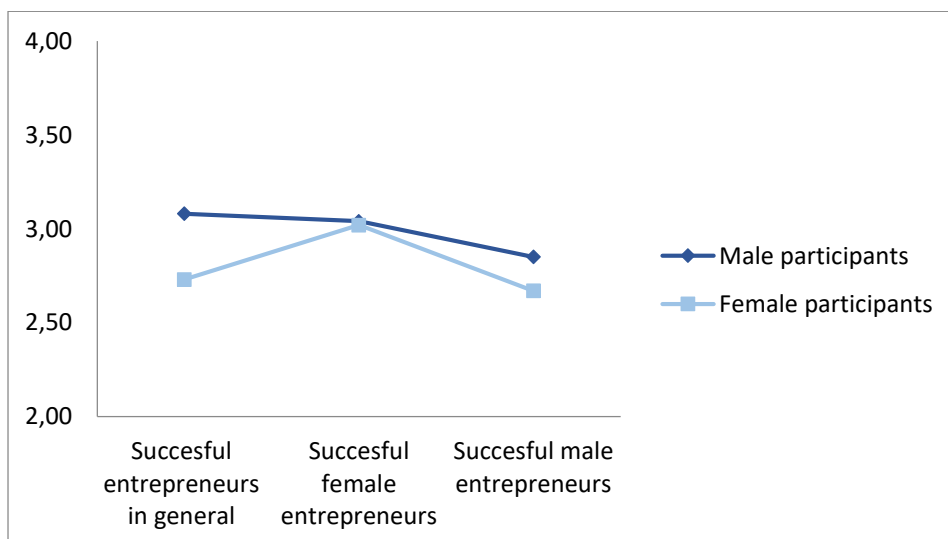


Figure 6.3. Entrepreneurial intention: Means across conditions and participants' gender.

With regard to attitudes toward entrepreneurship (Figure 6.4), results only showed a main effect of participants' gender  $F(1, 896) = 4.335, p = .038, \eta_p^2 = .005$ , such that male participants ( $M = 2.99, SD = 0.81$ ) showed more positive attitudes toward entrepreneurship than did female participants ( $M = 2.87, SD = 0.89$ ). With respect to subjective norms (Figure 6.5), neither main effects nor interaction effects were found.

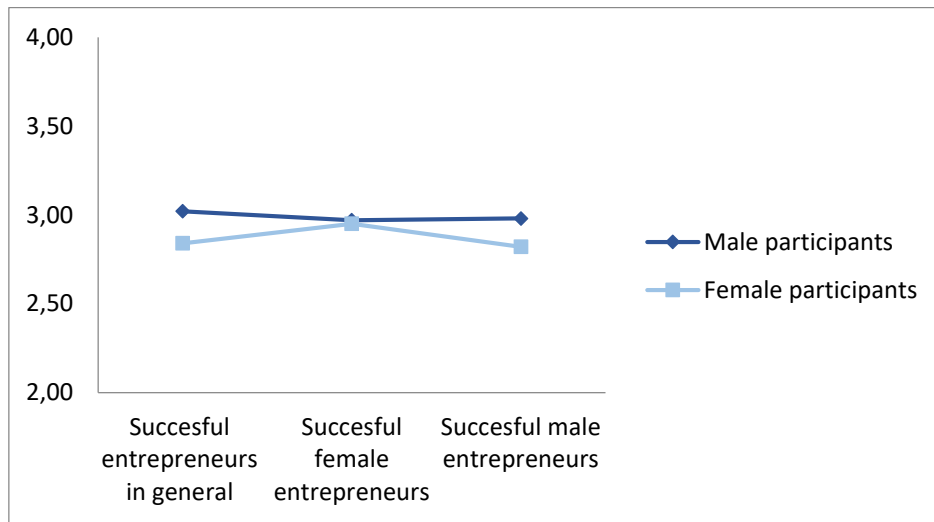


Figure 6.4. Attitudes toward entrepreneurship: Means across conditions and participants' gender.

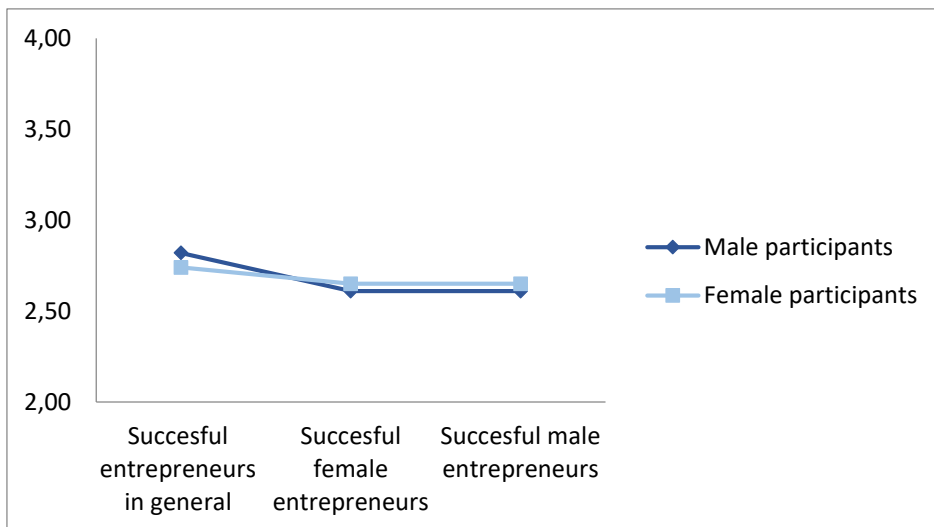


Figure 6.5. Subjective norms: Means across conditions and participants' gender.

Concerning entrepreneurial self-efficacy (Figure 6.6), results yielded a main effect of participants' gender,  $F(1, 896) = 5.454$ ,  $p = .020$ ,  $\eta_p^2 = .006$ , such that male participants ( $M = 3.53$ ,  $SD = 0.63$ ) presented higher scores on self-efficacy than did female participants ( $M = 3.43$ ,  $SD = 0.65$ ). Results also yielded a significant entrepreneurs' gender x participants' gender interaction effect,  $F(2, 896) = 3.194$ ,  $p = .041$ ,  $\eta_p^2 = .007$ , such that there were not differences for male participants across the three conditions. However, female participants assigned to the successful female entrepreneurs condition self-reported a higher entrepreneurial self-efficacy ( $M = 3.51$ ,  $SD = 0.65$ ) than those female participants assigned to the successful male entrepreneurs condition ( $M = 3.36$ ,  $SD = 0.67$ ,  $p = .041$ ). Female participants assigned to the successful entrepreneurs in general condition ( $M = 3.40$ ,  $SD = 0.63$ ) did not differ in their entrepreneurial self-efficacy from women assigned to the successful female entrepreneurs condition ( $p = .121$ ), or from women assigned to the male entrepreneurs condition ( $p = .594$ ).

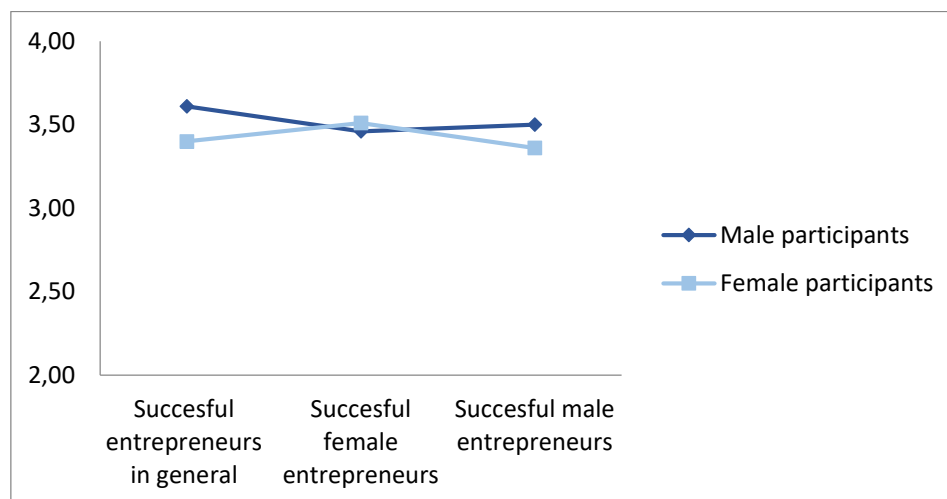


Figure 6.6. Entrepreneurial self-efficacy: Means across conditions and participants' gender.

Finally, with respect to necessity vs. opportunity motivation (Figure 6.7), results only yielded a main effect of participants' gender,  $F(1, 896) = 8.325$ ,  $p = .004$ ,  $\eta_p^2 = .009$ , such that male participants ( $M = 3.31$ ,  $SD = 1.51$ ) scored higher in opportunity motivation than female

participants ( $M = 3.02$ ,  $SD = 1.58$ ). While the interaction effect did not achieve significance ( $p = .282$ ), more detailed analyses showed that male participants did not report differences across conditions while female participants assigned to the successful female entrepreneurs condition self-reported more opportunity motivation ( $M = 3.18$ ,  $SD = 1.53$ ) than those assigned to the successful male entrepreneurs condition ( $M = 2.81$ ,  $SD = 1.61$ ,  $p = .029$ ).

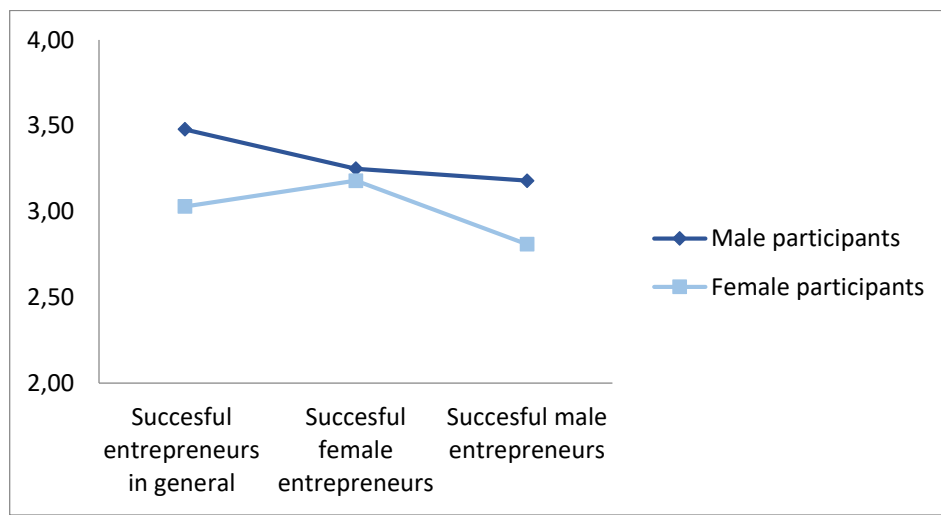


Figure 6.7. Opportunity vs. necessity motivation: Means across conditions and participants' gender.

To sum up, female participants assigned to the successful female entrepreneurs condition self-reported higher entrepreneurial intention (Hypothesis 2), higher entrepreneurial self-efficacy (Research Question 1c), and opportunity motivation (Research Question 2), while no differences were found in the case of attitudes (Research Question 1a) and subjective norms (Research Question 1b).

#### *Differences in recalling the target*

At the end of the questionnaire, a question inquired about who participants were thinking about when answering questions about the typical characteristics of successful entrepreneurs, with answering options: 1) a person entrepreneur, 2) a male entrepreneur, 3) a female entrepreneur, 4) do not remember, and 5) other cases. Table 6.3 illustrates percentages

across conditions and participant's gender. A percentage of 64.7% of participants assigned to the entrepreneurs in general condition correctly remembered a person entrepreneur (Hypothesis 3a not supported). However, 26.6% of male participants envisioned a male entrepreneur and 17.6% of female participants envisioned a female entrepreneur, showing a slight gender-congruent bias.

Table 6.3

*Percentage of participants who remembered their study condition*

	Successful entrepreneurs in general		Successful female entrepreneurs		Successful male entrepreneurs	
	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>
Person entrepreneur	<b>63.3</b>	<b>65.9</b>	58.5	45.1	61.0	54.6
Male entrepreneur	26.6	9.4	12.2	1.6	<b>32.4</b>	<b>26.3</b>
Female entrepreneur	2.9	17.6	<b>22.8</b>	<b>47.8</b>	0.7	9.2
Other	7.2	7.1	6.5	4.4	5.9	9.8

*Note.*  $n_{\text{successful entrepreneurs in general}} = 309$ ,  $n_{\text{successful female entrepreneurs}} = 305$ ,  $n_{\text{successful male entrepreneurs}} = 288$ .

*M* = Male participants; *F* = Female participants.

Regarding the female entrepreneurs condition, 50.5% of participants were envisioning a person entrepreneur. Only 22.8% of male participants assigned to the female entrepreneurs condition remembered a female entrepreneur, while 47.8% female participants correctly remembered it, thus supporting Hypothesis 3b. A larger proportion of male participants were thinking about an entrepreneur (58.5%) or a male entrepreneur (12.2%). A great proportion of female participants were also thinking about an entrepreneur (45.1%). Altogether, only a 37.7% of the participants remembered thinking about a female entrepreneur when asked to rate one. When rating the male entrepreneurs condition, only 32.4% of the male participants declared that they were envisioning a male entrepreneur, compared to 26.3% of the female participants. The majority of male participants (61%) and female participants (54.6%)

remembered an entrepreneur (57.6% on average). Altogether, a 29.2% of the participants rating a male entrepreneur remembered it correctly. Only 5.2% incorrectly remembered a female entrepreneur. Other response options (I do not remember, other cases or missing) were low (under 10%). Overall, these results supported the "think entrepreneur – think male" bias. Moreover, they suggest participants were not conscious of the condition manipulation.

## 2.6. Discussion

The aim of the study was threefold: (1) to examine gender-stereotypical perceptions of entrepreneurship through the assessment on task and relationship orientation of three targets (successful entrepreneurs in general, successful female entrepreneurs, and successful male entrepreneurs); (2) to test gender differences in entrepreneurial intention, its antecedents (attitudes, subjective norms, and entrepreneurial self-efficacy) and necessity vs. opportunity motivation, as well to investigate how inhibition of the stereotype threat, through activation of the successful female entrepreneurs' stereotype, influences women's entrepreneurial intention and the other variables; and (3) to analyze a possible recall bias of the target.

### *Task and relationship orientation*

Successful entrepreneurs are perceived as more task-oriented (stereotypically masculine) than relationship-oriented (stereotypically feminine), which confirms the "think entrepreneur – think male" paradigm (Hypothesis 1a). In accordance with Hypothesis 1b, male and female participants perceived successful female entrepreneurs as less task-oriented than successful male entrepreneurs or successful entrepreneurs in general. A further examination revealed this hypothesis was fully supported when considering male participants (successful entrepreneurs = successful male entrepreneurs  $\neq$  successful female entrepreneurs) whereas female participants perceived all conditions to have a similar task orientation.

Regarding relationship orientation, female participants perceived this leadership style as more characteristic of successful entrepreneurship than did male participants. Further, female

participants ascribed more relationship orientation to successful female entrepreneurs and to a lesser extent to successful entrepreneurs in general, while male participants considered successful male entrepreneurs and successful entrepreneurs in general as less relationship-oriented than successful female entrepreneurs, which gives support to Hypothesis 1c.

Taken together, these data demonstrate a more androgynous view of entrepreneurship by women, but not by men, which is in line with previous research showing that women are adopting stereotypically masculine characteristics of agency, but it is not perceived that men assume stereotypically feminine characteristics (Donnelly & Twenge, 2017; López-Zafra & García-Retamero, 2012).

#### *Entrepreneurial intention and gender*

As with previous studies (Moriano, 2005; Oliveira et al., 2015), present results also reflect gender differences are not only in entrepreneurial intention but also in its antecedents. In accordance with Hypothesis 2, female participants assigned to the successful female entrepreneurs condition, which assumes an activation of the stereotype of a female entrepreneur, presented a higher entrepreneurial intention (in comparison to females assigned to successful entrepreneurs or successful male entrepreneurs conditions). The presentation of a gender-congruent role model only had an effect on female participants, while male participants did not show any difference across conditions. Therefore, women would suffer from the stereotype threat when they consider developing their professional career through entrepreneurship and simply thinking about the characteristics and behaviors that can be attributed to a successful female entrepreneur inhibits this phenomenon and eliminates the differences between female and male participants in entrepreneurial intention.

Regarding the antecedents of entrepreneurial intention, female participants assigned to the successful female entrepreneurs condition (in comparison to successful entrepreneurs in general or successful male entrepreneurs conditions) did not significantly report more positive attitudes (RQ1a), contrary to expectations. A plausible explanation is that the measured beliefs



about attitudes (e.g., "facing new challenges," "creating new jobs") are too general or equally socially desirable to detect differences across conditions. Thus, further exploration of the role of gender in attitudes is encouraged using qualitative approaches.

Moreover, female participants assigned to the successful female entrepreneurs condition did not report more supportive social norms (RQ1b). Subjective norms also appear to be the weakest component in the TPB model (e.g., Krueger et al., 2000). In this regard, it can be pointed out that the scale used did not mention other important people (spouse/partner or children) or other external factors (the mass media). This is an important issue for several reasons. First, the life stage of a person can alter the relevance of different referent groups, and the three groups considered in this study (my closest family members, friends, and colleagues) could not sufficiently reflect all possibilities and personal situations of our sample. Marriage and parenthood, for example, can increase role conflict, but also can provide additional recourses and have an influence on entrepreneurial intention (Davis & Shaver, 2012). Second, the image of the entrepreneur in the media is shaped by cultural norms and expectations (Anderson & Warren, 2011).

As expected, female participants assigned to the successful female entrepreneurs condition reported higher entrepreneurial self-efficacy (RQ1c) than those female participants assigned to the successful male entrepreneurs condition. Results suggest that the presentation of a female entrepreneur can serve as a positive role model that increases the self-perception of entrepreneurial self-efficacy in women. Male participants appear not to be influenced by the entrepreneurs' gender.

With respect to necessity vs. opportunity motivation (RQ2), female participants assigned to the successful female entrepreneurs condition reported more opportunity motivation than those assigned to the successful male entrepreneurs condition. However, one of the limitations of the measure on motivation is that it consists of a single item. Thus, future qualitative studies are encouraged to seek a deeper insight into how perceptions of different types of

entrepreneurs can affect entrepreneurial motivation. Although, as discussed above, most entrepreneurs are triggered by opportunity (rather than necessity), there exist cultural differences across nationalities and regions. Spain, in comparison with other European countries, is not a country where people necessarily report seeing good opportunities in starting a firm (Singer et al., 2018).

Finally, results replicate previous studies (van der Zwan et al., 2016; Wilson et al., 2009; Zampetakis et al., 2017) which show that women, in comparison to men, present lower entrepreneurial intention, less positive attitudes toward entrepreneurship, lower self-efficacy, and a higher likelihood to be motivated by necessity rather than opportunity.

#### *Differences in recalling the target*

Last, at the end of the questionnaire, a question explored who participants were thinking about when answering questions about the typical characteristics of successful entrepreneurs. Most participants assigned to the successful entrepreneurs in general condition correctly remembered a person entrepreneur, although a slight gender-congruent bias was found (26.6% of male participants envisioned a male entrepreneur and 17.6% of female participants envisioned a female entrepreneur). This result does not support Hypothesis 3a and to some extent contrasts with the findings of Sczesny et al. (2004), regarding leaders in general, and de Pillis and Meilich (2006), about a hypothetical successful entrepreneur / successful male entrepreneur / successful female entrepreneur. However, the former deals with leadership and in the latter, in the entrepreneurship field, the sample was relatively small (140 participants), comprised of undergraduate students; further, only two options were proposed (male or female entrepreneur) and the option to select a person was not displayed. While most female participants in the successful female entrepreneurs condition in the present study correctly remembered their target group, male participants tended to envision a person entrepreneur, giving support to Hypothesis 3b. This finding suggests a female entrepreneur seems less

accessible (or more counter-stereotypical) for male participants than to female participants, being the "think entrepreneur – think male" more noticeable in male participants.

### *Conclusions*

In sum, the findings suggest the "think entrepreneur – think male" paradigm offers an adequate framework for analyzing the differences between women and men in entrepreneurship roles. It thus can be a useful tool for working with gender stereotypes in entrepreneurship education programs. It is encouraged to incorporate the extensive research on leadership into this context is encouraged. Similar to the fact that exposure to women in leadership positions can undermine women's automatic gender stereotypic beliefs (Dasgupta & Asgari, 2004), the presentation of feminine role models in entrepreneurship can encourage more women to pursue a career as an entrepreneur. Indeed, role models indirectly influence entrepreneurial intention through its antecedents (e.g., Karimi et al., 2013).

#### **2.6.1. Limitations and future research**

In the same vein that the "think manager – think male" stereotype is a global phenomenon, the "think entrepreneur – think male" can be posited to be also a global phenomenon. The present research, of course, was limited to Spanish participants. Therefore, future studies are encouraged to examine the influence of gender stereotypes in other countries particularly in Europe, as the scarce research on the "think entrepreneur – think male" stereotype (e.g., de Pillis & Meilich, 2006; Gupta et al., 2008) has thus far mostly been conducted in the United States. As characteristics of entrepreneurs present similarities and differences across nationalities (e.g., Gupta & Fernández, 2009), future studies should confirm that the same characteristics are considered task-oriented or relationship-oriented in different countries. It could be expected that in more gender-egalitarian cultures the "think entrepreneur – think male" stereotype would be weaker.

Another line of research concerns the perception of success in traditionally considered masculine or feminine sectors and a given entrepreneur's gender. Differences in the ascription

of task and relationship orientation between female and male entrepreneurs could be anticipated if they run a traditionally feminine business (e.g., a hair salon) or a traditionally masculine business (e.g., an engineering company) such that the feminine business would be related to higher relationship orientation and the masculine business to higher task orientation, especially when the gender of the entrepreneur is congruent with the type of business. Indeed, Heilman and Chen (2003) propose that customers could perceive a lack of fit between business owner and industry characteristics and then choose not to turn to women for their products and services, especially in traditionally masculine sectors such as construction.

Finally, this study focused on participants aged 18–44 years old. Further exploration of whether or not adolescents share the same stereotypical views as the adult population is encouraged. Changes across time, particularly in females' views, indicate the “think manager – think male” framework is a dynamic phenomenon (Bosak & Sczesny, 2011). Similarly, the “think entrepreneur – think male” perspective is expected to be reduced over time, especially for women. Future studies should also consider another group that is attracting increasing interest: the third age, that is, enterprising activity in persons over 50 years old (e.g., Kautonen et al., 2011).

### **2.6.2. Implications of this study**

Findings may have practical implications for the design of entrepreneurship courses as well as other educational and political initiatives aimed at promoting female entrepreneurship and reducing negative or biased stereotypes. Gender stereotypes and the consequent expectations about what women are like and how women should behave can lead to both devaluation of their performance and credit denial for their successes (descriptive component of gender stereotype), and penalization for their proven competence (prescriptive component of gender stereotype) (Heilman, 2001). Gender stereotypes are considered to be at the foundation of gender bias in work settings and to cause discriminatory treatment of women in organizations (Heilman, 2001). Therefore, the entrepreneurial sex typing about males and

females should be taken into account when selecting candidates for entrepreneurship education. Gender stereotypes are of special concern regarding admission for entrepreneurship education or access to funding. Thus, educators and other agents should be conscious of their potential bias in order to assess candidates in equal conditions. As females may not fit the stereotype of entrepreneur (in the view of their evaluators), less positive assessments than their male partners could arise. Stereotypes have proved to bias the evaluation of new business opportunities when different scenarios are manipulated (Gupta, Turban, & Pareek, 2013), so that opportunity evaluation is influenced by an interaction between what stereotypical information is activated (masculine–feminine), how it is activated (subtle–blatant), and who it is presented to (men–women).

The effects of gender on entrepreneurial intention can be neutralized, at least in the short term, by presenting entrepreneurship as gender neutral, that is, when entrepreneurship is explicitly described as possessing characteristics common to both men and women (Gupta et al., 2008). Nevertheless, research papers and teaching cases rarely present positive role models of female business owners (Ahl, Berglund, Pettersson, & Tillmar, 2016; Ahl & Marlow, 2012); entrepreneurship education marginalizes women and academic texts are illustrated with pictures of men, while mention gender and use illustrations of women when they are targeted to women. Importantly, gendered narratives reproduced within teaching cases are transmitted to the next generation of scholars and students. In my opinion, it is doubtful that this lack of feminine examples and role models in general entrepreneurship education could lead to the intention to become an entrepreneur. Therefore, I strongly encourage including stereotypically feminine characteristics and female role models in entrepreneurship education (e.g., books and case studies) and programs to present entrepreneurship as a feasible career option for both women and men. This may, in turn, foster women's entrepreneurial intention.

Additionally, a wider use of gender-fair language could contribute to reducing stereotyping. Interestingly, both male and female participants in the successful male entrepreneurs condition

remembered a person entrepreneur. This result could be related to the language of the questionnaire. Spanish is a grammatical gender language and the word “emprededor” (entrepreneur) refers only to a male entrepreneur. The masculine generic plural “emprededores” is used to refer to male entrepreneurs but also to both female and male entrepreneurs. On the other hand, the feminine form “emprededora o emprendedoras” (female entrepreneur or female entrepreneurs) does not function generically but refer only to a single woman or a group of women.

To sum up, the prevalence of masculine role models in the media and as cases in entrepreneurship education can limit to some extent the perception of entrepreneurs to only a masculine perspective (e.g., Ahl & Marlow, 2012). Thus, it is encourageable to: (a) present entrepreneurship as gender-neutral, that is, explicitly described as possessing characteristics common to both men and women (Gupta et al., 2008), and (b) present more female entrepreneurs as role models. The presentation of more diverse entrepreneur models, attending also to age and activities, could be useful in promoting entrepreneurship for both women and men.

### **3. SELF-PERCEIVED TASK AND RELATIONSHIP ORIENTATION AND ENTREPRENEURIAL INTENTION**

To complement Study 4, in Study 5 an independent sample of 1,147 non-entrepreneurs self-categorized themselves in the same 13 characteristics on task and relationship orientation. This study is aimed at exploring how self-perceived task and relationship orientation influence entrepreneurial intention and their antecedents (attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy). As indicated previously, task orientation can be considered stereotypically masculine, while relationship orientation would be stereotypically feminine.

All societies allocate roles on the basis of sex, an allocation that is anticipated in the socialization of children (Bem, 1981). However, individual differences exist and not everyone becomes equally sex typed. Gender identity, masculinity and femininity, represents the extent to which the possession of traits associated with traditional gender stereotypes is assumed by an individual. Each of those dimensions gathers beliefs about the traits associated with males and females, respectively. Males are expected to be higher in masculinity and females in femininity through self-categorization (identification with traits attributed to members of their same sex). There exists a tendency to pursue tasks associated with own gender and avoiding gender-incongruent tasks. Male stereotyping is related to instrumental-agent traits (e.g., competent, independent, assertive). On the other hand, female stereotyping is related to expressive-communal traits (e.g., warmth, nurturance, unselfishness).

According to Gupta et al. (2009), if entrepreneurship is associated with masculine characteristics, then people who strongly identify with masculine characteristics are more likely to have higher entrepreneurial intention compared with people who see themselves as having less masculine characteristics. They also argue that since entrepreneurship is generally not associated with feminine characteristics, it is not expected that identification with feminine characteristics influence entrepreneurial intention. However, androgynous characteristics, that is, high scores for both masculinity and femininity, have also been identified with the figure of the entrepreneur (Hancock et al., 2014; Pérez-Quintana, Hormiga, Martori, & Madariaga, 2017). Combining both lines of research and considering a sample of entrepreneurs in Spain who rated themselves high in both task and relationship orientation (see Appendix E), I hypothesize that both dimensions will be positively related to entrepreneurial intention:

*Hypothesis 1a:* Self-perceived task orientation will be positively related to entrepreneurial intention.

*Hypothesis 2:* Self-perceived relationship orientation will be positively related to entrepreneurial intention.

According to the theory of planned behavior and following Studies 1, 2, and 3 (Chapters 3, 4, and 5), these influences are expected to be mediated by attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy. Thus, the following hypotheses are formulated:

*Hypothesis 3:* Positive attitudes toward entrepreneurship will mediate the influence on entrepreneurial intention of: (a) self-perceived task orientation, and (b) self-perceived relationship.

*Hypothesis 4:* Subjective norms will mediate the influence on entrepreneurial intention of: (a) self-perceived task orientation, and (b) self-perceived relationship.

*Hypothesis 5:* Entrepreneurial self-efficacy will mediate the influence on entrepreneurial intention of: (a) self-perceived task orientation, and (b) self-perceived relationship.

### **3.1. Method**

#### **3.1.1. Participants and procedure**

A total of 1,147 participants took part in this study (54.5% female; 45.5% male). The average age was 35.6 years ( $SD = 10.9$ , 18 – 64 years old). This sample consisted of 68.2% employees, 9% unemployed, and 22.8% students. None of the participants indicated they were an entrepreneur (solo or with partners).

Over half of the participants (55.6%) indicated they had at least one relative who was an entrepreneur, specifically: 17.3% father, 6.5% mother, and 40.6% other relatives. Additionally, 46.8% knew between one and three entrepreneurs in their environment (family, neighbours, friends, acquaintances, etc.), 22.9% indicated knowing between three and five entrepreneurs, 12.4% between five and ten entrepreneurs, and only 7.7% knew more than ten entrepreneurs, while 9.9% of participants did not know anybody who has become entrepreneur. Up to 39.1% of participants claimed having attended a course about how to create a firm or what it means to be an entrepreneur, 28.3% reported having experience in developing a business plan, and



13.4% had experience in creating a firm. Work experience ranged between 0 and 45 years ( $M = 11.9$ ,  $SD = 10.5$ ; 199 participants, 17.3%, did not have work experience or experience was less than one year).

For the purposes of this study, a non-probabilistic convenience sampling procedure was used to recruit participants. The participants completed a self-report online questionnaire. Completing the questionnaire took about 14 minutes ( $SD = 8.1$ ).

### 3.1.2. Measures

All variables were measured with pre-existing scales, which have been described in Study 4. The Entrepreneurial Intention Questionnaire (EIQ; Moriano, 2005; Moriano et al., 2012) was used to gauge entrepreneurial intention as well as the three components of the TPB (attitudes, subjective norms, and self-efficacy). The instruction to the "Entrepreneurial Task and Relationship" (ETR) 13-item scale was modified to measure self-perceived task and relationship orientation (instead of rating the characteristics and behaviors of entrepreneurs, see Study 4), "In your opinion, how typical of yourself are the following characteristics and behaviors?" Both Cronbach's alpha and composite reliabilities were satisfactory, ranging between .75 and .92. Table 6.4. illustrates mean scores of subscales and reliabilities.

Finally, socio-demographic background questions covered gender, age, work experience, and entrepreneurial family models ("Does anyone in your family have their own company?" with response options of "my mother," "my father," "other relatives," or "none"). A group of questions about attendance of entrepreneurship courses, experience in preparing a business plan, experience in starting a firm, and the number of people participants knew who had become entrepreneurs (family, neighbors, friends, acquaintances, etc.) were collected as well. These variables were operationalized as dichotomous variables: gender (0 = *female*, 1 = *male*); course attendance, experience in preparing a business plan, and/or experience in starting a firm, and family role (for these cases, 0 = *no*, 1 = *yes*). Knowing entrepreneurs presents the following range of answers: none (1), 1–3 people (2), 3–5 people (3), 5–10 people (4), and

more than 10 people (5). Age and work experience were included in the models as continuous variables.

### **3.1.3. Data analysis**

Data were analyzed using SPSS 22 (descriptive statistics and correlations) and SmartPLS v3.0 software (Ringle et al., 2015). The constructs of attitudes, subjective norms, self-efficacy, task, and relationship orientation were measured by means of formative indicator scales. In contrast, a reflective indicator scale was used for assessing entrepreneurial intention. The confirmatory tetrad analysis (CTA-PLS) empirically supported this measurement model specification, as non-redundant tetrads were found significantly different from zero in the constructs of attitudes, subjective norms, self-efficacy, and task orientation, while tetrads were no significant in the case of entrepreneurial intention and relationship orientation.<sup>39</sup> However, in the same way that task orientation is a formative construct, relationship orientation theoretically is a formative variable instead of reflective, as appointed by the CTA. Thus, to be consistent with conceptual considerations, relationship orientation is considered a formative construct despite empirical test results.

Bootstrapping procedure was used with 5,000 samples and casewise deletion was applied for missing data. All the relationships between the reflective indicators and their constructs were significant ( $p < .001$ ), and the outer loadings were above the recommended value of .60 (Hair et al., 2017). Average Variance Extracted (AVE = .73) and composite reliability ( $\rho_c = .92$ ) values achieved the critical thresholds, .50 and .60, respectively (Bagozzi & Yi, 1988), indicating good convergent validity. Regarding formative indicators, weights of items “Obtaining high incomes” (attitudes), “Complete the necessary and administrative and bureaucratic work to create your own business” (entrepreneurial self-efficacy), and “I am self-confident” (task orientation) were not significant and their loadings did not achieve the minimum cut-off value of .50. Although it

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<sup>39</sup> Only constructs with at least four items were entered in the CTA-PLS.

would have been advisable to delete these three items from the model, they were kept to maintain consistency with the scales of the other studies. The maximum values of Variance Inflation Factors (VIF) stayed under the recommended value of 5, indicating no multicollinearity issues in this study.

### 3.2. Results

Table 6.4 shows mean scores, reliability scores, and correlations between the variables. Participants scored relatively low on subjective norms ( $M = 2.61$ ,  $SD = 1.06$ ) and entrepreneurial intention ( $M = 2.77$ ,  $SD = 1.15$ ). With respect to the components of the TPB, the highest mean score corresponded to entrepreneurial self-efficacy ( $M = 3.43$ ,  $SD = 0.68$ ). Self-perceived task orientation correlated positively with the intention to become an entrepreneur ( $r = .38$ ,  $p < .001$ ), as well as with the variables of the TPB model (attitudes, subjective norms, and self-efficacy), especially with entrepreneurial self-efficacy ( $r = .60$ ,  $p < .001$ ).

Similarly, self-perceived relationship orientation correlated with entrepreneurial intention ( $r = .21$ ,  $p < .001$ ) and the variables of the TPB model. Self-perceived task and relationship orientation also were strongly correlated ( $r = .45$ ,  $p < .001$ ). With respect to control variables, except for gender and work experience, all of the variables (age, attendance to entrepreneurship course, experience in creating a business plan or company, having a relative who is an entrepreneur, and knowing entrepreneurs) related significantly to the intention to become an entrepreneur.

To test the hypotheses, a step-by-step analysis of the structural model was followed. First, the links between self-perceived task and relationship orientation and entrepreneurial intention are presented (hypotheses  $H_1$  and  $H_2$ , Figure 6.8). Second, the three components of the TPB (attitudes, subjective norms, and entrepreneurial self-efficacy) were introduced as mediators and the full model was assessed ( $H_3$ ,  $H_4$ , and  $H_5$ , Figure 6.9).

Table 6.4

Descriptive statistics and correlations of study and control variables

	<i>M</i>	<i>SD</i>	$\rho_c$	$\alpha$	1	2	3	4	5	6	7	8	9	10	11	12	13
Criterion variable																	
1. Entrepreneurial intention	2.77	1.15	.92	.87	-												
TPB mediator variables																	
2. Attitudes	2.85	0.88	.86	.80	.49***	-											
3. Subjective norms	2.61	1.06	.90	.82	.30***	.40***	-										
4. Entrepreneur. self-efficacy	3.43	0.68	.90	.87	.47***	.52***	.36***	-									
Predictor variables																	
5. Self-perceived task orientation	3.67	0.59	.86	.79	.38***	.46***	.27***	.60***	-								
6. Self-perceived relationship orientation	4.15	0.55	.84	.75	.21***	.36***	.26***	.32***	.45***	-							
Control variables																	
7. Gender (0 = Female)	-	-	-	-	.04	-.04	-.07*	.02	.03	-.19***	-						
8. Age	35.6	10.9	-	-	-.08**	-.14***	-.18***	-.03	-.04	-.06	.09**	-					
9. Work experience	11.9	10.5	-	-	-.06	-.10***	-.14***	.03	.00	-.06	.17***	.88***	-				
10. Entrepreneurship course	-	-	-	-	.27***	.20***	.14***	.22***	.20***	.14***	-.01	-.08**	-.08**	-			
11. Business plan	-	-	-	-	.28***	.16***	.04	.24***	.21***	.07*	.01	.04	.04	.37***	-		
12. Former entrepreneur	-	-	-	-	.23***	.08*	-.04	.16***	.18***	.01	.05	.21***	.23***	.22***	.42***	-	
13. Family entrepreneur	-	-	-	-	.14***	.10***	.11***	.12***	.07*	.06*	.01	-.06*	-.05	.10**	.04	.07*	-
14. Know entrepreneurs	-	-	-	-	.18***	.13***	.07*	.16***	.12***	.08**	.02	.16***	.16***	.20***	.18***	.20***	.39***

Note. *N* = 1,147. Scales ranged from 1 to 5.  $\rho_c$  = composite reliability;  $\alpha$  = Cronbach's alpha.

\**p* < .05. \*\**p* < .01. \*\*\**p* < .001.

Figure 6.8 depicts the direct influence of self-perceived task and relationship orientation on entrepreneurial intention. The results of this first model showed that, although self-perceived task orientation had a significant influence on the intention to become an entrepreneur (thus supporting H<sub>1</sub>), the influence of self-perceived relationship orientation did not achieve statistical significance (H<sub>2</sub> not supported). This direct model explained 26.0% of the variance of entrepreneurial intention. Participants' gender (0 = female, 1 = male) was positively related to entrepreneurial intention (male participants exhibited a higher intention) and negatively associated to self-perceived relationship orientation (female participants reported a higher relationship orientation). On the contrary, gender was not related to self-perceived task orientation.

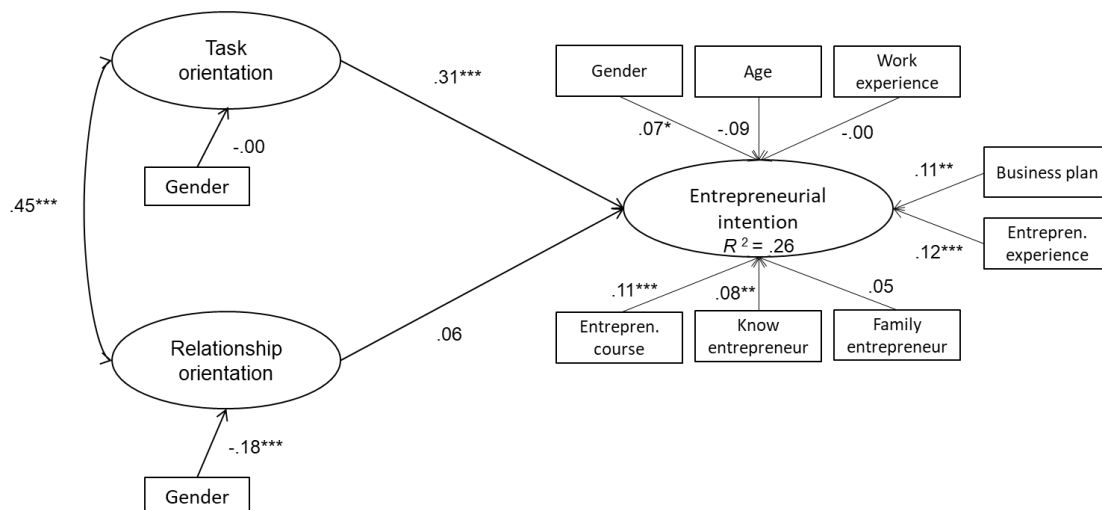


Figure 6.8. Structural model: Self-perceived task and relationship orientation and entrepreneurial intention (direct links).

Note. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

In the second model (Figure 6.9), the three antecedents of the TPB were introduced as mediators: attitudes, subjective norms, and entrepreneurial self-efficacy. All the coefficients of latent variables were significant except for the link self-perceived relationship orientation to entrepreneurial self-efficacy ( $\beta = .06$ ,  $p = .056$ ). However, self-perceived relationship orientation presented positive and significant paths to attitudes toward entrepreneurship

( $\beta = .18, p < .001$ ) and subjective norms ( $\beta = .14, p .001$ ). Self-perceived task orientation also presented positive and significant paths to the three mediators: entrepreneurial self-efficacy ( $\beta = .59, p < .001$ ), attitudes ( $\beta = .42, p < .001$ ), and subjective norms ( $\beta = .22, p < .001$ ). The coefficient of determination of the three mediators, attitudes ( $R^2 = .27$ ), subjective norms ( $R^2 = .10$ ), and entrepreneurial self-efficacy ( $R^2 = .39$ ) did achieve the minimum value of .10 (Falk & Miller, 1992), underpinning the predictive validity of this model. These three antecedents mediated the relationship between self-perceived task orientation and entrepreneurial intention, while attitudes and subjective norms mediated the relationship between relationship orientation and entrepreneurial intention. The direct path self-perceived task orientation –entrepreneurial intention, significant in the first model, did not achieve significance in this overall model. Regarding control variables, only having experience in creating a business and writing a business plan, participants' gender, and attending an entrepreneurship course were significant. This global model explained 37.5% of the variance of entrepreneurial intention.

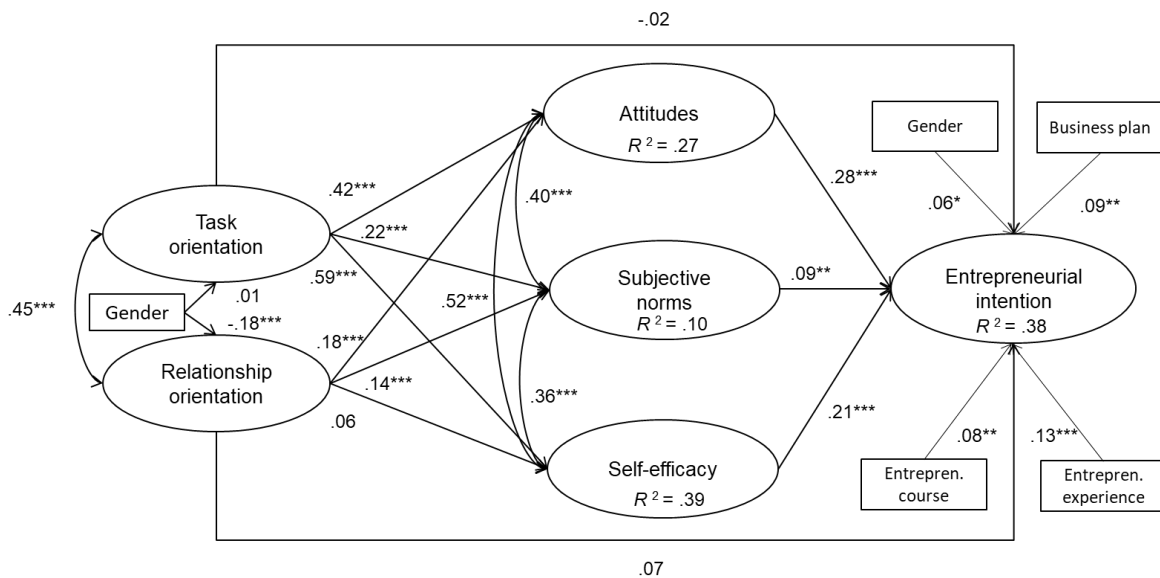


Figure 6.9. Structural model: Self-perceived task and relationship orientation and entrepreneurial intention (mediated links TPB).

Note. Non-significant paths regarding control variables have been omitted.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

### 3.3. Discussion

This study was conducted to investigate how self-perceived task and relationship orientation influence entrepreneurial intention and their antecedents (attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy). First, self-perceived task orientation had a significant influence on the intention to become an entrepreneur ( $H_1$  supported), as well as on the three antecedents, particularly on entrepreneurial self-efficacy ( $H_{3a}$ ,  $H_{4a}$ , and  $H_{5a}$  supported). Perceiving that a person presents certain characteristics and behaviors (e.g., negotiation skills or ability to cope with stress) relates to higher entrepreneurial intention, more positive attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy. Second, the link self-perceived relationship orientation – intention did not achieve statistical significance ( $H_2$  not supported). These results are in line with previous findings claiming that identification with masculine characteristics (i.e., task orientation) is related to higher entrepreneurial intention, while identification with feminine characteristics (i.e., relationship orientation) is not related (Gupta et al., 2009). However, self-perceived relationship orientation positively related to attitudes ( $H_{3b}$ ) and subjective norms ( $H_{4b}$ ). Thus, relationship orientation has an indirect impact on intention through these components. In contrast, perceiving a high relationship orientation (e.g., sensitive to the needs of their clients) does not appear to be related to entrepreneurial self-efficacy ( $H_{5b}$  not supported). Overall, these results highlight the complex link between self-perceptions and entrepreneurial intention. Further studies are encouraged to shed more light on this issue.

In a similar vein to a previous study with a sample of entrepreneurs (Appendix E), participants in the present study self-perceived themselves more relationship-oriented than task-oriented. Thus, both entrepreneurs and non-entrepreneurs present the same pattern. Nevertheless, Study 4 reveals that participants perceive entrepreneurs to be highly task-oriented and less relationship-oriented. There seems to be a gap between what individuals perceive about entrepreneurs and how entrepreneurs self-perceived themselves. This interesting finding

opens the way to exploring if a more informed view of entrepreneurs (closer to reality) is related to higher entrepreneurial intention. Role models have shown to be important in the field of entrepreneurship. However, if role models presented in the media and entrepreneurship education programs are perceived to be too much different from potential entrepreneurs, these models could discourage, rather than encourage, entrepreneurship.

Finally, these findings are in line with previous research showing that female participants self-report a lower entrepreneurial intention than male participants (e.g., Zampetakis et al., 2017). While being female related to higher self-perceived relationship orientation, there were no differences between female and male participants in task orientation, attitudes, subjective norms, or entrepreneurial self-efficacy. Biological sex, as frequently measured in most studies, seems not to be as relevant as gender identity (Gupta et al., 2009) or self-perceived task and relationship orientation (as shown in the present findings). Indeed, other studies (e.g., Gupta et al., 2009) do not find differences in entrepreneurial intention between women and men.

As with all empirical studies, it is important to consider potential limitations of present research. First, the sample is limited to a single country, Spain. Future studies should analyze cross-cultural differences and similarities. Second, cross-sectional studies do not enable inferences of causation. More longitudinal studies are welcome to shed light in the influence of task and relationship orientation, not only on entrepreneurial intention, but also on entrepreneurial behavior and business outcomes. Third, using different gender identity measures could help better understand the relationship among biological sex, gender, and entrepreneurship. Last, this study focused on characteristics attributed to entrepreneurs. However, gendered components comprise traits, role behaviors, occupations, and physical characteristics (Haines et al., 2016). Future studies could deepen these aspects within the field of entrepreneurship.

### **3.3.1. Implications**

It is important to note that not all women-founded organizations will have feminine characteristics, while personal/feminine attributes are also found in organizations created by



men (Bird & Brush, 2002). New ventures will comprise a combination of both masculine/traditional and feminine/personal characteristics in a balance based on different variables. However, more masculinity models are showed in the media and as cases in entrepreneurship education, biasing to some extent the perception of entrepreneurs from only a masculine perspective. A more balanced exhibition of both type of models could contribute to foster feminine entrepreneurship. Thus, the media and entrepreneurship education programs should present both task (masculine) and relationship (feminine) aspects of business. Presenting entrepreneurship as gender neutral, that is, when entrepreneurs are explicitly described as possessing characteristics common to both men and women (Gupta et al., 2008), can increase women's entrepreneurial intention.



# Capítulo 7. Conclusiones

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## Chapter 7. Conclusions



*Again, you can't connect the dots looking forward; you can only connect them looking backward. So you have to trust that the dots will somehow connect in your future. You have to trust in something — your gut, destiny, life, karma, whatever.*

Steve Jobs, Apple's founder<sup>40</sup>

## **1. GENERAL DISCUSSION**

This Chapter is aimed at discussing the main findings of the studies accomplished in this Thesis and their contribution to research on entrepreneurship, particularly on entrepreneurial intention. Next, limitations of this Thesis are identified. Limitations also offer new paths for future research. Finally, implications are considered.

To begin with, this Thesis presents the relevance of entrepreneurship and a lower entrepreneurial intention in Spain in comparison with other European countries. In addition, a gender gap in entrepreneurship is identified both internationally and in Spain. This Thesis was designed to analyze through five empirical studies to what extent some variables (university environment, entrepreneurial environment, and perceived risk – Study 1; self-perceived creativity – Study 2; the mass media – Study 3; and, gender stereotypes – Studies 4 and 5) influence a higher entrepreneurial intention in order to improve entrepreneurship education programs and interventions. Although other factors influencing entrepreneurship remain to be studied, this Thesis implies a step forward toward a better understanding of the formation of entrepreneurial intention in Spain.

First, Study 1, drawing on the data collected in Spain (9,753 participants) within the international research project GUESSS (Global University Entrepreneurial Spirit Students'

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<sup>40</sup> Stanford commencement address delivered by Steve Jobs on June 12, 2005: <https://news.stanford.edu/2005/06/14/jobs-061505/>

Survey), analyzed the influence of the university environment, the entrepreneurial environment, and the perceived risk of becoming an entrepreneur in students' entrepreneurial intention, both directly and mediated through two of the three components of the theory of planned behavior (attitudes toward entrepreneurship and entrepreneurial self-efficacy). Contrary to expectations, subjective norms did not significantly mediate these relationships. Previous studies have obtained similar results and point to subjective norms as the component within the theory of planned behavior with less influence on entrepreneurial intention (Autio et al., 2001; Krueger et al., 2000; Lortie & Castogiovanni, 2015). The results revealed that the university environment was the antecedent with the greatest effect on entrepreneurial intention. Both university and entrepreneurial environment positively related to entrepreneurial intention and its three antecedents, while perceived risk negatively related to these variables. These results are in line with the research on entrepreneurship education for university students and the influence of the university environment (Souitaris et al., 2007; Zhang et al., 2014), family and other role models (BarNir et al., 2011), and risk perception (Barbosa et al., 2007; Segal et al., 2005; Zhao et al., 2010).

Study 2 gave support to the commonly assumed thought of creativity as a relevant characteristic of entrepreneurship (Athayde, 2009; Dimov, 2007; Gielnik et al., 2014; Radu & Redien-Collot, 2008; Rauch & Frese, 2007; Ward, 2004; Zhao et al., 2010). This study aimed to deepen the understanding of the relationship between self-perceived creativity and entrepreneurial intention. In a cross-sectional survey study among university students, self-perceived creativity positively related to entrepreneurial intention both directly and indirectly through the components posited in the theory of planned behavior (except for subjective norms). Further, the results showed that family and university support for creativity, as well as taking a creativity course, were significant predictors of self-perceived creativity. These findings attest to the generalizability of the findings of previous studies conducted in other European countries (Zampetakis et al., 2011; Zampetakis & Moustakis, 2006). Additionally, they concur well with the prior evidence in work environments that linked creativity and

emotional, informational, and organizational support for creativity, as well as family and friends' support (Madjar, 2008; Zhou & George, 2001). These results also indicate that family support for creativity is one of the key elements through which families can stimulate entrepreneurship (Zampetakis et al., 2011).

Overall, these two studies suggest that distal antecedents influence entrepreneurial intention both directly and indirectly through attitudes toward entrepreneurship and entrepreneurial self-efficacy, thus challenging the sufficiency hypothesis of the theory of planned behavior. Although these additions slightly improve the explained variance of intention beyond the original model, an extended model including other variables together with those posited in the theory of planned behavior could better predict entrepreneurial intention and be of use in entrepreneurship education. However, subjective norms appear to be the weakest component in the model, as they did not result a significant mediator in these studies. This result is in line with previous research that identifies subjective norms as having the weakest influence on intention (see Chapter 2, Section 3.3.2. Subjective norms).

As opposed to the majority of previous studies mostly focused on business or economics students (Liñán & Chen, 2009; Liñán et al., 2011), and taking into account the findings of Zhang et al. (2014) about the higher entrepreneurial intention among students of technological universities than students from other universities, samples in the studies of this Thesis are not restricted to a specific major (e.g., Business, Law, Psychology, Education, Medicine, Engineering, and Architecture). Therefore, the present findings lend support to the generalizability of these conclusions to students in general, not specifically interested in Business or Economics. What is more, students in other majors may benefit more from creativity and entrepreneurship education. Both university environment and university support for creativity positively related to students' entrepreneurial intention. Importantly, education supporting entrepreneurship may also stimulate intrapreneurship. In this regard, universities have an important role in promoting entrepreneurial mindsets among their students. However,

stimulating creativity appears to receive little attention in our university educational systems and students sometimes perceive that what universities offer is not necessarily what students demand. Therefore, it is recommended that entrepreneurship be promoted through initiatives and educational programs in the university environment, including creativity contents and practice, and periodically analyzing best practices and students' perceptions and demands.

Additionally, the results of Studies 1 and 2 point to the relevant role of family in boosting entrepreneurship. Having relatives who are entrepreneurs (one or both parents, other relatives such as uncles or aunts), as well as close friends, was related in Study 1 not only to higher entrepreneurial intention, but also to more positive attitudes toward entrepreneurship, higher subjective norms, and greater entrepreneurial self-efficacy. In Study 2, family support for creativity was positively associated with entrepreneurial intention and self-perceived creativity, and also positively correlated with attitudes, subjective norms, and self-efficacy. Interestingly, family support for creativity showed an even higher correlation with entrepreneurial intention than being from an entrepreneurial family. Therefore, family role models are relevant when students consider their career options (as prior research has shown) and family support for creativity is a key element through which families can stimulate entrepreneurship.

Study 3 focused on the effect of the mass media (i.e., television, radio, newspapers, magazines, films, and the internet) on entrepreneurial intention. Particularly, this study explored the influence on entrepreneurial intention of social legitimacy attached to entertainment (media that stage entrepreneurship for entertainment purposes) and the perceived skills learned by watching entertainment, both directly and indirectly through its proximal antecedents (i.e., attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy). The results revealed that perceived skills positively related to entrepreneurial intention, while perceived social legitimacy did not show a significant impact. In a similar vein as Swail et al. (2014) and Eisner (2006), participants perceived the media to be useful for learning entrepreneurial skills, especially those participants who have thought about becoming



an entrepreneur or being self-employed at least occasionally. The higher the perception that they acquired entrepreneurial skills, the higher the scores in self-reported attitudes, subjective norms, and entrepreneurial self-efficacy. Perceived social legitimacy, however, only positively related to attitudes and entrepreneurial self-efficacy. Additional analyses suggested that positive attitudes and entrepreneurial self-efficacy mediated the perceived social legitimacy – entrepreneurial intention and skills – entrepreneurial intention relationships, whereas subjective norms were not significant. Therefore, if the media have a positive impact on entrepreneurial intention, more attention should be paid to what is exhibited and how. As the mass media convey cultural stereotypes (Hang & van Weezel, 2007), the media can perpetuate the perception that entrepreneurs equal “young men,” discouraging other potential entrepreneurs. Further, entre-tainment formats could be successfully included in entrepreneurship education, due to their attractive presentation, greater appeal to certain students than textbooks or traditional lectures, and their contribution to people acquiring useful skills. Future studies should examine the appropriateness of this suggestion.

Finally, Studies 4 and 5 explored gender stereotypes within entrepreneurship, which traditionally has been a male occupation and still attracts fewer women than men. After the adaptation and validation of the “Entrepreneurial Task and Relationship” (ETR) 13-item scale to assess gender stereotypes in entrepreneurship (Appendix E), this scale was used in Study 4 to investigate differences in the assessment of task and relationship orientation of three targets (i.e., successful entrepreneurs in general, successful female entrepreneurs, and successful male entrepreneurs). Successful entrepreneurs were perceived as more task-oriented (stereotypically masculine) than relationship-oriented (stereotypically feminine), thus confirming the “think entrepreneur – think male” paradigm (de Pillis & Meilich, 2006; Gupta & Bhawe, 2007; Gupta, Goktan, et al., 2014; Gupta et al., 2008). Specifically, this research explored whether activation of a successful female entrepreneur (through the random assignment of participants to the successful female entrepreneurs condition) positively affected participants’ self-reported entrepreneurial intention, their attitudes toward entrepreneurship,

subjective norms, and entrepreneurial self-efficacy, as well as necessity vs. opportunity motivation. The results revealed that female participants assigned to the successful female entrepreneurs condition self-reported higher entrepreneurial intention, entrepreneurial self-efficacy, and opportunity motivation, while no differences were found in the case of attitudes and subjective norms.

Further, when asked at the end of the questionnaire, most participants assigned to the successful entrepreneurs in general condition correctly remembered a person entrepreneur, although a slight gender-congruent bias was found; while most female participants in the successful female entrepreneurs condition correctly remembered their target group, male participants tended to envision a person entrepreneur. In line with the results of de Pillis and Meilich (2006), this finding suggested a female entrepreneur seems less accessible (or more counter-stereotypical) for male participants than to female participants, that is, the “think entrepreneur – think male” is more noticeable in male participants. Overall, these findings suggested the “think entrepreneur – think male” paradigm offers an adequate framework for analyzing the differences between women and men in entrepreneurship roles. It thus can be a useful tool for working with gender stereotypes in entrepreneurship education programs.

To complement Study 4 (i.e., assessment of three target groups in characteristics and behaviors relevant to entrepreneurship which were categorized in task and relationship orientation), in Study 5 an independent sample of non-entrepreneurs self-categorized themselves in the same 13 characteristics and behaviors. In so doing, this study explored how self-perceived task and relationship orientation influenced entrepreneurial intention and its antecedents. First, self-perceived task orientation had a significant influence on the intention to become an entrepreneur, as well as on the three antecedents, particularly on entrepreneurial self-efficacy. Perceiving that a person presents certain characteristics and behaviors (e.g., negotiation skills or ability to cope with stress) related to higher entrepreneurial intention, more positive attitudes toward entrepreneurship, subjective norms, and

entrepreneurial self-efficacy. Second, the link self-perceived relationship orientation – intention did not achieve statistical significance. However, self-perceived relationship orientation positively related to attitudes and subjective norms. Thus, relationship orientation had an indirect impact on intention through these components. While being female related to higher self-perceived relationship orientation, there were no differences between female and male participants in task orientation, attitudes, subjective norms, or entrepreneurial self-efficacy. Biological sex, as frequently measured in most studies, seems not to be as relevant as gender identity (Gupta et al., 2009) or self-perceived task and relationship orientation. Overall, these results highlighted the complex link between self-perceptions, biological sex, and entrepreneurial intention.

In sum, different variables that are relevant to entrepreneurship are analyzed in the context of Spain. Thus, this Thesis contributes to generalizing the results found in other countries, giving support to previous studies. On the other hand, it delves into the theory of planned behavior as a reference framework in the study of entrepreneurial intention and the sufficiency of the variables proposed in this theory, suggesting an expansion of the model. The theory of planned behavior posits that three proximal antecedents (attitudes, subjective norms, and perceived behavioral control/self-efficacy) are the only direct determinants of intention, while all other factors are theorized to indirectly influence intention through one or more of these components. The results of Studies 1 and 2 revealed both direct and indirect effects, challenging the sufficiency hypothesis. In both studies, an extended model including other variables together with those posited in the theory of planned behavior was tested. According to Ajzen and Fishbein (2005), it is possible to consider the addition of behavior-specific constructs to the theory, although these additions are often found to slightly improve the prediction of intention over and above the original model. In any case, they recommend that additional predictors be proposed and added to the theory with caution for the sake of parsimony. Thus, I encourage considering these variables in research on entrepreneurship education, as well as other potential variables that be found relevant, particularly when administering pre and post

questionnaires. However, while the inclusion of additional variables in these extended models may contribute to explain greater variance of entrepreneurial behavior, their utility is limited as they are not applicable to a wide variety of behaviors.

Subjective norms appear to be the weakest component in the model, as was found in other studies (e.g., Krueger et al., 2000; Liñán & Chen, 2009; Liñán et al., 2011). Instead of a direct influence on intention, it has been proposed that the influence of subjective norms on intention can be mediated by attitudes and perceived behavioral control (e.g., Liñán & Chen, 2009; Liñán et al., 2013; Maes et al., 2014). What is more, the overall model could be reversed, as suggested by Krueger (2009). The findings of Study 3 also suggests that the mass media have an influence on the perception of the entrepreneurs and thus could be more generally considered within subjective norms. Indeed, Ajzen and Fishbein (2005) propose that items of two types of norms, injunctive and descriptive, are needed to obtain a complete measure of subjective norms. While injunctive norms tap perceptions of what others think the person should do, descriptive or behavioral norms deal with perceptions of what others are doing. In my opinion, the representation of entrepreneurs in the media could then be part of these descriptive norms. However, the review of subjective norms scales in entrepreneurship research (see Chapter 2, Section 4.2.3. Subjective norms) mainly reflects the use of injunctive, rather than descriptive norms. Further, the findings of Study 4 raise a concern about the exhaustiveness of the scale used, as it taps only three referent groups (i.e., closest family members -parents and siblings-, friends, and colleagues), and the appropriateness of including other important people for the adult population (e.g., spouse/partner or children). Indeed, family could have a stronger impact on women than on men. On the one hand, entrepreneurship has been proposed to be one possible career path that alleviates problems women face in the traditional workplace (Heilman & Chen, 2003). On the other hand, Jennings and McDougald (2007) suggest that female business owners are more likely to experience greater work–family conflict than their male counterparts. Nevertheless, most scales on subjective norms are limited to these three referent groups (see Chapter 2, Section 4.2.3. Subjective norms),

possibly due to the fact that university students samples are more common in the study of entrepreneurial intention than other groups.

Finally, a methodological concern should be mentioned. In Study 1, PROCESS macro was used for data analyses, while in Studies 2, 3, and 5, SmartPLS software (partial least squares technique) was selected. Although both approaches lead to similar results, I would suggest the latent variables technique provides further insight that can be particularly useful in exploratory research.

To conclude, the aim of this Thesis is not that everybody should become an entrepreneur or enroll in entrepreneurship courses. On the contrary, more comprehensive information may discourage some people. In fact, entrepreneurship education has been found to decrease the level of entrepreneurial intention for some students at the end of the program (e.g., Fayolle et al., 2006b). However, entrepreneurship education can satisfy a fourfold objective. First, it is useful for those interested in becoming entrepreneurs to acquire or improve entrepreneurial skills and competences, allowing them to be more successful when pursuing this career path. Second, it presents information and tools for those who for the time being are not interested in becoming entrepreneurs but who, through this education, can consider entrepreneurship as a viable and feasible future career option. Third, education provides a more acute vision of requisites and competences to become an entrepreneur, and thus can lead to a more conscious decision, avoiding erroneous expectations. Fourth, entrepreneurial skills and competences can be also useful when working as an employee, favoring intrapreneurship. Further, entrepreneurship is frequently used as a synonym for self-employment. However, it is important to distinguish independent self-employment/entrepreneurship from other forms of employment, such as dependent (Böheim & Muehlberger, 2006; Navajas-Romero et al., 2017; Williams & Horodnic, 2018), involuntary (Kautonen et al., 2010), or false self-employment (Moore & Newsome, 2018; Thörnquist, 2015). Indeed, there is a concern about how these other types of self-employees may lack labor protection (e.g., paid holidays, minimum wage

levels, protection from dismissal), benefits from social security (e.g., unemployment insurance), and are often beyond trade union representation (Böheim & Muehlberger, 2006).

## **2. LIMITATIONS AND FUTURE RESEARCH**

All studies present limitations that need consideration but which, in turn, pave opportunities for future research. Particular limitations are presented at the end of each study within this Thesis. In this section, main general limitations, as well as future lines of research, are presented.

### *Entrepreneurial intention and entrepreneurial behavior*

In these studies, I focused on entrepreneurial intention as the best predictor of entrepreneurial behavior. However, more longitudinal studies in this field are encouraged to investigate developments over time, such as the relationship between entrepreneurial intention and entrepreneurial behavior (Kautonen, van Gelderen, et al., 2015; Kautonen et al., 2013). The correlation between intention and different behaviors ranged from .18 to .84 in different studies analyzed by Ajzen (1991). Regarding also different types of behaviors, the meta-analytic study of Armitage and Conner (2001) showed that on average 27% of the variance in behavior was explained by the theory of planned behavior. This percentage was slightly higher (37%) in the meta-analytic study in the entrepreneurial context accomplished by Schlaegel and Koenig (2014). After the formation of intention, acting may be postponed or abandoned (e.g., van Gelderen, Kautonen, & Fink, 2015). Along these lines, implementation intention, commitment, motivations, or self-control are suggested as relevant factors in the intention – action gap (Adam & Fayolle, 2015, 2016; Carsrud & Brännback, 2011; van Gelderen et al., 2015), although further empirical research on these and other moderators is needed.

### *Cross-sectional studies*

Cross-sectional studies do not enable inferences of causation. Although I based the research on a robust theoretical model, the results must be interpreted with caution. For instance, attitudes, subjective norms, and entrepreneurial self-efficacy are considered proximal

antecedents of entrepreneurial intention. However, Krueger (2009) questions whether these relationships may be bi-directional, as opposed to directional (antecedents to intention), and wonders whether intention models only capture a snapshot of a dynamic process. In fact, looking at the model in reverse, the impact of intention on the antecedents may be stronger than the impact of antecedents on intention (e.g., Krueger, 2009). To shed light on this issue, more dynamic measures and longitudinal studies are encouraged.

#### *Self-report measures and non-representative samples*

A potential limitation of these studies is their reliance on self-reports. As concerns the TPB variables, it makes sense to use self-report measures, because these variables refer to subjective experiences. This may be different for creativity or gender perceptions. In this regard, social desirability was not specifically measured, then, it cannot be ruled out as a possible explanation. However, questionnaires were anonymous to mitigate the tendency toward social desirability responding.

Convenience samples are not representative of the Spanish population. To alleviate this limitation, large samples (over 300 participants) have been intently sought. Specifically, the sample sizes were: Study 1 ( $N = 9,753$ ), Study 2 ( $N = 559$ ), Study 3 ( $N = 320$ ), Study 4 ( $N = 902$ ), and Study 5 ( $N = 1,147$ ). Overall, 12,681 participants have filled out questionnaires for this Thesis. In any case, these sample sizes are similar to or greater than those of some of the most 24 influential papers on entrepreneurial intention identified by Liñán and Fayolle (2015), such as the 519 participants of Liñán and Chen (2009), the 265 Master of Business Administration students of Zhao et al. (2005), or the 469 students of Gupta et al. (2008).

#### *Entrepreneurial intention questionnaires (EIQ)*

In Study 1, Liñán and Chen's (2009) EIQ presented a high correlation between attitudes and entrepreneurial intention. In Studies 2, 3, 4, and 5, Moriano's (2005) EIQ did not present this high correlation. However, none of these questionnaires completely follow the guidelines of Ajzen (1991). Further, the constructs of the theory of planned behavior contain random

measurement error, even when carefully assessed (Ajzen, 2011). While Moriano's (2005) EIQ measures attitudes by a combination of subjective evaluation and the strength of each salient belief, as well as subjective norms by a combination of the strength of each normative belief and the motivation to comply with the referent in question, it does not consider control beliefs multiplied by the perceived power of the particular control factor. To the contrary, in the case of perceived behavioral control, the control beliefs and the perceived power of the control factor in particular to facilitate or inhibit the behavior are not assessed separately, as established in the theory of planned behavior (Ajzen, 1991).

On the other hand, Liñán and Chen's (2009) EIQ employs direct overall measures for all constructs and thus does not consider behavioral, normative, and control beliefs. To the best of my knowledge, only Maes et al. (2014) include both beliefs and direct measures in a questionnaire on entrepreneurial intention, but this questionnaire is not as extensive as the instruments developed by Liñán and Chen (2009) or Moriano (2005). Liñán and Moriano have collaborated on another version of the Entrepreneurial Intention Questionnaire (Rueda, Moriano, & Liñán, 2015), but they have missed the opportunity to fully integrate the best of both questionnaires. Thus, an analysis of the complete model proposed by Ajzen (1991), that is, how attitudes, subjective norms, and perceptions of control make independent contributions to the prediction of intention, as well as how behavioral, normative, and control beliefs predict, respectively, attitudes, subjective norms, and perceived behavioral control (e.g., de Leeuw, Valois, Ajzen, & Schmidt, 2015) has yet to be accomplished in Spain.

#### *Formative – reflective approach*

In the first months of my Thesis project I was particularly concerned with measures (as indicated in Chapter 2) and analysis techniques. I decided to use partial least squares structural equation modeling (PLS-SEM), as it is a useful technique in cases where complex mediation models are being analyzed with a large number of indicators and relationships (Hair et al., 2017). This approach is recommended when the main objective is the exploration and



development of new theories, rather than confirmation of previously proposed models. Further, PLS-SEM is a nonparametric technique that allows for the incorporation of reflective and formative measurement models (Hair et al., 2017). Formative models cover the construct domain under study through the aggregation of different indicators, that is, these indicators cause the construct, while indicators in reflective models are the effects of the construct. In Study 1, reviewers at a journal suggested using another technique. However, other techniques are not as flexible in dealing with reflective and formative measurement models. In fact, the variables of the theory of planned behavior are usually considered to be reflective measures. However, as explained in Studies 2, 3, and 5, the constructs of attitudes, subjective norms, and entrepreneurial self-efficacy were measured by means of formative indicator scales according to the specific wording of the items as well as the confirmatory tetrad analysis (CTA-PLS) accomplished in each study.

Misspecification of a measurement model attains some implications and can lead to biased results. In a reflective measurement model, measures represent the effects or manifestations of the underlying construct (Hair et al., 2017). Thus, indicators should be highly correlated with each other, and individual items should be interchangeable. In contrast, formative measurement models assume that indicators form the construct by means of linear combinations. These indicators are not interchangeable and do not necessarily correlate with each other. This is relevant in that, if a reflective measurement model is considered for a construct (misspecifying a formative model), reliability analysis could suggest removing important items. Further, when formative indicators are represented in a reflective measurement model, they produce lower factor loadings. As a consequence, conventional rules of thumb or recommended cut-off values could indicate these indicators should be (incorrectly due to misspecification) removed. The specification of a construct thus depends on both conceptualization and the objective of the study. Constructs can indeed be operationalized in both ways. Besides theoretical concerns, the confirmatory tetrad analysis (CTA-PLS) empirically allows testing the null hypothesis that the construct measures are

reflective. When the null hypothesis in a tetrad test is rejected, formative measures should be used.

While most studies applying the theory of planned behavior consider composites (i.e., reflective measures), there are some concerns about individual beliefs and the use of formative indicators when sample size is adequate (de Leeuw et al., 2015). Petter, Straub, and Rai (2007) argue that formative constructs are being misspecified for reflective constructs in some papers (not specifically in entrepreneurship). While entrepreneurial intention is most suitably measured by reflective rather than formative indicators (Thompson, 2009), future studies should provide a better understanding of attitudes, subjective norms, and entrepreneurial self-efficacy. Indeed, Rueda et al. (2015) suggest “the attitude scale could present a formative character, instead of being reflective in nature” (p. 73) and Zarzuela and Antón (2015) use formative measures when applying the theory of reasoned action, the predecessor of the theory of planned behavior.

#### *Beyond the theory of planned behavior*

The theory of planned behavior is alive and well, and not ready to retire (Ajzen, 2015). However, other theories and models have been proposed to deal with entrepreneurial intention (e.g., Krueger, 2009). For instance, the theory of planned behavior and Shapero’s model of the entrepreneurial event have been successfully combined in integrated models that provide additional explanatory power and a better understanding of the developmental process of entrepreneurial intention (Esfandiar, Sharifi-Tehrani, Pratt, & Altinay, in press; Schlaegel & Koenig, 2014).

Despite well-developed theory and robust empirical models regarding entrepreneurial intention, as well as vast research, some concerns trigger the need to review how we conceptualize, model, and measure entrepreneurial intention to try to find a better model (Krueger, 2009). Perhaps a model can be found that is theoretically strong and has the potential to better explain, predict, and be useful to educators and practitioners. Krueger posits

that most theoretical and empirical models are static while they study a clearly dynamic process. Further, behavior is only partially volitional; it is necessary to consider alternative behaviors/goals as well as both a rational component and an emotional component.

Sarasvathy posits effectuation as a constructive model of entrepreneurial cognition (e.g., Sarasvathy, 2014). According to this model, we need to consider an iterative, evolutionary, interactive, proactive, co-creative, and transformative process rather than a mere adaptation to the environment. This is, entrepreneurial-decision making does not always follow a linear path. In fact, “[t]he decision to start a new venture may itself be an artifact arising out of the effectual process” (Sarasvathy, 2014, p. 464). Then, if entrepreneurs are effectuating, intention may evolve in similarly nonlinear fashion (Krueger, 2009).

According to Krueger (2007), scholars often take beliefs for granted or do not consider them sufficiently relevant due to the fact that they are far from human action. However, although we can still learn from intention models and measures, it is necessary to explore “the less-accessible realms of cognition” (Krueger, 2007, p. 132). Beliefs are “deeply held strong assumptions that underpin our sensemaking and our decision making” (Krueger, 2007, p. 124). And by examining deep beliefs we can gain a better understanding of entrepreneurship, as beliefs are behind deep cognitive structures, which in turn, are behind entrepreneurial attitudes, which in turn are behind entrepreneurial intention, which in turn are behind entrepreneurial action (Krueger, 2007). The movement from a more novice to a more expert mindset is reflected in “changes in deep cognitive structures, punctuated by critical developmental experiences” (Krueger, 2007, pp. 124-125). He suggests that future research could start by identifying expert entrepreneurs and capturing their developmental experiences. Entrepreneurial bricolage is another model proposed to explain how entrepreneurs “create something from nothing” in resource-constrained environments as well as their business grow (Baker & Nelson, 2005). The three main elements of the definition of bricolage are: “making do,” “combination of resources for new purposes,” and “resources at hand.” Although this

model does not specifically consider entrepreneurial intention, it emphasizes the importance of certain characteristics, such as improvisation, creativity, social skills, or combinative capabilities on firm outcomes. This is, entrepreneurs usually face limited resources and must improvise with resources perceived to be at hand. We could deduce that creating and developing a firm do not necessarily follow linear or planned paths.

New theoretical perspectives in entrepreneurship research contrast and complement, and could be integrated into future research (Fisher, 2012). After analyzing six different firms, Fisher (2012) found fundamental similarities between effectuation and bricolage. Further, he found evidence against a causal-planned approach to venture development.

In addition, the link between intention and behavior may not be straightforward. The realization of the decision may depend on different factors, such as time lag between making the decision and the opportunity to enact it or incongruence of the decision with other goals (Bagozzi, Dholakia, & Basuroy, 2003). Then, a person engages in a goal-striving process to enact the decision, and this process can end in success or failure. Bagozzi et al. (2003) propose a theoretical model of effortful decision making and enactment which comprises subsequent stages (proximal goal-striving process): goal desire, goal intention, implementation desire, implementation intention, perceived behavioral control, plan enactment, and goal realization. They also take into consideration other variables which have an influence on some of the main variables (distal decision-making process): decision process characteristics (i.e., decision process importance, decision process effort investment, and decision process confidence); positive and negative anticipated emotions; attitude; subjective norms; and goal feasibility. Both plan enactment and goal realization need to be measured in a follow-up contact. In comparison to two established models, the theory of planned behavior (Ajzen, 1991) and the model of action phases (Heckhausen & Gollwitzer, 1987), this new model explains higher variance in goal realization and provides more insights into the processes preceding goal realization. However, this model has not received as much attention as the theory of planned

behavior (Krueger, 2009). Of great importance is the distinction between goal intention and implementation intention. In this regard, Krueger questions if entrepreneurial intention is a goal intention or an implementation intention, that is, the intention “to begin the process” or the intention “to actually get the venture launched” (p. 61).

In their criticism of the theory of planned behavior in health research, Sniehotta et al. (2014) also propose different theories and models to expand future research, such as action theories (e.g., self-regulation theories), temporal dynamics and temporal frames when considering benefits and costs of behavioral alternatives, dual process models (considering reflective or impulsive determinants), as well as sequential models. Perhaps these models could also be successfully applied to entrepreneurship.

#### *Attitude change*

The theory of planned behavior as well as other models assign great relevance to attitudes and their influence on behavioral intention. Other models in the field of Social Psychology focus on attitude change, and this research could be of utility to entrepreneurship education and be explored in future studies. The elaboration likelihood model (ELM) is a general theory of attitude change that provides a framework for organizing, categorizing, and understanding the processes behind the effectiveness of persuasive communications (Petty & Cacioppo, 1986). This model distinguishes two routes of persuasion: central route (linked to careful and thoughtful consideration of the information presented) and peripheral route (related to cues in the context inducing change without scrutiny if the information, e.g., attractiveness of the source). Elaboration refers to the extent to which a person thinks about the arguments in a message. The likelihood of elaboration will depend on the personal motivation and ability to evaluate the information presented, varying along a continuum (none–complete). According to Petty and Cacioppo (1986), the theory of reasoned action, antecedent of the theory of planned behavior, is placed in the complete extreme as it assumes that people attempt to carefully evaluate the information and integrate it in a coherent position. However, other models draw

on simple affective processes, or inferences, or persuasion rules when people have no ability or motivation to consider the information. The ELM has been applied in different areas, for example the mass media (Petty et al., 2009) or communication of academic research (Steffens, Weeks, Davidsson, & Isaak, 2014). Regarding entrepreneurship, some studies analyze how entrepreneurs acquire funds for their ventures adopting this persuasion perspective (Allison, Davis, Webb, & Short, 2017; Martens, Jennings, & Jennings, 2007; Zheng, Hung, Qi, & Xu, 2016). However, there is room for exploring this model in entrepreneurship education and attitudes to entrepreneurship.

#### *Hybrid entrepreneurship*

This Thesis does not include the possibility of starting a business while still working as an employee (hybrid entrepreneurship) and considers entrepreneurship and wage employment as separately options. However, this may be not the case for many potential entrepreneurs (e.g., Thorgren, Nordstrom, & Wincent, 2014). As the risk and uncertainty associated with entrepreneurial activity deters entry, hybrid entrepreneurship can reduce these factors and influence both entrepreneurial entry and survival (Raffiee & Feng, 2014). Indeed, not all hybrid entrepreneurs decide to leave wage employment and become a full-time entrepreneur (Thorgren, Sirén, Nordström, & Wincent, 2016). Hybrid entrepreneurship can be also an appealing alternative for retirees. Indeed, Tornikoski, Viljamaa, and Varamäki (2015) define retired hybrid entrepreneurs as “individuals who have retired from the active workforce but continue entrepreneurial activities part-time” (p. 188). Future research should contemplate this option.

#### *Age of participants*

The participant groups in Studies 1 and 2 were comprised of university students (17 – 40 years old). In contrast, Study 3's sample was comprised of adult participants between 19 and 75 years old, Study 4 focused on participants aged 18 – 44 years old, and Study 5 on participants aged 18 – 64 years old. Future studies should consider another group that is attracting

increasing interest: the third age, that is, enterprising activity in persons over 50 years old (Kautonen et al., 2011; Singh & De Noble, 2003). According to Laguía and Moriano (2018a, 2018b), older participants report lower entrepreneurial intention. However, chronological age should be complemented with other measures of subjective age to rule out confounding effects (Laguía, Topa, & Moriano, 2018).

### *Gender and entrepreneurship*

All studies in this Thesis provide insights for improving entrepreneurship education programs and interventions. Nonetheless, the study on gender stereotypes (Studies 4 and 5) opens the most innovative line of research. First, the scale used to measure gender stereotypes was an adaptation into entrepreneurship of a scale from the “think manager – think male” paradigm. After a thorough review (Ahl, 2006; de Pillis & Meilich, 2006; Gupta & Fernández, 2009; Hancock et al., 2014; Orser et al., 2011; Rauch & Frese, 2007; Zhao et al., 2010), ten additional characteristics and behaviors have been identified for future studies: creative, innovative, passionate for work, optimistic, persistent, flexible, autonomous, active, competitive, and visionary. Orser et al. (2011) found a limited convergence across two of the most used measures on gender, the 92 items in the Schein Descriptive Index (SDI; Schein, 1973, 1975), and the 60 feminine/masculine/neutral attributes of the Bem Sex-Roles Inventory (BSRI; Bem, 1974), and the 39 cross-cultural entrepreneurial traits identified by Gupta and Fernández (2009). Orser et al.’s (2011) interviews with female entrepreneurs showed that self-reported attributes were consistent with many of the salient entrepreneurial characteristics identified by Gupta and Fernández (2009). A sound ETR scale is needed to further investigate this area, as the application of long inventories reveals that some words are inappropriate for characterizing adults engaged in entrepreneurial activity, and even some words may be outdated (Ahl, 2006; Orser et al., 2011). Some of Bem’s femininity words are the direct opposite of entrepreneur words, while other femininity words do not seem to be present in the entrepreneurship discussion (Ahl, 2006). Moreover, Orser et al. (2011) claim “[a]n important next step in

describing feminist entrepreneurs is the creation of an 'entrepreneurial' nomenclature or scale construction of entrepreneurial attributes that reflect women's voices, especially the central themes articulated by respondents related to passion, action, and vision" (p. 582).

Second, cross-cultural replication of the structure of the ETR scale is advisable. A pilot study (Laguía, Moriano, García-Ael, & Wach, 2018) has been conducted in Germany, and contacts with other European colleagues will allow testing in other countries. Third, the media help to divulge a stereotype of the figure of the entrepreneur. As entrepreneurs are usually represented as young people and male entrepreneurs are more frequently exhibited than female entrepreneurs, Study 3 also converges with Studies 4 and 5. In this regard, future qualitative studies are encouraged to seek a deeper insight into how the social legitimacy attached to entrepreneurship and media in general relate to entrepreneurial intention as well as attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy.

### **3. PRACTICAL IMPLICATIONS**

Despite the aforementioned limitations, this Thesis has implications for practice. Below, implications are grouped into four blocks: (a) universities, (b) families, (c) the media, and (d) education on entrepreneurship and gender.

#### **Universities**

With respect to Studies 1 and 2, universities should pay attention to the courses and services offered to foster entrepreneurship. First, these courses and services should be available to all students, not only to Business students. Particularly, networking and coaching activities are highly advisable. Further, courses and services could be of use for researchers, professors, lecturers, and other university staff, who, in turn, can serve as entrepreneurship role models for students. Courses and services are good ways to deal with perceived risk by providing hands-on information and the possibility of learning by doing. Thus, they can alleviate the



negative impact of perceived risk on entrepreneurial intention and future entrepreneurial behavior.

Second, courses should include creativity contents and practice to improve self-perceived creativity. University support for creativity, as well as taking a creativity course, were significant predictors of self-perceived creativity in Study 2 which, in turn, had a positive influence on entrepreneurial intention. In this vein, universities can encourage students to solve problems in a creative way and to examine old problems from new perspectives, showing that there is more than one solution to a problem. Additionally, universities can reward innovative and creative ideas and recognize people for their creative work, as well as provide mechanisms for encouraging and developing creative ideas.

In sum, universities play an important role in boosting the entrepreneurial mindsets among their community members. Entrepreneurship is one of the eight key competences for lifelong learning in the European Union (European Commission/EACEA/Eurydice, 2016); whether or not students end creating a business, they can benefit from this learning. This does not mean that all students should become entrepreneurs, but that they should consider whether creating their own business is a viable option in line with their own skills, motives, and general preferences (Sieger et al., 2014).

## **Families**

Having role models in the family or close environment is also directly related to higher scores on entrepreneurial intention (Study 1). Not only does the family environment have a positive influence on entrepreneurial intention, also important is exposure to other role models such as friends or bosses, since these persons, together with family members, can transmit their entrepreneurial knowledge (BarNir et al., 2011; Zhang et al., 2014).

Additionally, family support for creativity plays a role similar to universities in fostering self-perceived creativity (see Study 2). Along with universities, the family environment is crucial to

transmitting positive attitudes toward entrepreneurship, providing social support, and facilitating tools and opportunities to strengthen self-efficacy and a sense of controllability of future potential entrepreneurs. In so doing, families can promote thinking about new ideas for making life easier, show adaptation to several circumstances, and allow family members to freely talk about new ideas.

Moreover, family support for creativity was found in Study 2 to have a higher correlation with entrepreneurial intention than merely being from an entrepreneurial family. Parents can consider for themselves other career options rather than becoming entrepreneurs, but they can encourage entrepreneurship by supporting their children's creativity. Even if families are not particularly interested in boosting entrepreneurship, supporting creativity in any case is useful for developing future employees and intrapreneurs, as indicated in Chapter 4. Thus, supporting creativity would contribute to promoting a core competence for employees and intrapreneurs, as well as entrepreneurs, favoring children in any career path they want to pursue.

### **The media**

Study 3 highlighted the relevant role of the media in promoting entrepreneurial skills. This result opens the way for reviewing what messages are being conveyed and how to boost more efficiently entrepreneurial skills and social legitimacy attached to entrepreneurship. Qualitative studies such as the accomplished by Boyle and Kelly (2016) in the United Kingdom should be encouraged in Spain.

The inclusion of entre-tainment formats in entrepreneurship education could be useful for acquiring entrepreneurial skills. Television and radio programs and other formats can be included in entrepreneurship education as well as in campaigns to encourage entrepreneurship. Teachers have included film, music, television, and other media to enhance the classroom experience for decades (Putman, 2013). Indeed, contents can successfully be

integrated into teaching and encourage critical thinking in the students. For instance, *The Apprentice* has been found to be an interesting and constructive pedagogical tool to engage students, which can foster critical thinking, analysis, and application (Eisner, 2006).

Moreover, the mass media help to divulge a stereotype of the figure of the entrepreneur. Consequently, making more conscious to media producers of the potential biases that they may be conveying can help to turn to a more diverse image of entrepreneurs. This is especially acute (e.g., Nicholson & Anderson, 2005; Radu & Redien-Collot, 2008) regarding age (entrepreneurs are usually represented as young people) and gender (male entrepreneurs are more frequently exhibited than female entrepreneurs). In their focus groups in the United Kingdom, Boyle and Kelly (2016) found “an overwhelming perception among respondents that entrepreneurs were ‘young, rich and successful’” (p. 115). While the age group with greater tendency to become an entrepreneur worldwide is that of 25 – 34 years old followed by the group of 35 – 44 years (Singer et al., 2018), another group which is attracting increasing interest is the so called “the third age,” that is, new entrepreneurs over 50 years old (Kautonen et al., 2011; Singh & De Noble, 2003). It is important that all age groups be represented to offer wide role models.

Further, media representations of entrepreneurship are dominated by male entrepreneurs (Achtenhagen & Welter, 2011; Hamilton, 2013; Radu & Redien-Collot, 2008). Due to this representation of entrepreneurship as male, women have less opportunities to find sources of identification (Achtenhagen & Welter, 2011). What is more, female entrepreneurs are described more in terms of look, clothes, or family situation than male entrepreneurs. Thus, both traditional gender stereotypes and role models are reinforced. Men and women are then exposed to a large number of male entrepreneurs as a consequence of entrepreneurship being a male-dominated occupation. This exposition leads them to perceive a similarity between masculine and entrepreneurial characteristics (Gupta et al., 2009). As people are motivated by the successes of others who are similar to themselves (Bandura, 2001), it is important the

exposition for diverse, credible, and attractive roles models to encourage different potential entrepreneurs (Radu & Redien-Collot, 2008). Successful entrepreneurs can also be seen as figures to aspire to be like and thus encourage people through a rags to riches narrative (e.g., Boyle & Kelly, 2010). Consequently, a more balanced and diverse presentation of entrepreneurs is highly advisable.

### **Education on entrepreneurship and gender**

Regarding Study 4, Spanish is a grammatical gender language and the word “emprededor” (entrepreneur) refers only to a male entrepreneur. The masculine generic plural “emprededores” is used to refer to male entrepreneurs but also to both female and male entrepreneurs. On the other hand, the feminine form “emprededora o emprendedoras” (female entrepreneur or female entrepreneurs) does not function generically but refer only to a single woman or a group of women. Linguistic forms which refer to persons impact mental representations and masculine generics evoke a male bias in mental representations; consequently, readers/listeners are more likely to think of male than female exemplars of the category and women tend to be cognitively underrepresented (see Horvath & Sczesny, 2016; Sczesny et al., 2016). In those countries in which the dominant language’s structure incorporates sex-based systems and gender-differentiated pronouns, there exists a greater gender gap in entrepreneurial activity (Hechavarría et al., 2018). Therefore, in the study questionnaires, I intentionally used the somehow redundant term “hombres emprendedores” (male entrepreneurs) to avoid potential response bias, that is, considering only men or both women and men. However, it appears this condition is the most difficult to remember for both female and male participants (Study 4).

A wider use of gender-fair language could contribute to reducing stereotyping. For instance, in Madrid “el día del emprendedor” ([male] entrepreneur’s day, <http://diadelemprededorcomunidaddemadrid.es/>) is celebrated, while in Andalucía it is called “día de la persona emprendedora” (person entrepreneur’s day,

<http://www.diadelapersonaemprededora-andalucia.es>). Two principle strategies have been employed to make languages gender-fair (Sczesny et al., 2016): neutralization and feminization, or a combination of both. In this Thesis, the use of neutralization (person entrepreneur) was found to be more similar to male entrepreneurs than female entrepreneurs. On the contrary, feminization (explicitly mentioning female entrepreneurs) proved to increase entrepreneurial intention for female participants. While the results did not show an effect on male participants, I consider it is worth mentioning that “emprededores y emprendedoras” (male and female entrepreneurs) instead of “personas emprendedoras” (person entrepreneurs) makes a more inclusive term for females. In the leadership context, one of the first examples of how linguistic forms affect women’s perceived lack of fit with leadership positions is presented in Horvath and Sczesny (2016). Their study in a hiring-simulation experiment with different linguistic forms in job advertisements indicated that when the masculine form or the masculine form with (m/f) was used, female applicants were perceived to fit less well with the high-status position than male applicants. In contrast, feminine-masculine word pairs were associated with perception of female and male applicants as fitting the high-status leadership position similarly well. More importantly, according to UNESCO (2011), “language does not merely reflect the way we think: it also shapes our thinking” (p. 4). And linguistic asymmetries affect mostly women: the use of masculine forms leads to women seen less prototypical category exemplars and women feel less adequate as job candidates (Sczesny et al., 2016).

However, gender-fair language can have a positive effect also on males by making them more included in traditionally female jobs advertisements, which usually are referred to in the feminine form (Sczesny et al., 2016). I then recommend the media and entrepreneurship education programs to pay more attention to gender-fair language by using feminization (“emprededoras y emprendedores,” that is, female and male entrepreneurs), or a combination with neutralization (“emprendimiento”, entrepreneurship).

Last, Study 4 explored how activation of a successful female entrepreneur (through the random assignment of participants to the successful female entrepreneurs condition) positively affected female participants' self-reported entrepreneurial intention, entrepreneurial self-efficacy, as well as necessity vs. opportunity motivation. However, research papers and teaching cases rarely present positive role models of female business owners (Ahl et al., 2016; Ahl & Marlow, 2012). Therefore, I strongly advise including stereotypically feminine characteristics and female role models in entrepreneurship education and programs (e.g., books and case studies) to present entrepreneurship as a feasible career option for both women and men. This may, in turn, foster women's entrepreneurial intention.

*I don't know what I may seem to the world, but as to myself,  
I seem to have been only like a boy playing on the sea-shore and diverting myself  
in now and then finding a smoother pebble or a prettier shell than ordinary,  
whilst the great ocean of truth lay all undiscovered before me.*

Isaac Newton (1642-1727)<sup>41</sup>

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<sup>41</sup> Isaac Newton (1642-1727) is supposed to have remarked this quote a little before his death.  
[http://www.lib.cam.ac.uk/exhibitions/Footprints\\_of\\_the\\_Lion/introduction.html](http://www.lib.cam.ac.uk/exhibitions/Footprints_of_the_Lion/introduction.html)

## **Bibliografía**

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## **References**





- Acs, Z. J., Audretsch, D. B., Braunerhjelm, P., & Carlsson, B. (2012). Growth and entrepreneurship. *Small Business Economics*, 39(2), 289-300. doi:10.1007/s11187-010-9307-2
- Achtenhagen, L., & Welter, F. (2011). 'Surfing on the ironing board' – the representation of women's entrepreneurship in German newspapers. *Entrepreneurship & Regional Development*, 23(9-10), 763-786. doi:10.1080/08985626.2010.520338
- Adam, A. F., & Fayolle, A. (2015). Bridging the entrepreneurial intention–behaviour gap: The role of commitment and implementation intention. *International Journal of Entrepreneurship and Small Business*, 25(1), 36-54. doi:10.1504/IJESB.2015.068775
- Adam, A. F., & Fayolle, A. (2016). Can implementation intention help to bridge the intention–behaviour gap in the entrepreneurial process? An experimental approach. *The International Journal of Entrepreneurship and Innovation*, 17(2), 80-88. doi:10.1177/1465750316648569
- Ahl, H. (2006). Why research on women entrepreneurs needs new directions. *Entrepreneurship Theory and Practice*, 30(5), 595-621. doi:10.1111/j.1540-6520.2006.00138.x
- Ahl, H., Berglund, K., Pettersson, K., & Tillmar, M. (2016). From feminism to FemInc.ism: On the uneasy relationship between feminism, entrepreneurship and the Nordic welfare state. *International Entrepreneurship and Management Journal*, 12(2), 369-392. doi:10.1007/s11365-014-0341-4
- Ahl, H., & Marlow, S. (2012). Exploring the dynamics of gender, feminism and entrepreneurship: Advancing debate to escape a dead end? *Organization*, 19(5), 543-562. doi:10.1177/1350508412448695
- Ahlin, B., Drnovšek, M., & Hisrich, R. D. (2014). Entrepreneurs' creativity and firm innovation: The moderating role of entrepreneurial self-efficacy. *Small Business Economics*, 43, 101-117. doi:10.1007/s11187-013-9531-7
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. doi:10.1016/0749-5978(91)90020-T
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology*, 52, 27-58. doi:10.1146/annurev.psych.52.1.27
- Ajzen, I. (2002). Perceived behavioural control, self-efficacy, locus of control and the theory of planned behaviour. *Journal of Applied Social Psychology*, 32(4), 665-683. doi:10.1111/j.1559-1816.2002.tb00236.x
- Ajzen, I. (2011). The theory of planned behaviour: Reactions and reflections. *Psychology and Health*, 26(9), 1113-1127. doi:10.1080/08870446.2011.613995
- Ajzen, I. (2015). The theory of planned behaviour is alive and well, and not ready to retire: A commentary on Sniehotta, Pesseau, and Araújo-Soares. *Health Psychology Review*, 9(2), 131-137. doi:10.1080/17437199.2014.883474
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ, USA: Prentice-Hall.

- Ajzen, I., & Fishbein, M. (2005). The influence of attitudes on behavior. In D. Albarracín, B. T. Johnson, & M. P. Zanna (Eds.), *The handbook of attitudes* (pp. 173-221). Mahwah, NJ, USA: Lawrence Erlbaum.
- Alaminos, A. (2006). El muestreo en la investigación social. In A. Alaminos Chica & J. L. Castejón Costa (Eds.), *Elaboración, análisis e interpretación de encuestas, cuestionarios y escalas de opinión* (pp. 41-67). Alicante, Spain: Universidad de Alicante.
- Albarracín, D., Johnson, B. T., & Zanna, M. P. (2014). *The handbook of attitudes* (2nd ed.). New York, NY, USA: Psychology Press.
- Alsos, G. A., Isaksen, E. J., & Ljunggren, E. (2006). New venture financing and subsequent business growth in men-and women-led businesses. *Entrepreneurship Theory and Practice*, 30(5), 667-686. doi:10.1111/j.1540-6520.2006.00141.x
- Allen, I. E., Langowitz, N., & Minniti, M. (2007). *Global Entrepreneurship Monitor: 2006 Report on women in entrepreneurship*. Retrieved from <http://www.babson.edu/Academics/centers/blank-center/global-research/gem/Documents/gem-2006-women-entrepreneurship-report.pdf>
- Allison, T. H., Davis, B. C., Webb, J. W., & Short, J. C. (2017). Persuasion in crowdfunding: An elaboration likelihood model of crowdfunding performance. *Journal of Business Venturing*, 32(6), 707-725. doi:10.1016/j.jbusvent.2017.09.002
- Anderson, A. R., & Warren, L. (2011). The entrepreneur as hero and jester: Enacting the entrepreneurial discourse. *International Small Business Journal*, 29(6), 589-609. doi:10.1177/0266242611416417
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40(4), 471-499. doi:10.1348/014466601164939
- Athayde, R. (2009). Measuring enterprise potential in young people. *Entrepreneurship Theory and Practice*, 33(2), 481-500. doi:10.1111/j.1540-6520.2009.00300.x
- Athayde, R. (2012). The impact of enterprise education on attitudes to enterprise in young people: An evaluation study. *Education + Training*, 54(8/9), 709-726. doi:10.1108/00400911211274846
- Autio, E., Keeley, R. H., Klofsten, M., Parker, G. G. C., & Hay, M. (2001). Entrepreneurial intent among students in Scandinavia and in the USA. *Enterprise and Innovation Management Studies*, 2(2), 145-160. doi:10.1080/14632440110094632
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review. *Entrepreneurship Theory and Practice*, 38(2), 217-254. doi:10.1111/etap.12095
- Bagozzi, R. P., Dholakia, U. M., & Basuroy, S. (2003). How effortful decisions get enacted: The motivating role of decision processes, desires, and anticipated emotions. *Journal of Behavioral Decision Making*, 16(4), 273-295. doi:10.1002/bdm.446

- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94. doi:10.1007/BF02723327
- Baker, T., & Nelson, R. E. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, 50(3), 329-366. doi:10.2189/asqu.2005.50.3.329
- Banco Mundial (2017). *Gender statistics*. Retrieved from <https://data.worldbank.org/data-catalog/gender-statistics>
- Bandura, A. (1977). Self-efficacy: Toward unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. doi:10.1037/0033-295X.84.2.191
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148. doi:10.1207/s15326985ep2802\_3
- Bandura, A. (2001). Social cognitive theory of mass communication. *Media Psychology*, 3(3), 265-299. doi:10.1207/S1532785XMEP0303\_03
- Barbosa, S. D., Gerhardt, M. W., & Kickul, J. R. (2007). The role of cognitive style and risk preference on entrepreneurial self-efficacy and entrepreneurial intentions. *Journal of Leadership & Organizational Studies*, 13(4), 86-104. doi:10.1177/10717919070130041001
- BarNir, A., Watson, W. E., & Hutchins, H. M. (2011). Mediation and moderated mediation in the relationship among role models, self-efficacy, entrepreneurial career intention, and gender. *Journal of Applied Social Psychology*, 41(2), 270-297. doi:10.1111/j.1559-1816.2010.00713.x
- Baron, R. A. (1998). Cognitive mechanisms in entrepreneurship: Why and when entrepreneurs think differently than other people. *Journal of Business Venturing*, 13(4), 275-294. doi:10.1016/S0883-9026(97)00031-1
- Baron, R. A. (2002). OB and entrepreneurship: The reciprocal benefits of closer conceptual links. In B. M. Staw & R. M. Kramer (Eds.), *Research in organizational behavior - An annual series of analytical essays and critical reviews* (Vol. 24, pp. 225-270). Oxford, England: Elsevier Science.
- Baron, R. A., Markman, G. D., & Hirska, A. (2001). Perceptions of women and men as entrepreneurs: Evidence for differential effects of attributional augmenting. *Journal of Applied Psychology*, 86(5), 923-929. doi:10.1037/0021-9010.86.5.923
- Baron, R. A., & Tang, J. (2011). The role of entrepreneurs in firm-level innovation: Joint effects of positive affect, creativity, and environmental dynamism. *Journal of Business Venturing*, 26, 49-60. doi:10.1016/j.jbusvent.2009.06.002
- Barreto, M., Ryan, M. K., & Schmitt, M. T. (2009). Introduction: Is the glass ceiling still relevant in the 21st century? In M. Barreto, M. K. Ryan, & M. T. Schmitt (Eds.), *The glass ceiling in the 21st century: Understanding barriers to gender equality* (pp. 3-18). Washington, DC, USA: American Psychological Association.

- Beghetto, R. A. (2006). Creative self-efficacy: Correlates in middle and secondary students. *Creativity Research Journal*, 18(4), 447-457. doi:10.1207/s15326934crj1804\_4
- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*, 42(2), 155-162. doi:10.1037/h0036215
- Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review*, 88(4), 354-364. doi:10.1037/0033-295X.88.4.354
- Bentler, P. M. (2006). EQS 6 Structural Equations Program manual. Encino, CA, USA: Multivariate Software, Inc.
- Bentler, P. M., & Wu, E. J. (2015). Supplement to EQS 6.3 for Windows User's Guide. Encino, CA, USA: Multivariate Software, Inc.
- Bigelow, L., Lundmark, L., Parks, J. M., & Wuebker, R. (2014). Skirting the issues: Experimental evidence of gender bias in IPO prospectus evaluations. *Journal of Management*, 40(6), 1732-1759. doi:10.1177/0149206312441624
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intentions. *Academy of Management Review*, 13(3), 442-453. doi:10.5465/amr.1988.4306970
- Bird, B., & Brush, C. (2002). A gendered perspective on organizational creation. *Entrepreneurship Theory and Practice*, 26(3), 41-65. doi:10.1177/104225870202600303
- Blanchflower, D. G. (2000). Self-employment in OECD countries. *Labour Economics*, 7(5), 471-505. doi:10.1016/S0927-5371(00)00011-7
- Block, J., & Sandner, P. (2009). Necessity and opportunity entrepreneurs and their duration in self-employment: Evidence from German micro data. *Journal of Industry, Competition and Trade*, 9(2), 117-137. doi:10.1007/s10842-007-0029-3
- Boada-Grau, J., Sánchez-García, J.-C., Prizmic-Kuzmica, A.-J., & Vigil-Colet, A. (2014). Spanish adaptation of the Creative Potential and Practised Creativity scale (CPPC-17) in the workplace and inside the organization. *Psicothema*, 26(1), 55-62. doi:10.7334/psicothema2013.68
- Böheim, R., & Muehlberger, U. (2006). *Dependent forms of self-employment in the UK: Identifying workers on the border between employment and self-employment* (IZA Discussion Paper No. 1963). Retrieved from Institute of Labor Economics (IZA): <ftp://repec.iza.org/pub/SSRN/pdf/dp1963.pdf>
- Booyesen, L., & Nkomo, S. (2006). Think manager – Think (fe)male: A South African perspective. *The International Journal of Interdisciplinary Social Sciences*, 1(2), 23-34. doi:10.18848/1833-1882/CGP/v01i02/52429
- Booyesen, L., & Nkomo, S. (2010). Gender role stereotypes and requisite management characteristics: The case of South Africa. *Gender in Management: An International Journal of Business and Management*, 25(4), 285-300. doi:10.1108/17542411011048164

- Bosak, J., & Sczesny, S. (2011). Exploring the dynamics of incongruent beliefs about women and leaders. *British Journal of Management*, 22(2), 254-269. doi:10.1111/j.1467-8551.2010.00731.x
- Boyd, N. G., & Vozikis, G. S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 18(4), 63-77. doi:10.1177/104225879401800404
- Boyle, R., & Kelly, L. (2010). The celebrity entrepreneur on television: Profile, politics and power. *Celebrity Studies*, 1(3), 334-350. doi:10.1080/19392397.2010.511135
- Boyle, R., & Kelly, L. W. (2016). *The television entrepreneurs: Social change and public understanding of business*. Abingdon, England: Routledge.
- Breckler, S. J., & Wiggins, E. C. (2014). On defining attitude and attitude theory: Once more with feeling. In A. R. Pratkanis, S. J. Breckler, & A. G. Greenwald (Eds.), *Attitude, structure and function* (pp. 407-428). New York, NY, USA: Psychology Press.
- Brenner, O. C., Tomkiewicz, J., & Schein, V. E. (1989). The relationship between sex role stereotypes and requisite management characteristics revisited. *The Academy of Management Journal*, 32(2), 662-669. doi:10.2307/256439
- Briñol, P., & Petty, R. E. (2015). Elaboration and validation processes: Implications for media attitude change. *Media Psychology*, 18, 267-291. doi:10.1080/15213269.2015.1008103
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research* (2nd ed.). New York, NY, USA: Guilford Press.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park, CA, USA: Sage.
- Brush, C., Edelman, L. F., Manolova, T., & Welter, F. (2018). A gendered look at entrepreneurship ecosystems. *Small Business Economics*. Advance online publication. doi:10.1007/s11187-018-9992-9
- Brush, C., Greene, P., Balachandra, L., & Davis, A. (2018). The gender gap in venture capital- progress, problems, and perspectives. *Venture Capital*, 20(2), 115-136. doi:10.1080/13691066.2017.1349266
- Burgess, D., & Borgida, E. (1999). Who women are, who women should be: Descriptive and prescriptive gender stereotyping in sex discrimination. *Psychology, Public Policy, and Law*, 5(3), 665-692. doi: 10.1037//1076-8971.5.3.665
- Busenitz, L. W., Gomez, C., & Spencer, J. W. (2000). Country institutional profiles: Unlocking entrepreneurial phenomena. *Academy of Management Journal*, 43(5), 994-1003. doi:10.5465/1556423
- Buttner, E. H. (2001). Examining female entrepreneurs' management style: An application of a relational frame. *Journal of Business Ethics*, 29(3), 253-269. doi:10.1023/A:1026460615436

- Caliendo, M., Fossen, F. M., & Kritikos, A. S. (2009). Risk attitudes of nascent entrepreneurs – new evidence from an experimentally validated survey. *Small Business Economics*, 32(2), 153-167. doi:10.1007/s11187-007-9078-6
- Cann, A., & Siegfried, W. D. (1990). Gender stereotypes and dimensions of effective leader behavior. *Sex Roles*, 23(7-8), 413-419. doi:10.1007/BF00289229
- Cardon, M. S., Stevens, C. E., & Potter, D. R. (2011). Misfortunes or mistakes? Cultural sensemaking of entrepreneurial failure. *Journal of Business Venturing*, 26(1), 79-92. doi:10.1016/j.jbusvent.2009.06.004
- Carli, L. L., Alawa, L., Lee, Y., Zhao, B., & Kim, E. (2016). Stereotypes about gender and science: Women ≠ scientists. *Psychology of Women Quarterly*, 40(2), 244-260. doi:10.1177/0361684315622645
- Carr, J. C., & Sequeira, J. M. (2007). Prior family business exposure as intergenerational influence and entrepreneurial intent: A theory of planned behavior approach. *Journal of Business Research*, 60, 1090-1098. doi:10.1016/j.jbusres.2006.12.016
- Carree, M. A., & Thurik, A. R. (2010). The impact of entrepreneurship on economic growth. In Z. J. Acs & D. B. Audretsch (Eds.), *Handbook of entrepreneurship research: An interdisciplinary survey and introduction* (pp. 557-594 ). New York, NY, USA: Springer.
- Carsrud, A., & Brännback, M. (2011). Entrepreneurial motivations: What do we still need to know. *Journal of Small Business Management*, 49(1), 9-26. doi:10.1111/j.1540-627X.2010.00312.x
- Carter, S., Shaw, E., Lam, W., & Wilson, F. (2007). Gender, entrepreneurship, and bank lending: The criteria and processes used by bank loan officers in assessing applications. *Entrepreneurship Theory and Practice*, 31(3), 427-444. doi:10.1111/j.1540-6520.2007.00181.x
- Carton, R. B., Hofer, C. W., & Meeks, M. D. (1998). *The entrepreneur and entrepreneurship: Operational definitions of their role in society*. Paper presented at the Annual International Council for Small Business conference, Singapore. <https://sites.google.com/a/uca.edu/sbanc/icsb-1998>
- Cimatti, B. (2016). Definition, development, assessment of soft skills and their role for the quality of organizations and enterprises. *International Journal for Quality Research*, 10(1), 97-130. doi:10.18421/IJQR10.01-05
- Cogliser, C. C., & Brigham, K. H. (2004). The intersection of leadership and entrepreneurship: Mutual lessons to be learned. *Leadership Quarterly*, 15(6), 771-799. doi:10.1016/j.leaqua.2004.09.004
- Comisión Europea (2003). *Libro Verde de la Comisión, de 21 de enero de 2003, titulado «El espíritu empresarial en Europa» [COM (2003) 27 final, no publicado en el Diario Oficial]*. Retrieved from <http://eur-lex.europa.eu/legal-content/ES/TXT/?uri=URISERV:n26023>
- Comisión Europea (2006). *Comunicación de la Comisión al Consejo, al Parlamento Europeo, al Comité Económico y Social Europeo y al Comité de las Regiones. COM(2006) 33 final. Aplicar el programa comunitario de Lisboa: Fomentar la mentalidad empresarial mediante la educación y*

- la formación. Retrieved from <https://eur-lex.europa.eu/legal-content/ES/TXT/?uri=CELEX%3A52006DC0033>
- Comisión Europea (2008). *La iniciativa emprendedora en la enseñanza superior, especialmente en estudios no empresariales. Resumen del Informe final del grupo de expertos*. Retrieved from [http://www.cdiex.org/aprendizaje/documento\\_8.pdf](http://www.cdiex.org/aprendizaje/documento_8.pdf)
- Comisión Europea (2011). *A second chance for entrepreneurs: Prevention of bankruptcy, simplification of bankruptcy procedures and support for a fresh start. Final report of the Expert Group*. Retrieved from <http://ec.europa.eu/DocsRoom/documents/10451>
- Comisión Europea (2013). *Comunicación de la Comisión al Parlamento Europeo, al Consejo, al Comité Económico y Social Europeo y al Comité de las Regiones. Plan de Acción sobre Emprendimiento 2020: Relanzar el espíritu emprendedor en Europa, COM(2012) 795 final*. Retrieved from <http://ec.europa.eu/transparency/regdoc/rep/1/2012/ES/1-2012-795-ES-F1-1.Pdf>
- Comisión Europea (2014). *La iniciativa de emprendimiento social de la Comisión Europea*. Retrieved from [http://ec.europa.eu/internal\\_market/publications/docs/sbi-brochure/sbi-brochure-web\\_es.pdf](http://ec.europa.eu/internal_market/publications/docs/sbi-brochure/sbi-brochure-web_es.pdf)
- Comisión Europea (2016). *Social Enterprises and their eco-systems: Developments in Europe*. Retrieved from <http://ec.europa.eu/social/main.jsp?catId=952&intPageId=2914&langId=en>
- Comisión Europea, & OCDE (2017). *Policy brief on women's entrepreneurship*. Retrieved from <https://publications.europa.eu/en/publication-detail/-/publication/a50f1af1-e470-11e7-9749-01aa75ed71a1/language-en>
- Conner, M. (2014). Extending not retiring the theory of planned behaviour: A commentary on Sniehotta, Preseau and Araújo-Soares. *Health Psychology Review*, 9(2), 141-145. doi:10.1080/17437199.2014.899060
- Conner, M., Godin, G., Sheeran, P., & Germain, M. (2013). Some feelings are more important: Cognitive attitudes, affective attitudes, anticipated affect, and blood donation. *Health Psychology Review*, 32(3), 264-272. doi:10.1037/a0028500
- Conner, M., Povey, R., Sparks, P., James, R., & Shepherd, R. (2003). Moderating role of attitudinal ambivalence within the theory of planned behaviour. *British Journal of Social Psychology*, 42(1), 75-94. doi:10.1348/014466603763276135
- Cuadrado, I., García-Ael, C., & Molero, F. (2015). Gender-typing of leadership: Evaluations of real and ideal managers. *Scandinavian Journal of Psychology*, 56, 236-244. doi:10.1111/sjop.12187
- Chan, K. (1998). Mass communication and pro-environmental behaviour: Waste recycling in Hong Kong. *Journal of Environmental Management*, 52(4), 317-325.
- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling*, 14(3), 464-504. doi:10.1080/10705510701301834



- Chen, M.-H., Chang, Y.-Y., & Lo, Y.-H. (2015). Creativity cognitive style, conflict, and career success for creative entrepreneurs. *Journal of Business Research*, 68, 906-910. doi:10.1016/j.jbusres.2014.11.050
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Mahwah, NJ, USA: Lawrence Erlbaum.
- Daniel, T. A. (2004). The exodus of women from the corporate workplace to self-owned businesses. *Employment Relations Today*, 30(4), 55-61. doi:10.1002/ert.10108
- Dasgupta, N., & Asgari, S. (2004). Seeing is believing: Exposure to counterstereotypic women leaders and its effect on the malleability of automatic gender stereotyping. *Journal of Experimental Social Psychology*, 40(5), 642-658. doi:10.1016/j.jesp.2004.02.00
- Davies, P. G., Spencer, S. J., & Steele, C. M. (2005). Clearing the air: Identity safety moderates the effects of stereotype threat on women's leadership aspirations. *Journal of Personality and Social Psychology*, 88(2), 276-287. doi:10.1037/0022-3514.88.2.276
- Davis, A. E., & Shaver, K. G. (2012). Understanding gendered variations in business growth intentions across the life course. *Entrepreneurship Theory and Practice*, 36(3), 495-512. doi:10.1111/j.1540-6520.2012.00508.x
- de Leeuw, A., Valois, P., Ajzen, I., & Schmidt, P. (2015). Using the theory of planned behavior to identify key beliefs underlying pro-environmental behavior in high-school students: Implications for educational interventions. *Journal of Environmental Psychology*, 42, 128-138. doi:10.1016/j.jenvp.2015.03.005
- De Noble, A. F., Jung, D., & Ehrlich, S. B. (1999). *Entrepreneurial self-efficacy: The development of a measure and its relationship to entrepreneurial actions*. Paper presented at the 19th Annual Entrepreneurship Research Conference, Frontiers of Entrepreneurship Research 1999. Retrieved from [http://fusionmx.babson.edu/entrep/fer/papers99/II\\_C/IC.html](http://fusionmx.babson.edu/entrep/fer/papers99/II_C/IC.html)
- de Pillis, E., & Meilich, O. (2006). Think entrepreneur, think male? Business students' assumptions about a hypothetical entrepreneur. *International Journal of Entrepreneurship Education*, 4, 3-18.
- Deal, J. J., & Stevenson, M. A. (1998). Perceptions of female and male managers in the 1990s: Plus ça change... *Sex Roles*, 38(3/4), 287-300. doi:10.1023/A:1018741318216
- DeTienne, D. R., & Chandler, G. N. (2004). Opportunity identification and its role in the entrepreneurial classroom: A pedagogical approach and empirical test. *Academy of Management Learning and Education*, 3(3), 242-257. doi:10.5465/amle.2004.14242103
- Dewett, T. (2007). Linking intrinsic motivation, risk taking, and employee creativity in an R&D environment. *R&D Management*, 37(3), 197-208. doi:10.1111/j.1467-9310.2007.00469.x



- Díaz-García, M. C., & Jiménez-Moreno, J. (2010). Entrepreneurial intention: The role of gender. *International Entrepreneurship and Management Journal*, 6(3), 261-283. doi:10.1007/s11365-008-0103-2
- DiLiello, T. C., & Houghton, J. D. (2008). Creative potential and practised creativity: Identifying untapped creativity in organizations. *Creativity and Innovation Management*, 17(1), 37-46. doi:10.1111/j.1467-8691.2007.00464.x
- Dimov, D. (2007). Beyond the single-person, single-insight attribution in understanding entrepreneurial opportunities. *Entrepreneurship Theory and Practice*, 31(5), 713-731. doi:10.1111/j.1540-6520.2007.00196.x
- do Paço, A., Ferreira, J. M., Raposo, M., Rodrigues, R. G., & Dinis, A. (2013). Entrepreneurial intentions: Is education enough? *International Entrepreneurship and Management Journal*, 11(1), 57-75. doi:10.1007/s11365-013-0280-5
- Donnelly, K., & Twenge, J. M. (2017). Masculine and feminine traits on the Bem Sex-Role Inventory, 1993–2012: A cross-temporal meta-analysis. *Sex Roles*, 76(9-10), 556-565. doi:10.1007/s11199-016-0625-y
- Douglas, E. J., & Fitzsimmons, J. R. (2013). Intrapreneurial intentions versus entrepreneurial intentions: Distinct constructs with different antecedents. *Small Business Economics*, 41, 115-132. doi:10.1007/s11187-012-9419-y
- Duehr, E. E., & Bono, J. E. (2006). Men, women, and managers: Are stereotypes finally changing? *Personnel Psychology*, 59(4), 815-846. doi:10.1111/j.1744-6570.2006.00055.x
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3), 573-598. doi:10.1037/0033-295x.109.3.573
- Eagly, A. H., & Steffen, V. J. (1984). Gender stereotypes stem from the distribution of women and men into social roles. *Journal of Personality and Social Psychology*, 46(4), 735-754. doi:10.1037/0022-3514.46.4.735
- Eddleston, K. A., Ladge, J. J., Mitteness, C., & Balachandra, L. (2016). Do you see what I see? Signaling effects of gender and firm characteristics on financing entrepreneurial ventures. *Entrepreneurship Theory and Practice*, 40(3), 489-514. doi:10.1111/etap.12117
- Eddleston, K. A., & Powell, G. N. (2008). The role of gender identity in explaining sex differences in business owners' career satisfier preferences. *Journal of Business Venturing*, 23, 244-256. doi:10.1016/j.jbusvent.2006.11.002
- Edwards-Schachter, M., García-Granero, A., Sánchez-Barrioluengo, M., Quesada-Pineda, H., & Amara, N. (2015). Disentangling competences: Interrelationships on creativity, innovation and entrepreneurship. *Thinking Skills and Creativity*, 16, 27-39. doi:10.1016/j.tsc.2014.11.006
- Ehrlinger, J., Plant, E. A., Hartwig, M. K., Vossen, J. J., Columb, C. J., & Brewer, L. E. (2018). Do gender differences in perceived prototypical computer scientists and engineers contribute to gender

- gaps in computer science and engineering? *Sex Roles*, 78, 40-51. doi:10.1007/s11199-017-0763-x
- Eisner, S. P. (2006). Apprentice watch: Learning through reality TV. *Journal of College Teaching & Learning*, 3(9), 19-37. doi:10.19030/tlc.v3i9.1678
- Engle, R. L., Dimitriadi, N., Gavidia, J. V., Schlaegel, C., Delanoe, S., Alvarado, I., . . . Wolff, B. (2010). Entrepreneurial intent: A twelve country evaluation of Ajzen's model on planned behavior. *International Journal of Entrepreneurial Behavior & Research*, 16(1), 35-57. doi:10.1108/13552551011020063
- Esfandiari, K., Sharifi-Tehrani, M., Pratt, S., & Altinay, L. (in press). Understanding entrepreneurial intentions: A developed integrated structural model approach. *Journal of Business Research*. doi:10.1016/j.jbusres.2017.10.045
- European Commission (2006). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the Regions. Implementing the Community Lisbon Programme: Fostering entrepreneurial mindsets through education and learning*, COM/2006/0033 final. Retrieved from <http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:52006DC0033>
- European Commission (2007). *Report of the Expert Group: Promoting entrepreneurship on TV and in other audio-visual media*. Retrieved from [https://ec.europa.eu/growth/content/promoting-entrepreneurship-tv-and-other-audio-visual-media-report-0\\_en](https://ec.europa.eu/growth/content/promoting-entrepreneurship-tv-and-other-audio-visual-media-report-0_en)
- European Commission (2013). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Entrepreneurship 2020 Action Plan: Reigniting the entrepreneurial spirit in Europe*, COM(2012) 795 final. Retrieved from <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0795:FIN:en:PDF>
- European Commission/EACEA/Eurydice (2016). *Entrepreneurship education at school in Europe*. Retrieved from Publications Office of the European Union website: <https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/images/4/45/195EN.pdf>
- Eurostat (2018). *Unemployment statistics*. Retrieved October 2018 from [http://ec.europa.eu/eurostat/statistics-explained/index.php/Unemployment\\_statistics#Recent\\_developments\\_in\\_unemployment\\_at\\_a\\_European\\_and\\_Member\\_State\\_level](http://ec.europa.eu/eurostat/statistics-explained/index.php/Unemployment_statistics#Recent_developments_in_unemployment_at_a_European_and_Member_State_level)
- Fagenson, E. A., & Marcus, E. C. (1991). Perceptions of the sex-role stereotypic characteristics of entrepreneurs: Women's evaluations. *Entrepreneurship Theory and Practice*, 15(4), 33-48. doi:10.1177/104225879101500406
- Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling*. Akron, OH, USA: The University of Akron Press.

- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006a). Assessing the impact of entrepreneurship education programmes: A new methodology. *Journal of European Industrial Training*, 30(9), 701-720. doi:10.1108/03090590610715022
- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006b). Effect and counter-effect of entrepreneurship education and social context on student's intentions. *Estudios de Economía Aplicada*, 24(2), 509-523.
- Fayolle, A., & Liñán, F. (2014). The future of research on entrepreneurial intentions. *Journal of Business Research*, 67(5), 663-666. doi:10.1016/j.jbusres.2013.11.024
- Feldman, D. C., & Bolino, M. C. (2000). Career patterns of the self-employed: Career motivations and career outcomes. *Journal of Small Business Management*, 38(3), 53-67.
- Ferreira, J. J., Raposo, M. L., Rodrigues, R. G., Dinis, A., & do Paço, A. (2012). A model of entrepreneurial intention: An application of the psychological and behavioral approaches. *Journal of Small Business and Enterprise Development*, 19(3), 424-440. doi:10.1108/14626001211250144
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA, USA: Addison-Wesley.
- Fisher, G. (2012). Effectuation, causation, and bricolage: A behavioral comparison of emerging theories in entrepreneurship research. *Entrepreneurship Theory and Practice*, 36(5), 1019-1051. doi:10.1111/j.1540-6520.2012.00537.x
- Fleming, P., Watson, S. J., Patouris, E., Bartholomew, K. J., & Zizzo, D. J. (2017). Why do people file share unlawfully? A systematic review, meta-analysis and panel study. *Computers in Human Behavior*, 27, 535-548. doi:10.1016/j.chb.2017.02.014
- Fletcher, D. (2007). 'Toy Story': The narrative world of entrepreneurship and the creation of interpretive communities. *Journal of Business Venturing*, 22(5), 649-672. doi:10.1016/j.jbusvent.2006.10.001
- Fodor, O. C., & Pinteá, S. (2017). The "emotional side" of entrepreneurship: A meta-analysis of the relation between positive and negative affect and entrepreneurial performance. *Frontiers in Psychology*, 8:310. doi:10.3389/fpsyg.2017.00310
- Fornell, C. G., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. doi:10.2307/3151312
- Foro Económico Mundial. (2016). *The future of jobs: Employment, skills and workforce strategy for the Fourth Industrial Revolution*. Retrieved from <http://reports.weforum.org/future-of-jobs-2016/>
- Forsman, J. A., & Barth, J. M. (2017). The effect of occupational gender stereotypes on men's interest in female-dominated occupations. *Sex Roles*, 76, 460-472. doi:10.1007/s11199-016-0673-3

- Frese, M., & Gielnik, M. M. (2014). The psychology of entrepreneurship. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 413-438. doi:10.1146/annurev-orgpsych-031413-091326
- FUE (2012). *Educación emprendedora: servicios y programas de las universidades españolas*. Retrieved from Fundación Universidad - Empresa website: <https://www.fue.es/50545212/93124026060.pdf>
- Fuller-Love, N. (2006). Management development in small firms. *International Journal of Management Reviews*, 8(3), 175-190. doi:10.1111/j.1468-2370.2006.00125.x
- Gabriel, U., Gygax, P., Sarrasin, O., Garnham, A., & Oakhill, J. (2008). Au pairs are rarely male: Norms on the gender perception of role names across English, French, and German. *Behavior Research Methods*, 40(1), 206-212. doi:10.3758/BRM.40.1.206
- Gao, Y. L., Mattila, A. S., & Lee, S. (2016). A meta-analysis of behavioral intentions for environment-friendly initiatives in hospitality research. *International Journal of Hospitality Management*, 54, 107-115. doi:10.1016/j.ijhm.2016.01.010
- García-Ael, C., Cuadrado, I., & Molero, F. (2012). Think manager – think male vs. teoría del rol social: ¿Cómo percibimos a hombres y mujeres en el mundo laboral? *Estudios de Psicología*, 33(3), 347-357. doi:10.1174/021093912803758183
- García-Ael, C., Cuadrado, I., & Molero, F. (2013). Think manager – think male in adolescents and its relation to sexism and emotions in leadership. *Spanish Journal of Psychology*, 16, Published online. doi:10.1017/sjp.2013.88
- Gardner, B., & Abraham, C. (2008). Psychological correlates of car use: A meta-analysis. *Transportation Research Part F: Traffic Psychology and Behaviour*, 11(4), 300-311. doi:10.1016/j.trf.2008.01.004
- Gartner, W. B. (1989). "Who is an entrepreneur?" is the wrong question. *Entrepreneurship Theory and Practice*, 13(4), 47-67. doi:10.1177/104225878901300406
- Gatewood, E. J., Brush, C. G., Carter, N. M., Greene, P. G., & Hart, M. M. (2009). Diana: A symbol of women entrepreneurs' hunt for knowledge, money, and the rewards of entrepreneurship. *Small Business Economics*, 32(2), 129-144. doi:10.1007/s11187-008-9152-8
- Gawke, J. C., Gorgievski, M. J., & Bakker, A. B. (2017). Employee intrapreneurship and work engagement: A latent change score approach. *Journal of Vocational Behavior*, 100, 88-100. doi:10.1016/j.jvb.2017.03.002
- George, J. M. (2008). Creativity in organizations. In J. P. Walsh & A. P. Brief (Eds.), *The Academy of Management Annals* (Vol. 1, pp. 439-477). New York, NY, USA: Lawrence Erlbaum.
- Gielnik, M. M., Krämer, A. C., Kappel, B., & Frese, M. (2014). Antecedents of business opportunity identification and innovation: Investigating the interplay of information processing and

- information acquisition. *Applied Psychology*, 63(2), 344-381. doi:10.1111/j.1464-0597.2012.00528.x
- Godwin, L. N., Stevens, C. E., & Brenner, N. L. (2006). Forced to play by the rules? Theorizing how mixed-sex founding teams benefit women entrepreneurs in male-dominated contexts. *Entrepreneurship Theory and Practice*, 30(5), 623-642. doi:10.1111/j.1540-6520.2006.00139.x
- Gorgievski, M., & Stephan, U. (2016). Advancing the psychology of entrepreneurship: A review of the psychological literature and an introduction. *Applied Psychology*, 65(3), 437-468. doi:10.1111/apps.12073
- Gundry, L. K., Ofstein, L. F., & Kickul, J. R. (2014). Seeing around corners: How creativity skills in entrepreneurship education influence innovation in business. *The International Journal of Management Education*, 12, 529-538. doi:10.1016/j.ijme.2014.03.002
- Gupta, V. K., & Bhawe, N. M. (2007). The influence of proactive personality and stereotype threat on women's entrepreneurial intentions. *Journal of Leadership & Organizational Studies*, 13(4), 73-85. doi:10.1177/10717919070130040901
- Gupta, V. K., & Fernández, C. (2009). Cross-cultural similarities and differences in characteristics attributed to entrepreneurs: A three-nation study. *Journal of Leadership & Organizational Studies*, 15(3), 304-318. doi:10.1177/1548051808326036
- Gupta, V. K., Goktan, A. B., & Gunay, G. (2014). Gender differences in evaluation of new business opportunity: A stereotype threat perspective. *Journal of Business Venturing*, 29(2), 273-288. doi:10.1016/j.jbusvent.2013.02.002
- Gupta, V. K., Javadian, G., & Jalili, N. (2014). Role of entrepreneur gender and management style in influencing perceptions and behaviors of new recruits: Evidence from the Islamic Republic of Iran. *Journal of International Entrepreneurship*, 12(1), 85-109. doi:10.1007/s10843-014-0120-x
- Gupta, V. K., & Turban, D. B. (2012). Evaluation of new business ideas: Do gender stereotypes play a role? *Journal of Managerial Issues*, 24(2), 140-156.
- Gupta, V. K., Turban, D. B., & Bhawe, N. M. (2008). The effect of gender stereotype activation on entrepreneurial intentions. *Journal of Applied Psychology*, 93(5), 1053-1061. doi:10.1037/0021-9010.93.5.1053
- Gupta, V. K., Turban, D. B., & Pareek, A. (2013). Differences between men and women in opportunity evaluation as a function of gender stereotypes and stereotype activation. *Entrepreneurship Theory and Practice*, 37(4), 771-788. doi:10.1111/j.1540-6520.2012.00512.x
- Gupta, V. K., Turban, D. B., Wasti, S. A., & Sikdar, A. (2009). The role of gender stereotypes in perceptions of entrepreneurs and intentions to become an entrepreneur. *Entrepreneurship Theory and Practice*, 33(2), 397-417. doi:10.1111/j.1540-6520.2009.00296.x

- Haines, E. L., Deaux, K., & Lofaro, N. (2016). The times they are a-changing... or are they not? A comparison of gender stereotypes, 1983–2014. *Psychology of Women Quarterly*, *40*(3), 353-363. doi:10.1177/0361684316634081
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ, USA: Pearson Prentice Hall.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). Los Angeles, CA, USA: Sage.
- Hamidi, D. Y., Wennberg, K., & Berglund, H. (2008). Creativity in entrepreneurship education. *Journal of Small Business and Enterprise Development*, *15*(2), 304-320. doi:10.1108/14626000810871691
- Hamilton, E. (2013). The discourse of entrepreneurial masculinities (and femininities). *Entrepreneurship & Regional Development*, *25*(1-2), 90-99. doi:10.1080/08985626.2012.746879
- Hammond, M. M., Neff, N. L., Farr, J. L., Schwall, A. R., & Zhao, X. (2011). Predictors of individual-level innovation at work: A meta-analysis. *Psychology of Aesthetics, Creativity, and the Arts*, *5*(1), 90-105. doi:10.1037/a0018556
- Hancock, C., Pérez-Quintana, A., & Hormiga, E. (2014). Stereotypical notions of the entrepreneur: An analysis from a perspective of gender. *Journal of Promotion Management*, *20*(1), 82-94. doi:10.1080/10496491.2014.869100
- Hang, M., & van Weezel, A. (2007). Media and entrepreneurship: What do we know and where should we go? *Journal of Media Business Studies*, *4*(1), 51-70. doi:10.1080/16522354.2007.11073446
- Hartman, H. (1959). Managers and entrepreneurs: A useful distinction? *Administrative Science Quarterly*, *3*(4), 429-451.
- Haus, I., Steinmetz, H., Isidor, R., & Kabst, R. (2013). Gender effects on entrepreneurial intention: A meta-analytical structural equation model. *International Journal of Gender and Entrepreneurship*, *5*(2), 130-156. doi:10.1108/17566261311328828
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NJ, USA: Guilford Press.
- Heckhausen, H., & Gollwitzer, P. M. (1987). Thought contents and cognitive functioning in motivational versus volitional states of mind. *Motivation and Emotion*, *11*(2), 101-120. doi:10.1007/BF00992338
- Hechavarría, D. M., Terjesen, S. A., Stenholm, P., Brännback, M., & Lång, S. (2018). More than words: Do gendered linguistic structures widen the gender gap in entrepreneurial activity? *Entrepreneurship Theory and Practice*, Advance online publication. doi:10.1111/etap.12278
- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, *57*(4), 657-674. doi:10.1111/0022-4537.00234

- Heilman, M. E., Block, C. J., Martell, R. F., & Simon, M. C. (1989). Has anything changed? Current characterizations of men, women, and managers. *Journal of Applied Psychology, 74*(6), 935-942. doi:10.1037/0021-9010.74.6.935
- Heilman, M. E., & Chen, J. J. (2003). Entrepreneurship as a solution: The allure of self-employment for women and minorities. *Human Resource Management Review, 13*, 347-364. doi:10.1016/S1053-4822(03)00021-4
- Hennessey, B. A., & Amabile, T. M. (2010). Creativity. *Annual Review of Psychology, 61*, 569-598. doi:10.1146/annurev.psych.093008.100416
- Herrera, B., & Ortiz, C. (2010, May). *Estado del arte del emprendimiento en las Facultades de Administración en Bogotá: Investigación, promoción y formación en el período 2002 – 2007*. Paper presented at the IV Workshop formación de emprendedores universitarios. Red Emprendedorismo e Innovación en America Latina - Emprendesur, Ibagué, Colombia.
- Hindle, K., & Klyver, K. (2007). Exploring the relationship between media coverage and participation in entrepreneurship: Initial global evidence and research implications. *International Entrepreneurship and Management Journal, 3*(2), 217-242. doi:10.1007/s11365-006-0018-8
- Hofstede, G., Noorderhaven, N. G., Thurik, A. R., Uhlaner, L. M., Wennekers, A. R., & Wildeman, R. E. (2004). Culture's role in entrepreneurship: Self-employment out of dissatisfaction. In T. E. Brown & J. Ulijn (Eds.), *Innovation, entrepreneurship and culture: The interaction between technology, progress and economic growth* (pp. 162-203). Cheltenham, England: Edward Elgar.
- Hopp, C., & Stephan, U. (2012). The influence of socio-cultural environments on the performance of nascent entrepreneurs: Community culture, motivation, self-efficacy and start-up success. *Entrepreneurship & Regional Development, 24*(9-10), 917-945. doi:10.1080/08985626.2012.742326
- Horvath, L. K., Merkel, E. F., Maass, A., & Sczesny, S. (2016). Does gender-fair language pay off? The social perception of professions from a cross-linguistic perspective. *Frontiers in Psychology, 6*:2018. doi:10.3389/fpsyg.2015.02018
- Horvath, L. K., & Sczesny, S. (2016). Reducing women's lack of fit with leadership positions? Effects of the wording of job advertisements. *European Journal of Work and Organizational Psychology, 25*(2), 316-328. doi:10.1080/1359432X.2015.1067611
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. California, CA, USA: Sage.
- Hsu, M. H., Yen, C. H., Chiu, C. M., & Chang, C. M. (2006). A longitudinal investigation of continued online shopping behavior: An extension of the theory of planned behavior. *International Journal of Human-Computer Studies, 64*(9), 889-904. doi:10.1016/j.ijhcs.2006.04.004
- Hülshager, U. R., Anderson, N., & Salgado, J. F. (2009). Team-level predictors of innovation at work: A comprehensive meta-analysis spanning three decades of research. *Journal of Applied Psychology, 94*(5), 1128-1145. doi:10.1037/a0015978

- Hunter, S. T., Bedell, K. E., & Mumford, M. D. (2007). Climate for creativity: A quantitative review. *Creativity Research Journal*, 19(1), 69-90. doi:10.1080/10400410709336883
- Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education + Training*, 53(5), 353-370. doi:10.1108/00400911111147686
- INE (2018). *Tasas de empleo según niveles de educación. Brecha de género*. Retrieved from [http://www.ine.es/ss/Satellite?L=es\\_ES&c=INESeccion\\_C&cid=1259925461647&p=1254735110672&pagename=ProductosYServicios%2FPYSLayout&param1=PYSDetalle&param3=1259924822888](http://www.ine.es/ss/Satellite?L=es_ES&c=INESeccion_C&cid=1259925461647&p=1254735110672&pagename=ProductosYServicios%2FPYSLayout&param1=PYSDetalle&param3=1259924822888)
- Jaén, I., & Liñán, F. (2013). Work values in a changing economic environment: The role of entrepreneurial capital. *International Journal of Manpower*, 34(8), 939-960. doi:10.1108/IJM-07-2013-0166
- Jennings, J. E., & McDougald, M. S. (2007). Work-family interface experiences and coping strategies: Implications for entrepreneurship research and practice. *Academy of Management Review*, 32(3), 747-760. doi:10.5465/AMR.2007.25275510
- Kalden, J. N., Cunningham, J., & Anderson, A. R. (2017). The social status of entrepreneurs: Contrasting German perspectives. *The International Journal of Entrepreneurship and Innovation*, 18(2), 91-104. doi:10.1177/1465750317706439
- Karimi, S., Biemans, H. J. A., Lans, T., Chizari, M., Mulder, M., & Mahdei, K. N. (2013). Understanding role models and gender influences on entrepreneurial intentions among college students. *Procedia - Social and Behavioral Sciences*, 93, 204-214. doi:10.1016/j.sbspro.2013.09.179
- Kautonen, T., Down, S., Welter, F., Vainio, P., Palmroos, J., Althoff, K., & Kolb, S. (2010). "Involuntary self-employment" as a public policy issue: A cross-country European review. *International Journal of Entrepreneurial Behavior & Research*, 16(2), 112-129. doi:10.1108/13552551011027002
- Kautonen, T., Hatak, I., Kibler, E., & Wainwright, T. (2015). Emergence of entrepreneurial behaviour: The role of age-based self-image. *Journal of Economic Psychology*, 50, 41-51. doi:10.1016/j.joep.2015.07.004
- Kautonen, T., Tornikoski, E. T., & Kibler, E. (2011). Entrepreneurial intentions in the third age: The impact of perceived age norms. *Small Business Economics*, 37(2), 219-234. doi:10.1007/s11187-009-9238-y
- Kautonen, T., van Gelderen, M., & Matthias, F. (2015). Robustness of the theory of planned behavior in predicting entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 39(3), 655-674. doi:10.1111/etap.12056
- Kautonen, T., van Gelderen, M., & Tornikoski, E. T. (2013). Predicting entrepreneurial behaviour: A test of the theory of planned behaviour. *Applied Economics*, 45(6), 697-707. doi:10.1080/00036846.2011.610750



- Kelley, D., Brush, C., Greene, P., Herrington, M., Ali, A., & Kew, P. (2015). *Women's entrepreneurship (GEM special report)*. Retrieved from <http://www.gemconsortium.org/>
- Kelley, D., Singer, S., & Herrington, M. (2016). *Global Entrepreneurship Monitor 2015/16 global report*. Retrieved from <http://www.gemconsortium.org/report>
- Kelly, L., & Boyle, R. (2011). Business on television: Continuity, change, and risk in the development of television's "Business Entertainment Format". *Television & New Media*, 12(3), 228-247. doi:10.1177/1527476410372097
- Kibler, E., & Kautonen, T. (2016). The moral legitimacy of entrepreneurs: An analysis of early-stage entrepreneurship across 26 countries. *International Small Business Journal*, 34(1), 34-50. doi:10.1177/0266242614541844
- Knight, F. H. (1964). *Risk, uncertainty and profit* (Original work published in 1921). New York, NY, USA: Reprints of Economic Classics.
- Koenig, A. M., & Eagly, A. H. (2014). Evidence for the social role theory of stereotype content: Observations of groups' roles shape stereotypes. *Journal of Personality and Social Psychology*, 107(3), 371-392. doi:10.1037/a0037215
- Koenig, A. M., Eagly, A. H., Mitchell, A. A., & Ristikari, T. (2011). Are leader stereotypes masculine? A meta-analysis of three research paradigms. *Psychological Bulletin*, 137(4), 616-642. doi:10.1037/a0023557
- Kolvereid, L. (1996). Prediction of employment status choice intentions. *Entrepreneurship Theory and Practice*, 21(1), 47-58. doi:10.1177/104225879602100104
- Kolvereid, L., & Isaksen, E. (2006). New business start-up and subsequent entry into self-employment. *Journal of Business Venturing*, 21(6), 866-885. doi:10.1016/j.jbusvent.2005.06.008
- Kolvereid, L., & Isaksen, E. J. (2017). Expectations and achievements in new firms. *Journal of Small Business and Enterprise Development*, 24(3), 649-668. doi:10.1108/JSBED-11-2016-0189
- Kolvereid, L., & Moen, Ø. (1997). Entrepreneurship among business graduates: Does a major in entrepreneurship make a difference? *Journal of European Industrial Training*, 21(4), 154-160. doi:10.1108/03090599710171404
- Krueger, N. (1993). The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. *Entrepreneurship Theory and Practice*, 18(1), 5-21. doi:10.1177/104225879301800101
- Krueger, N. F. (2007). What lies beneath? The experiential essence of entrepreneurial thinking. *Entrepreneurship Theory and Practice*, 31(1), 123-138. doi:10.1111/j.1540-6520.2007.00166.x
- Krueger, N. F. (2009). Entrepreneurial intentions are dead: Long live entrepreneurial intentions. In A. Carsrud & M. Brannback (Eds.), *Understanding the entrepreneurial mind: Opening the black box* (pp. 51-72). New York, NJ, USA: Springer.

- Krueger, N. F., & Brazeal, D. V. (1994). Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship Theory and Practice*, 18(3), 91-104. doi:10.1177/104225879401800307
- Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship & Regional Development: An International Journal*, 5(4), 315-330. doi:10.1080/08985629300000020
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15, 411–432. doi:10.1016/S0883-9026(98)00033-0
- Kuratko, D. F. (2005). The emergence of entrepreneurship education: Development, trends, and challenges. *Entrepreneurship Theory and Practice*, 29(5), 577-597. doi:10.1111/j.1540-6520.2005.00099.x
- Küttim, M., Kallaste, M., Venesaar, U., & Kiis, A. (2014). Entrepreneurship education at university level and students' entrepreneurial intentions. *Procedia - Social and Behavioral Sciences*, 110, 658-668. doi:10.1016/j.sbspro.2013.12.910
- Laguía, A., & Moriano, J. A. (2018a, May). *Age-related decrease in entrepreneurial intention in Spain: Lost opportunities for bridge employment?* Paper presented at the 6th International Conference on Dynamics Games and Science 2018 (DGS-VI 2018) y 19ª Jornadas Latinoamericanas de Teoría Económica (Jolate-XIX), Madrid, Spain.
- Laguía, A., & Moriano, J. A. (2018b, November). *Influencia de la edad en la formación de la intención emprendedora y en el estereotipo de la persona emprendedora*. Paper presented at the V Congreso Internacional en Contextos Psicológicos, Educativos y de la Salud, Madrid, Spain.
- Laguía, A., Moriano, J. A., García-Ael, C., & Wach, D. (2018, October). *“Think entrepreneur – think male”: El rol de los estereotipos de género en la intención emprendedora en España y Alemania*. Poster presented at the III Congreso Internacional de la Sociedad Científica Española de Psicología y XIV Congreso Nacional de Psicología Social, Cuenca, Spain.
- Laguía, A., Moriano, J. A., Molero, F., & Gámez, J. A. (2017). Validación del Cuestionario de Intención Emprendedora en una muestra de estudiantes universitarios de Colombia [Validation of the Entrepreneurial Intention Questionnaire in a sample of university students from Colombia]. *Universitas Psychologica*, 16(1), 1-14. doi:10.11144/Javeriana.upsy16-1.vcie
- Laguía, A., Topa, G., & Moriano, J. A. (2018, October). *Edad cronológica y edad subjetiva, ¿coincide el año de nacimiento con la edad que percibimos que tenemos?* Poster presented at the III Congreso Internacional de la Sociedad Científica Española de Psicología y XIV Congreso Nacional de Psicología Social, Cuenca, Spain.
- Leahy, K. T., & Eggers, J. H. (1998). *Is gender still a factor in entrepreneurial leader behavior?* Paper presented at the 18th Annual Entrepreneurship Research Conference, Frontiers of Entrepreneurship Research 1998. Abstract retrieved from <http://fusionmx.babson.edu/entrep/fer/papers98/index98/index98.html>

- Lee, M.-C. (2009). Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. *Electronic Commerce Research and Applications*, 8(3), 130-141. doi:10.1016/j.elerap.2008.11.006
- Levie, J., Hart, M., & Karim, M. S. (2010). *Impact of media on entrepreneurial intentions and actions*. Retrieved from [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/32243/11-773-impact-of-media-entrepreneurial-intentions-actions.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/32243/11-773-impact-of-media-entrepreneurial-intentions-actions.pdf)
- Lévy-Magin, J.-P., Martín, M. T., & Román, M. V. (2006). Optimización según estructuras de covarianzas. In J.-P. Lévy-Mangin & J. Varela (Eds.), *Modelización con estructuras de covarianzas en ciencias sociales* (pp. 11-30). A Coruña, Spain: Netbiblo.
- Ley 14/2013, de 27 de septiembre, de apoyo a los emprendedores y su internacionalización, BOE nº 233, Jefatura del Estado, Gobierno de España. Retrieved from <https://www.boe.es/boe/dias/2013/09/28/pdfs/BOE-A-2013-10074.pdf>
- Ley 20/2007, de 11 de julio, del Estatuto del trabajo autónomo, BOE nº 166, Jefatura del Estado, Gobierno de España. Retrieved from <https://www.boe.es/buscar/pdf/2007/BOE-A-2007-13409-consolidado.pdf>
- Li, C., Bao, L., & Jiang, Q. (2013). Leadership styles of entrepreneurial women in eastern China: Characteristics and differences. *Social Behavior and Personality: An International Journal*, 41(3), 421-431. doi:10.2224/sbp.2013.41.3.421
- Lim, S., & Envick, B. R. (2013). Gender and entrepreneurial orientation: A multi-country study. *International Entrepreneurship and Management Journal*, 9(3), 465-482. doi:10.1007/s11365-011-0183-2
- Liñán, F. (2008). Skill and value perceptions: How do they affect entrepreneurial intentions? *International Entrepreneurship and Management Journal*, 4(3), 257-272. doi:s11365-008-0093-0
- Liñán, F., & Chen, Y.-W. (2006). Testing the entrepreneurial intention model on a two-country sample. *Documents de Treball. Universitat Autònoma de Barcelona, Departament d'Economia de l'Empresa*. Retrieved from <http://www.recercat.net/handle/2072/2213files/134/2213.html>
- Liñán, F., & Chen, Y.-W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617. doi:10.1111/j.1540-6520.2009.00318.x
- Liñán, F., & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions: Citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*, 11, 907-933. doi:10.1007/s11365-015-0356-5
- Liñán, F., Moriano, J. A., Romero, I., Rueda, S., Tejada, P., & Fernández, J. (2009, September). *VIE Project: Cultural values and socioeconomic factors as determinants of entrepreneurial intentions*. Paper presented at the ESU Conference 2009 on Entrepreneurship, Benevento, Italy. Paper retrieved from <http://institucional.us.es/vie/documentos/resultados/VIEProject202009.pdf>

- Liñán, F., Nabi, G., & Krueger, N. (2013). British and Spanish entrepreneurial intentions: A comparative study. *Revista de Economía Mundial*, 33, 73-103.
- Liñán, F., Rodríguez-Cohard, J. C., & Rueda-Cantuche, J. M. (2011). Factors affecting entrepreneurial intention levels: A role for education. *International Entrepreneurship and Management Journal*, 7(2), 195-218. doi:10.1007/s11365-010-0154-z
- Ljunggren, E., & Kolvereid, L. (1996). New business formation: Does gender make a difference? *Women in Management Review*, 11(4), 3-12. doi:10.1108/09649429610122096
- Loiola, E., Gondim, S. M. G., Prereira, C. R., & Ferreira, A. S. M. (2016). Ação planejada e intenção empreendedora entre universitários: Analisando preditores e mediadores. *Revista Psicologia: Organizações e Trabalho*, 16(1), 22-35. doi:10.17652/rpot/2016.1.706
- López-Sáez, M. (1994). Procesos culturales e individuales implicados en la estereotipia de género. Una aproximación empírica a la elección de carrera [Cultural and individual processes involved in gender stereotyping. An empirical study of career selection]. *Revista de Psicología Social*, 9(2), 213-230. doi:10.1174/021347494763490287
- López-Sáez, M., Morales, J. F., & Lisbona, A. (2008). Evolution of gender stereotypes in Spain: Traits and roles. *The Spanish Journal of Psychology*, 11(2), 609-617. doi:10.1017/S1138741600004613
- López-Zafra, E., & García-Retamero, R. (2012). Do gender stereotypes change? The dynamic of gender stereotypes in Spain. *Journal of Gender Studies*, 21(2), 169-183. doi:10.1080/09589236.2012.661580
- Lorenzo-Seva, U., & Ferrando, P. J. (2006). FACTOR: A computer program to fit the exploratory factor analysis model. *Behavior Research Methods*, 38(1), 88-91. doi:10.3758/BF03192753
- Lortie, J., & Castogiovanni, G. (2015). The theory of planned behavior in entrepreneurship research: What we know and future directions. *International Entrepreneurship and Management Journal*, 11, 935-957. doi:10.1007/s11365-015-0358-3
- Lüthje, C., & Franke, N. (2003). The 'making' of an entrepreneur: Testing a model of entrepreneurial intent among engineering students at MIT. *R&D Management*, 33(2), 135-147. doi:10.1111/1467-9310.00288
- Madjar, N. (2008). Emotional and informational support from different sources and employee creativity. *Journal of Occupational and Organizational Psychology*, 81, 83-100. doi:10.1348/096317907X202464
- Maes, J., Leroy, H., & Sels, L. (2014). Gender differences in entrepreneurial intentions: A TPB multi-group analysis at factor and indicator level. *European Management Journal*, 32(5), 784-794. doi:10.1016/j.emj.2014.01.001
- Maio, G. R., & Haddock, G. (2015). *The psychology of attitudes and attitude change* (2nd ed.). London, England: Sage.

- Mair, J., & Martí, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41, 36-44. doi:10.1016/jwb.2005.09.002
- Malach-Pines, A., Levy, H., Utasi, A., & Hill, T. L. (2005). Entrepreneurs as cultural heroes: A cross-cultural, interdisciplinary perspective. *Journal of Managerial Psychology*, 20(6), 541-555. doi:10.1108/02683940510615460
- Malmström, M., Johansson, J., & Wincent, J. (2017). Gender stereotypes and venture support decisions: How governmental venture capitalists socially construct entrepreneurs' potential. *Entrepreneurship Theory and Practice*, 41, 833-860. doi:10.1111/etap.12275
- Man, T. W. Y., Lau, T., & Snape, E. (2008). Entrepreneurial competencies and the performance of small and medium enterprises: An investigation through a framework of competitiveness. *Journal of Small Business & Entrepreneurship*, 21(3), 257-276. doi:10.1080/08276331.2008.10593424
- Marlow, S. (2002). Women and self-employment: A part of or apart from theoretical construct? *The International Journal of Entrepreneurship and Innovation*, 3(2), 83-91. doi:10.5367/000000002101299088
- Marlow, S., & McAdam, M. (2012). Analyzing the influence of gender upon high-technology venturing within the context of business incubation. *Entrepreneurship Theory and Practice*, 36, 655-676. doi:10.1111/j.1540-6520.2010.00431.x
- Martens, M. L., Jennings, J. E., & Jennings, P. D. (2007). Do the stories they tell get them the money they need? The role of entrepreneurial narratives in resource acquisition. *Academy of Management Journal*, 50(5), 1107-1132. doi:10.5465/amj.2007.27169488
- Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, 28(2), 211-224. doi:10.1016/j.jbusvent.2012.03.002
- McClelland, D. C. (1965). Need achievement and entrepreneurship: A longitudinal study. *Journal of Personality and Social Psychology*, 1, 389-392.
- McDermott, M. S., Oliver, M., Simnadis, T., Beck, E. J., Coltman, T., Iverson, D., . . . Sharma, R. (2015). The theory of planned behaviour and dietary patterns: A systematic review and meta-analysis. *Preventive Medicine*, 81, 150-156. doi:10.1016/j.ypmed.2015.08.020
- McEachan, R. R. C., Conner, M., Taylor, N. J., & Lawton, R. J. (2011). Prospective prediction of health-related behaviours with the theory of planned behaviour: A meta-analysis. *Health Psychology Review*, 5(2), 97-144. doi:10.1080/17437199.2010.521684
- McNally, J. J., Martin, B. C., Honig, B., Bergmann, H., & Piperopoulos, P. (2016). Toward rigor and parsimony: A primary validation of Kolvereid's (1996) entrepreneurial attitudes scales. *Entrepreneurship & Regional Development*, 28(5-6), 358-379. doi:10.1080/08985626.2016.1154985

- MINETUR (2012). *Educación emprendedora: buenas prácticas en la universidad española*. Retrieved from Fundación Universidad - Empresa website: <https://www.fue.es/50545212/69547671079.pdf>
- Minniti, M. (2009). Gender issues in entrepreneurship. *Foundations and Trends® in Entrepreneurship*, 5(7-8), 469-621. doi:10.1561/03000000021
- Mitchelmore, S., & Rowley, J. (2013). Entrepreneurial competencies of women entrepreneurs pursuing business growth. *Journal of Small Business and Enterprise Development*, 20(1), 125-142. doi:10.1108/14626001311298448
- Mockros, C. A., & Csikszentmihalyi, M. (2014). The social construction of creative lives. In M. Csikszentmihalyi (Ed.), *The systems model of creativity: The collected works of Mihaly Csikszentmihalyi* (pp. 127-160). Dordrecht, the Netherlands: Springer.
- Moore, S., & Newsome, K. J. (2018). Paying for free delivery: Dependent self-employment as a measure of precarity in parcel delivery. *Work, Employment and Society*, 32(3), 475-492. doi:10.1177/0950017018755664
- Moriano, J. A. (2005). *El perfil psicosocial del emprendedor [The psychosocial profile of the entrepreneur]*. Madrid, Spain: Consejo Económico y Social.
- Moriano, J. A. (2012). La conducta emprendedora. In C. M. Alcover de la Hera, J. A. Moriano León, A. Osca Segovia, & G. Topa Cantisano (Eds.), *Psicología del Trabajo* (pp. 205-252). Madrid, Spain: UNED.
- Moriano, J. A., Gómez, A., Laguna, M., & Roznowski, B. (2008). Validación de un cuestionario para medir la intención emprendedora. Una aplicación en España y Polonia. In J. F. Morales, C. Huici, A. Gómez, & E. Gaviria (Eds.), *Método, teoría e investigación en Psicología Social* (pp. 101-121). Madrid, Spain: Pearson.
- Moriano, J. A., Gorgievski, M., Laguna, M., Stephan, U., & Zarafshani, K. (2012). A cross-cultural approach to understanding entrepreneurial intention. *Journal of Career Development*, 39(2), 162-185. doi:10.1177/0894845310384481
- Moriano, J. A., Palací, F. J., & Morales, J. F. (2006a). Adaptación y validación en España de la escala de Autoeficacia Emprendedora [Adaptation and validation of Entrepreneurial Self-Efficacy scale in Spain]. *Revista de Psicología Social*, 21(1), 51-64. doi:10.1174/021347406775322223
- Moriano, J. A., Palací, F. J., & Morales, J. F. (2006b). El perfil psicosocial del emprendedor universitario. *Revista de Psicología del Trabajo y de las Organizaciones*, 22(1), 75-99.
- Moriano, J. A., Topa, G., Valero, E., & Lévy, J.-P. (2009). Identificación organizacional y conducta "intraemprendedora". *Anales de Psicología*, 25(2), 277-287.
- Morren, M., & Grinstein, A. (2016). Explaining environmental behavior across borders: A meta-analysis. *Journal of Environmental Psychology*, 47, 91-106. doi:10.1016/j.jenvp.2016.05.003

- Mueller, S. L., & Conway Dato-on, M. (2013). A cross cultural study of gender-role orientation and entrepreneurial self-efficacy. *International Entrepreneurship and Management Journal*, 9(1), 1-20. doi:10.1007/s11365-011-0187-y
- Muñoz Sastre, M. T., Fouquereau, E., Igier, V., Salvatore, N., & Mullet, E. (2000). Perception of occupational gender typing: A replication on European samples of Shinar's (1975) and Beggs and Doolittle's (1993) studies. *Journal of Applied Social Psychology*, 30(2), 430-441. doi:10.1111/j.1559-1816.2000.tb02324.x
- Nabi, G., & Liñán, F. (2013). Considering business start-up in recession time: The role of risk perception and economic context in shaping the entrepreneurial intent. *International Journal of Entrepreneurial Behaviour & Research*, 19(6), 633-655. doi:10.1108/IJEBR-10-2012-0107
- Nabi, G., Walmsley, A., Liñán, F., Akhtar, I., & Neame, C. (2016). Does entrepreneurship education in the first year of higher education develop entrepreneurial intentions? The role of learning and inspiration. *Studies in Higher Education*, 43(3), 452-467. doi:10.1080/03075079.2016.1177716
- Navajas-Romero, V., López-Martín, M. C., & Ariza-Montes, A. (2017). Los trabajadores autónomos dependientes en Europa. *CIRIEC-España, Revista de Economía Pública, Social y Cooperativa*, 89, 167-198.
- Neumeyer, X., Santos, S. C., Caetano, A., & Kalbfleisch, P. (2018). Entrepreneurship ecosystems and women entrepreneurs: A social capital and network approach. *Small Business Economics*. Advance online publication. doi:10.1007/s11187-018-9996-5
- Nicholson, L., & Anderson, A. R. (2005). News and nuances of the entrepreneurial myth and metaphor: Linguistic games in entrepreneurial sense-making and sense-giving. *Entrepreneurship Theory and Practice*, 29(2), 153-172. doi:10.1111/j.1540-6520.2005.00074.x
- Nitzl, C., Roldán, J. L., & Cepeda, G. (2016). Mediation analysis in partial least squares path modeling: Helping researchers discuss more sophisticated models. *Industrial Management & Data Systems*, 116(9), 1849-1864. doi:10.1108/IMDS-07-2015-0302
- Noar, S. M. (2006). A 10-year retrospective of research in health mass media campaigns: Where do we go from here? *Journal of Health Communication*, 11(1), 21-42. doi:10.1080/10810730500461059
- Nunnally, J. C. (1978). *Psychometric theory*. New York, NY, USA: McGraw-Hill.
- Obschonka, M., Goethner, M., Silbereisen, R. K., & Cantner, U. (2012). Social identity and the transition to entrepreneurship: The role of group identification with workplace peers. *Journal of Vocational Behavior*, 80, 137-147. doi:10.1016/j.jvb.2011.05.007
- Obschonka, M., Silbereisen, R. K., Cantner, U., & Goethner, M. (2015). Entrepreneurial self-identity: Predictors and effects within the theory of planned behavior framework. *Journal of Business and Psychology*, 30, 773-794. doi:10.1007/s10869-014-9385-2

- OCDE (2004). *Fostering entrepreneurship and firm creation as a driver of growth in a global economy*. Retrieved from <http://www.oecd.org/cfe/smes/31917899.pdf>
- Oliveira, B., Moriano, J. A., Laguía, A., & Soares, V. J. S. (2015). El perfil psicossocial del emprendedor: Un estudio desde la perspectiva de género [The psychosocial profile of the entrepreneur: A study from the point of view of gender]. *Anuario de Psicología*, 45(3), 301-315.
- Oliveira, B., Vieira, D., Laguía, A., Moriano, J. A., & Soares, V. J. S. (2016). Intenção empreendedora em estudantes universitários: Adaptação e validação de uma escala (QIE). *Avaliação Psicológica*, 15(2), 187-196. doi:10.15689/ap.2016.1502.07
- Omoredede, A., Thorgren, S., & Wincent, J. (2015). Entrepreneurship psychology: A review. *International Entrepreneurship and Management Journal*, 11, 743-768. doi:10.1007/s11365-014-0307-6
- Onstenk, J. (2003). Entrepreneurship and vocational education. *European Educational Research Journal*, 2(1), 74-89. doi:10.2304/eeerj.2003.2.1.12
- Orser, B. J., Elliott, C., & Leck, J. (2011). Feminist attributes and entrepreneurial identity. *Gender in Management: An International Journal*, 26(8), 561-589. doi:10.1108/175424111111183884
- Packham, G., Jones, P., Miller, C., Pickernell, D., & Thomas, B. (2010). Attitudes towards entrepreneurship education: A comparative analysis. *Education + Training*, 52(8/9), 568-586. doi:10.1108/00400911011088926
- Pardo, A., Ruiz, M. A., & San Martín, R. (2007). Cómo ajustar e interpretar modelos multinivel con SPSS. *Psicothema*, 19(2), 308-321.
- Pennings, J. M. E., & Wansink, B. (2004). Channel contract behavior: The role of risk attitudes, risk perceptions, and channel members' market structures. *The Journal of Business*, 77(4), 697-724. doi:10.1086/422633
- Peña, I., Guerrero, M., & González-Pernía, J. L. (2015). *Global Entrepreneurship Monitor: Informe GEM España 2014*. Retrieved from <http://www.gem-spain.com/>
- Peña, I., Guerrero, M., González-Pernía, J. L., & Montero, J. (2018). *Global Entrepreneurship Monitor: Informe GEM España 2017-2018*. Retrieved from <http://www.gem-spain.com/>
- Pérez-Quintana, A., Hormiga, E., Martori, J. C., & Madariaga, R. (2017). The influence of sex and gender-role orientation in the decision to become an entrepreneur. *International Journal of Gender and Entrepreneurship*, 9(1), 8-30. doi:10.1108/IJGE-12-2015-0047
- Perry, A., & Karpova, E. (2017). Efficacy of teaching creative thinking skills: A comparison of multiple creativity assessments. *Thinking Skills and Creativity*, 24, 118-126. doi:10.1016/j.tsc.2017.02.017
- Peterman, N. E., & Kennedy, J. (2003). Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship Theory and Practice*, 28(2), 129-144. doi:10.1046/j.1540-6520.2003.00035.x



- Petter, S., Straub, D., & Rai, A. (2007). Specifying formative constructs in information systems research. *MIS Quarterly*, 31(4), 623-656. doi:10.2307/25148814
- Petty, R. E., Briñol, P., & Priester, J. R. (2009). Mass media attitude change: Implications on the Elaboration Likelihood Model of persuasion. In J. Bryant & M. B. Oliver (Eds.), *Media effects: Advances in theory and reseach* (3rd ed., pp. 125-164). New York, NY, USA: Routledge.
- Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 19, pp. 123-205). Orlando, FL, USA: Academic Press.
- Phan, P., Zhou, J., & Abrahamson, E. (2010). Creativity, innovation, and entrepreneurship in China. *Management and Organization Review*, 6(2), 175-194. doi:10.1111/j.1740-8784.2010.00181.x
- Phipps, S. T. A., & Prieto, L. C. (2015). Women versus men in entrepreneurship: A comparison of the sexes on creativity, political skill, and entrepreneurial intentions. *Academy of Entrepreneurship Journal*, 21(1), 32-43.
- Pinchot, G., & Pellman, R. (1999). *Intrapreneuring in action: A handbook for business innovation*. San Francisco, CA, USA: Berrett-Koehler Publishers.
- Pratkanis, A. R., Breckler, S. J., & Greenwald, A. G. (2014). *Attitude, structure and function*. New York, NY, USA: Psychology Press.
- Prentice, D. A., & Carranza, E. (2002). What women and men should be, shouldn't be, are allowed to be, and don't have to be: The contents of prescriptive gender stereotypes. *Psychology of Women Quarterly*, 26(4), 269-281. doi:10.1111/1471-6402.t01-1-00066
- Putman, J. C. (2013). To boldly go where no history teacher has gone before. *The History Teacher*, 46(4), 509-529.
- Radu, M., & Redien-Collot, R. (2008). The social representation of entrepreneurs in the French press: Desirable and feasible models? *International Small Business Journal*, 26(3), 259-298. doi:10.1177/0266242608088739
- Raffiee, J., & Feng, J. (2014). Should I quit my day job? A hybrid path to entrepreneurship. *Academy of Management Journal*, 57(4), 936-963. doi:10.5465/amj.2012.0522
- Rauch, A., & Frese, M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *European Journal of Work and Organizational Psychology*, 16(4), 353-385. doi:10.1080/13594320701595438
- Read, S., Song, M., & Smit, W. (2009). A meta-analytic review of effectuation and venture performance. *Journal of Business Venturing*, 24(6), 573-587. doi:10.1016/j.jbusvent.2008.02.005
- Real Decreto-ley 4/2013, de 22 de febrero, de medidas de apoyo al emprendedor y de estímulo del crecimiento y de la creación de empleo, BOE nº 47, Jefatura del Estado, Gobierno de España. Retrieved from <https://www.boe.es/boe/dias/2013/02/23/pdfs/BOE-A-2013-2030.pdf>

- Real Decreto 126/2014, de 28 de febrero, por el que se establece el currículo básico de la Educación Primaria, BOE nº 52, Ministerio de Educación, Cultura y Deporte. Retrieved from <http://www.boe.es/boe/dias/2014/03/01/pdfs/BOE-A-2014-2222.pdf>
- Real Decreto 1105/2014, de 26 de diciembre, por el que se establece el currículo básico de la Educación Secundaria Obligatoria y del Bachillerato, BOE nº 3, Ministerio de Educación, Cultura y Deporte. Retrieved from <https://www.boe.es/boe/dias/2015/01/03/pdfs/BOE-A-2015-37.pdf>
- Riebl, S. K., Estabrooks, P. A., Dunsmore, J. C., Savla, J., Frisard, M. I., Dietrich, A. M., . . . Davy, B. M. (2015). A systematic literature review and meta-analysis: The theory of planned behavior's application to understand and predict nutrition-related behaviors in youth. *Eating Behaviors, 18*, 160-178. doi:10.1016/j.eatbeh.2015.05.016
- Ringle, C. M., Wende, S., & Becker, J.-M. (2015). SmartPLS 3 [Software]. Boenningstedt, Germany: SmartPLS GmbH. Retrieved from <http://www.smartpls.com>
- Robinson, P. B., Stimpson, D. V., Huefner, J. C., & Hunt, H. K. (1991). An attitude approach to the prediction of entrepreneurship. *Entrepreneurship Theory and Practice, 15*(4), 13-31. doi:10.1177/104225879101500405
- Rodríguez Batalla, F. (2015). *Estudio de la intención emprendedora en el ámbito científico público. El caso de las ciencias de la vida en España* (Doctoral thesis, Universitat Politècnica de València, Valencia, Spain). Retrieved from <https://riunet.upv.es/bitstream/handle/10251/54117/RODR%C3%8DGUEZ%20-%20Estudio%20de%20la%20intenci%C3%B3n%20emprenedora%20en%20el%20%C3%A1mbito%20cient%C3%ADfico%20p%C3%ABlico.%20El%20caso%20de%20las%20....pdf?sequence=1>
- Rueda, S., Moriano, J. A., & Liñán, F. (2015). Validating a theory of planned behavior questionnaire to measure entrepreneurial intentions. In A. Fayolle, P. Kyrö, & F. Liñán (Eds.), *Developing, shaping and growing entrepreneurship* (pp. 60-78). Cheltenham, England: Edward Elgar.
- Ryan, M. K., Haslam, S. A., Hersby, M. D., & Bongiorno, R. (2011). Think crisis – think female: Glass cliffs and contextual variation in the think manager – think male stereotype. *Journal of Applied Psychology, 96*, 470-484. doi:10.1037/e6333962013-515
- Salazar-Carvajal, P. F., Herrera-Sánchez, I. M., Rueda-Méndez, S., & León-Rubio, J. M. (2014). El efecto de la conservación de recursos sobre la intención emprendedora en el contexto de crisis económica: El rol moderador de la autoeficacia y la creatividad. *Anales de Psicología, 30*(2), 549-559. doi:10.6018/analesps.30.2.159281
- Sánchez García, J. C., Boada-Grau, J., Prizmic-Kuzmica, A.-J., & Hernández-Sánchez, B. (2014). Psychometric properties and the factor structure of the Spanish version of the Cognitive Adaptability Scale (MAC). *Universitas Psychologica, 13*(1), 311-320. doi:10.11144/Javeriana.UPSY13-1.ppps
- Santos, S. C., Caetano, A., Spagnoli, P., Costa, S. F., & Neumeier, X. (2017). Predictors of entrepreneurial activity before and during the European economic crisis. *International*

- Entrepreneurship and Management Journal*, 13(4), 1263-1288. doi:10.1007/s11365-017-0453-8
- Sarasvathy, S. D. (2014). The whole deal: Models, metaphors and mechanisms in entrepreneurial cognition. In J. R. Mitchell, R. K. Mitchell, & B. Randolph-Seng (Eds.), *Handbook of entrepreneurial cognition* (pp. 448-470). Cheltenham, England: Edward Elgar.
- Satorra, A., & Bentler, P. M. (1994). Corrections to test statistics and standard errors in covariance structure analysis. In A. von Eye & C. C. Clogg (Eds.), *Latent variables analysis: Applications to developmental research* (pp. 399-419). Thousand Oaks, CA, USA: Sage.
- Schein, V. E. (1973). The relationship between sex role stereotypes and requisite management characteristics. *Journal of Applied Psychology*, 57(2), 95-100. doi:10.1037/h0037128
- Schein, V. E. (1975). Relationships between sex role stereotypes and requisite management characteristics among female managers. *Journal of Applied Psychology*, 60(3), 340-344. doi:10.1037/h0076637
- Schein, V. E. (2001). A global look at psychological barriers to women's progress in management. *Journal of Social Issues*, 57(4), 675-688. doi:10.1111/0022-4537.00235
- Schein, V. E., & Mueller, R. (1992). Sex role stereotyping and requisite management characteristics: A cross cultural look. *Journal of Organizational Behavior*, 13(5), 439-447. doi:10.1002/job.4030130502
- Schein, V. E., Mueller, R., Lituchy, T., & Liu, J. (1996). Think manager - think male: A global phenomenon? *Journal of Organizational Behavior*, 17(1), 33-41. doi:10.1002/(SICI)1099-1379(199601)17:1<33::AID-JOB778>3.0.CO;2-F
- Schlaegel, C., & Koenig, M. (2014). Determinants of entrepreneurial intent: A meta-analytic test and integration of competing models. *Entrepreneurship Theory and Practice*, 38(2), 291-332 doi:10.1111/etap.12087
- Schumpeter, J. A. (1968). *The theory of economic development* (Original work published in 1934). Cambridge, MA, USA: Harvard University Press.
- Sczesny, S. (2003). A closer look beneath the surface: Various facets of the think manager – think male stereotype. *Sex Roles*, 49(7/8), 353-363. doi:10.1023/A:1025112204526
- Sczesny, S., Bosak, J., Neff, D., & Schyns, B. (2004). Gender stereotypes and the attribution of leadership traits: A cross-cultural comparison. *Sex Roles*, 51(11-12), 631-645. doi:10.1007/s11199-004-0715-0
- Sczesny, S., Formanowicz, M., & Moser, F. (2016). Can gender-fair language reduce gender stereotyping and discrimination? *Frontiers in Psychology*, 7:25. doi:10.3389/fpsyg.2016.00025
- Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behavior & Research*, 11(1), 42-57. doi:10.1108/13552550510580834

- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226. doi:10.5465/AMR.2000.2791611
- Shapero, A. (1975). The displaced, uncomfortable entrepreneur. *Psychology Today*, 9, 83-88.
- Shapero, A., & Sokol, L. (1982). The social dimensions of entrepreneurship. In C. A. Kent, D. L. Sexton, & K. H. Vesper (Eds.), *Encyclopedia of entrepreneurship* (pp. 72-90). Englewood Cliffs, NJ, USA: Prentice Hall.
- Shirokova, G., Osiyevskyy, O., & Bogatyreva, K. (2016). Exploring the intention-behavior link in student entrepreneurship: Moderating effects of individual and environmental characteristics. *European Management Journal*, 34(4), 386–399. doi:10.1016/j.emj.2015.12.007
- Sieger, P., Fueglistaller, U., & Zellweger, T. (2014). *Student entrepreneurship across the globe: A look at intentions and activities. International Report of the GUESSS Project 2013/2014*. Retrieved from <http://www.guesssurvey.org/publications/publications/international-reports.html>
- Sieger, P., Fueglistaller, U., & Zellweger, T. (2016). *Student Entrepreneurship 2016: Insights from 50 countries*. Retrieved from <http://www.guesssurvey.org/publications/publications/international-reports.html>
- Silvia, P. J., Wigert, B., Reiter-Palmon, R., & Kaufman, J. C. (2012). Assessing creativity with self-report scales: A review and empirical evaluation. *Psychology of Aesthetics, Creativity, and the Arts*, 6(1), 19-34. doi:10.1037/a0024071
- Simmons, S. A., Wiklund, J., & Levie, J. (2014). Stigma and business failure: Implications for entrepreneurs' career choices. *Small Business Economics*, 42(3), 485-505. doi:10.1007/s11187-013-9519-3
- Simon, M., Houghton, S. M., & Aquino, K. (2000). Cognitive biases, risk perception, and venture formation: How individuals decide to start companies. *Journal of Business Venturing*, 15(2), 113-134. doi:10.1016/S0883-9026(98)00003-2
- Singer, S., Herrington, M., & Menipaz, E. (2018). *Global Entrepreneurship Monitor: Global report 2017/2018*. Retrieved from <http://www.gemconsortium.org/report>
- Singh, G., & De Noble, A. (2003). Early retirees as the next generation of entrepreneurs. *Entrepreneurship Theory and Practice*, 27(3), 207-226. doi:10.1111/1540-8520.t01-1-00001
- Smeding, A. (2012). Women in science, technology, engineering, and mathematics (STEM): An investigation of their implicit gender stereotypes and stereotypes' connectedness to math performance. *Sex Roles*, 67, 617-629. doi:10.1007/s11199-012-0209-4
- Smith, R. M., Sardeshmukh, S. R., & Combs, G. M. (2016). Understanding gender, creativity, and entrepreneurial intentions. *Education + Training*, 58(3), 263-282. doi:10.1108/ET-06-2015-0044
- Snavely, W. B., & McNeill, J. D. (2008). Communicator style and social style: Testing a theoretical interface. *Journal of Leadership & Organizational Studies*, 14(3), 219-232. doi:10.1177/1071791907308464

- Sniehotta, F. F., Pesseau, J., & Araújo-Soares, V. (2014). Time to retire the theory of planned behaviour. *Health Psychology Review, 8*(1), 1-7. doi:10.1080/17437199.2013.869710
- Solesvik, M. Z., Westhead, P., Kolvereid, L., & Matlay, H. (2012). Student intentions to become self-employed: The Ukrainian context. *Journal of Small Business and Enterprise Development, 19*(3), 441-460. doi:10.1108/14626001211250153
- Solórzano-García, M., & Navío-Marco, J. (in press). Developing social entrepreneurs through distance education: The value of commitment and interactivity with the learning community. *International Journal of Mobile Learning and Organisation*. doi:10.1504/IJMLO.2019.10016602
- Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing, 22*(4), 566-591. doi:10.1016/j.jbusvent.2006.05.002
- Spagnoli, P., Caetano, A., & Santos, S. C. (2015). Entrepreneurial self-efficacy in Italy: An empirical study from a gender perspective. *Testing, Psychometrics, Methodology in Applied Psychology, 22*, 485-506. doi:10.4473/TPM22.4.4
- Stead, M., Tagg, S., MacKintosh, A. M., & Eadie, D. (2004). Development and evaluation of a mass media theory of planned behaviour intervention to reduce speeding. *Health Education Research, 20*(1), 36-50. doi:10.1093/her/cyg093
- Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. *Advances in Experimental Social Psychology, 34*, 379-440. doi:10.1016/S0065-2601(02)80009-0
- Steenkamp, J.-B. E. M., & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research, 25*(1), 78-90. doi:10.1086/209528
- Steffens, P. R., Weeks, C. S., Davidsson, P., & Isaak, L. (2014). Shouting from the ivory tower: A marketing approach to improve communication of academic research to entrepreneurs. *Entrepreneurship Theory and Practice, 38*(2), 399-426. doi:10.1111/etap.12079
- Stephan, U., & Drencheva, A. (2017). The person in social entrepreneurship: A systematic review of research on the social entrepreneurial personality. In G. Ahmetoglu, T. Chamorro-Premuzic, B. Klinger, & T. Karcisky (Eds.), *The Wiley handbook of entrepreneurship* (pp. 205-229). Chichester, England: John Wiley.
- Stephan, U., Lukes, M., Dej, D., & Richter, P. G. (2007). Attitudes towards and perceptions of entrepreneurs in Central Eastern Europe (Poland, the Czech Republic, and East-Germany). In G. Zheng, K. Leung, & J. G. Adair (Eds.), *Perspectives and progress in contemporary cross-cultural psychology: Selected papers from the seventeenth International Congress of the International Association for Cross-Cultural Psychology* (online ed., pp. 173-191). Beijing, China: Industry Press.

- Subdirección General de Apoyo a la PYME. (2018). *Cifras PyME. Datos enero 2018*. Retrieved from <http://www.ipyme.org/es-ES/ApWeb/EstadisticasPYME/Documents/CifrasPYME-enero2018.pdf>
- Sümer, H. C. (2006). Women in management: Still waiting to be full members of the club. *Sex Roles*, 55(1-2), 63-72. doi:10.1007/s11199-006-9059-2
- Swail, J., Down, S., & Kautonen, T. (2014). Examining the effect of 'entre-tainment' as a cultural influence on entrepreneurial intentions. *International Small Business Journal: Researching Entrepreneurship*, 32(8), 859-875. doi:10.1177/0266242613480193
- Thompson, E. R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice*, 33(3), 669-694. doi:10.1111/j.1540-6520.2009.00321.x
- Thorgren, S., Nordstrom, C., & Wincent, J. (2014). Hybrid entrepreneurship: The importance of passion. *Baltic Journal of Management*, 9(3), 314-329. doi:10.1108/BJM-11-2013-0175
- Thorgren, S., Sirén, C., Nordström, C., & Wincent, J. (2016). Hybrid entrepreneurs' second-step choice: The nonlinear relationship between age and intention to enter full-time entrepreneurship. *Journal of Business Venturing Insights*, 5, 14-18. doi:10.1016/j.jbvi.2015.12.001
- Thörnquist, A. (2015). False self-employment and other precarious forms of employment in the 'grey area' of the labour market. *International Journal of Comparative Labour Law and Industrial Relations*, 31(4), 411-429.
- Tkachev, A., & Kolvereid, L. (1999). Self-employment intentions among Russian students. *Entrepreneurship & Regional Development*, 11(3), 269-280. doi:10.1080/089856299283209
- Toledano, N., & Urbano, D. (2008). Promoting entrepreneurial mindsets at universities: A case study in the South of Spain. *European Journal of International Management*, 2(4), 382-399. doi:10.1504/EJIM.2008.021244
- Tornikoski, E. T., Viljamaa, A., & Varamäki, E. (2015). Hybrid entrepreneurship during retirement: Comparison of motives and aspirations. In N. Sappleton & F. Lourenço (Eds.), *Entrepreneurship, self-employment and retirement* (pp. 187-208). London, England: Palgrave Macmillan.
- UNESCO (2011). *Priority gender equality guidelines*. Retrieved from [http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/BSP/GENDER/GE%20Guidelines%20December%2020\\_FINAL.pdf](http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/BSP/GENDER/GE%20Guidelines%20December%2020_FINAL.pdf)
- Valliere, D., & Steele, M. (2015). An improved measure of entrepreneurial intent: A Jamaica-Canada perspective. *Journal of Eastern Caribbean Studies*, 40(2), 42-62.
- van der Sluis, J., van Praag, M., & Vijverberg, W. (2008). Education and entrepreneurship selection and performance: A review of the empirical literature. *Journal of Economic Surveys*, 22(5), 795-841. doi:10.1111/j.1467-6419.2008.00550.x

- van der Zwan, P., Thurik, R., Verheul, I., & Hessels, J. (2016). Factors influencing the entrepreneurial engagement of opportunity and necessity entrepreneurs. *Eurasian Business Review*, 6(3), 273-295. doi:10.1007/s40821-016-0065-1
- van Gelderen, M., Brand, M., van Praag, M., Bodewes, W., Poutsma, E., & van Gils, A. (2008). Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International*, 13(6), 538-559. doi:10.1108/13620430810901688
- van Gelderen, M., Kautonen, T., & Fink, M. (2015). From entrepreneurial intentions to actions: Self-control and action-related doubt, fear, and aversion. *Journal of Business Venturing*, 30(5), 655-673. doi:10.1016/j.jbusvent.2015.01.003
- Varamäki, E., Joensuu, S., Viljamaa, A., & Tornikoski, E. (2012). Changes in entrepreneurial intentions of university and vocational school students. In N. Delener, L. Fuxman, F. V. Lu, & S. Rodrigues (Eds.), *Mapping the global future: Evolution through innovation and excellence* (pp. 1011-1019). New York, NY, USA: Global Business and Technology Association (GBATA).
- Varela, R., Gómez, L., Vesga, R., & Pereira, F. (2014). *Dinámica empresarial colombiana*. Retrieved from <http://gemcolombia.org>
- Varela, R., Moreno, J. A., & Bedoya, M. (2013). *Colombian entrepreneurial dynamics 2013*. Retrieved from [www.gemcaribbean.org](http://www.gemcaribbean.org)
- Varela, R., Moreno, J. A., & Bedoya, M. (2015). *GEM Colombia 2006 – 2013*. Retrieved from <http://gemcolombia.org>
- Vecchio, R. P. (2003). Entrepreneurship and leadership: Common trends and common threads. *Human Resource Management Review*, 13(2), 303-327. doi:10.1016/S1053-4822(03)00019-6
- Verheul, I., Block, J., Burmeister-Lamp, K., Thurik, R., Tiemeier, H., & Turturea, R. (2015). ADHD-like behavior and entrepreneurial intentions. *Small Business Economics*, 45, 85-101. doi:10.1007/s11187-015-9642-4
- Verheul, I., & Thurik, R. (2001). Start-up capital: Does gender matter? *Small Business Economics*, 16, 329-345. doi:10.1023/A:1011178629240
- Vinogradov, E., Kolvereid, L., & Timoshenko, K. (2013). Predicting entrepreneurial intentions when satisfactory employment opportunities are scarce. *Education + Training*, 55(7), 719-737. doi:10.1108/ET-06-2012-0067
- Vogel, T., & Wänke, M. (2016). *Attitudes and attitude change* (2nd ed.). New York, NY, USA: Routledge.
- von Graevenitz, G., Harhoff, D., & Weber, R. (2010). The effects of entrepreneurship education. *Journal of Economic Behavior and Organization*, 76, 90-112. doi:10.1016/j.jebo.2010.02.015
- von Mises, L. (1998). *Human action: The scholar's edition* (Unaltered treatise published in 1998, originally published in 1949). Auburn, AL, USA: The Ludwig Von Mises Institute.



- Wakkee, I., Elfring, T., & Monaghan, S. (2010). Creating entrepreneurial employees in traditional service sectors. The role of coaching and self-efficacy. *International Entrepreneurship and Management Journal*, 6, 1-21. doi:10.1007/s11365-008-0078-z
- Ward, T. B. (2004). Cognition, creativity, and entrepreneurship. *Journal of Business Venturing*, 19(2), 173-188. doi:10.1016/S0883-9026(03)00005-3
- Weber, M. (1930). *The protestant ethic and the spirit of capitalism* (Original work published in 1905 in German). New York, NY, USA: Scribner.
- Wennberg, K., Pathak, S., & Autio, E. (2013). How culture moulds the effects of self-efficacy and fear of failure on entrepreneurship. *Entrepreneurship & Regional Development*, 25(9-10), 756-780. doi:10.1080/08985626.2013.862975
- Williams, C. C., & Horodnic, I. A. (2018). Evaluating the prevalence and distribution of dependent self-employment: Some lessons from the European Working Conditions Survey. *Industrial Relations Journal*, 49(2), 109-127. doi:10.1111/irj.12206
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory and Practice*, 31(3), 387-406. doi:10.1111/j.1540-6520.2007.00179.x
- Wilson, F., Kickul, J., Marlino, D., Barbosa, S. D., & Griffiths, M. D. (2009). An analysis of the role of gender and self-efficacy in developing female entrepreneurial interest and behavior. *Journal of Developmental Entrepreneurship*, 14(2), 105-119. doi:10.1142/S1084946709001247
- Wong, P. K., Ho, Y. P., & Autio, E. (2005). Entrepreneurship, innovation and economic growth: Evidence from GEM data. *Small Business Economics*, 24(3), 335-350. doi:10.1007/s11187-005-2000-1
- World Bank (2017). *Gender Statistics*. Retrieved from <https://data.worldbank.org/data-catalog/gender-statistics>
- World Economic Forum and Global Entrepreneurship Monitor (2016). *Europe's hidden entrepreneurs: Entrepreneurial employee activity and competitiveness in Europe*. Retrieved from [http://www3.weforum.org/docs/WEF\\_Entrepreneurship\\_in\\_Europe.pdf](http://www3.weforum.org/docs/WEF_Entrepreneurship_in_Europe.pdf)
- Zampetakis, L. A. (2008). The role of creativity and proactivity on perceived entrepreneurial desirability. *Thinking Skills and Creativity*, 3(2), 154-162. doi:10.1016/j.tsc.2008.07.002
- Zampetakis, L. A., Bakatsaki, M., Kafetsios, K. G., & Moustakis, V. (2016). Sex differences in entrepreneurs' business growth intentions: An identity approach. *Journal of Innovation and Entrepreneurship*, 5(29), 1-20. doi:10.1186/s13731-016-0057-5
- Zampetakis, L. A., Bakatsaki, M., Litos, C., Kafetsios, K. G., & Moustakis, V. (2017). Gender-based differential item functioning in the application of the theory of planned behavior for the study of entrepreneurial intentions. *Frontiers in Psychology*, 8:451. doi:10.3389/fpsyg.2017.00451



- Zampetakis, L. A., Gotsi, M., Andriopoulos, C., & Moustakis, V. (2011). Creativity and entrepreneurial intention in young people: Empirical insights from business school students. *The International Journal of Entrepreneurship and Innovation*, 12(3), 189-199. doi:10.5367/ije.2011.0037
- Zampetakis, L. A., Lerakis, M., Kafetsios, K., & Moustakis, V. (2015). Using short films for the effective promotion of entrepreneurship. *Journal of Global Entrepreneurship Research*, 5(23), 1-9. doi:10.1186/s40497-015-0040-9
- Zampetakis, L. A., Lerakis, M., Kafetsios, K., & Moustakis, V. S. (2016). The moderating role of anticipated affective ambivalence in the formation of entrepreneurial intentions. *International Entrepreneurship and Management Journal*, 12(3), 815-838. doi:10.1007/s11365-015-0367-2
- Zampetakis, L. A., & Moustakis, V. (2006). Linking creativity with entrepreneurial intentions: A structural approach. *The International Entrepreneurship and Management Journal*, 2(3), 413-428. doi:10.1007/s11365-006-0006-z
- Zapkau, F. B., Schwens, C., Steinmetz, H., & Kabst, R. (2015). Disentangling the effect of prior entrepreneurial exposure on entrepreneurial intention. *Journal of Business Research*, 68, 639-653. doi:10.1016/j.jbusres.2014.08.007
- Zarzuela, P., & Antón, C. (2015). Determinants of social commitment in the young: Applying the theory of reasoned action. *Revista Española de Investigación de Marketing ESIC*, 19, 83-94. doi:10.1016/j.reimke.2015.05.001
- Zhang, Y., Duysters, G., & Cloudt, M. (2014). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *International Entrepreneurship and Management Journal*, 10(3), 623-641. doi:10.1007/s11365-012-0246-z
- Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of Management*, 36(2), 381-403. doi:10.1177/0149206309335187
- Zhao, H., Siebert, S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265-1272. doi:10.1037/0021-9010.90.6.1265
- Zheng, H., Hung, J.-L., Qi, Z., & Xu, B. (2016). The role of trust management in reward-based crowdfunding. *Online Information Review*, 40(1), 97-118. doi:10.1108/OIR-04-2015-0099
- Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management Journal*, 44(4), 682-696. doi:10.2307/3069410
- Zhou, J., Shin, S. J., & Cannella, J., Albert A. (2008). Employee self-perceived creativity after mergers and acquisitions: Interactive effects of threat-opportunity perception, access to resources, and support for creativity. *Journal of Applied Behavioral Science*, 44(4), 397-421. doi:10.1177/0021886308328010



# Apéndice documental

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## Appendices



## APÉNDICE A. ESTUDIO DE LA PERCEPCIÓN DE DISTINTAS OCUPACIONES

Este estudio tiene como objetivo explorar cómo se perciben diferentes ocupaciones, con especial atención al emprendimiento. Para ello, se administró un cuestionario online diseñado con la herramienta web Qualtrics en el que se presentaron una serie de preguntas (intención laboral, percepción de diferentes ocupaciones y datos sociodemográficos).

De acuerdo a la teoría del rol social, la percepción de las personas sobre grupos sociales y los estereotipos asociados se derivan de sus experiencias con miembros del grupo en sus roles sociales típicos, que son roles en los que estos miembros están relativamente sobrerrepresentados (Koenig y Eagly, 2014). Así, las conductas en estos roles influyen en los rasgos que se perciben como característicos de dicho grupo. En particular, los roles ocupacionales son un buen ejemplo de distribución desigual entre grupos. Por ejemplo, la mayor presencia de hombres en puestos directivos está relacionada con una percepción de esos puestos de dirección más asociados a características masculinas que femeninas, lo que se ha denominado el fenómeno “think manager – think male” (Schein, 1973). En el área de Ciencias, donde las mujeres están también infrarrepresentadas, el estereotipo es también más próximo al estereotipo masculino que al femenino (Carli et al., 2016).

Si bien en algunas ocupaciones se emplean palabras diferentes para designar a un hombre o a una mujer (por ejemplo, psicólogo o psicóloga), en otras ocupaciones se trata de una palabra única (por ejemplo, policía o periodista) que no denota el sexo de dicha persona. El uso del masculino plural genérico en idiomas como castellano o francés recoge una representación de ambos sexos, aunque algunos autores defienden que con esta forma lingüística existe una mayor accesibilidad cognitiva a prototipos masculinos (véase por ejemplo Gabriel, Gyga, Sarrasin, Garnham y Oakhill, 2008). Si el uso del masculino se interpretase de forma genérica, no se diferenciaría de la utilización de la forma masculina y femenina. Sin embargo, las diferencias encontradas en diversos estudios implican un sesgo masculino en la forma genérica (Gabriel et al., 2008; Horvath et al., 2016). Por tanto, los estudios en esta área suelen

comparar la percepción de ocupaciones utilizando las formas femenina y masculina (por ejemplo, profesores / profesoras) con la percepción cuando se emplea el masculino plural (por ejemplo, profesores).

La visibilidad de las mujeres, esto es, el porcentaje de mujeres que se estima en cada ocupación, es mayor cuando se emplean formas femeninas y masculinas en comparación a presentar solo el masculino plural (Horvath et al., 2016). Asimismo, de acuerdo con Gabriel et al. (2008), la percepción del porcentaje de mujeres y hombres que ocupan ese rol también varía, siendo este resultado consistente en distintos idiomas, de tal modo que las mujeres estiman un menor porcentaje de hombres en las distintas ocupaciones y, en general, se estiman mayores porcentajes de hombres en un rol cuando se emplea el masculino plural frente a las formas femeninas y masculinas. Es más, Gabriel et al. (2008) encontraron en su estudio que en algunos casos se interpretaba que el porcentaje era el 100%, siendo posible que algunas personas interpreten el masculino plural genérico únicamente como forma plural del masculino. Por otra parte, las profesiones típicamente masculinas, con independencia de si se emplean formas femeninas y masculinas o el masculino plural, siguen siendo consideradas de mayor estatus en cuanto a su prestigio, éxito económico y nivel educativo (Horvath et al., 2016). Adicionalmente, se estima un mayor salario, especialmente cuando se emplea el masculino. Frente a estas investigaciones, en el presente estudio se incluyó el emprendimiento como ocupación principal de interés.

En línea con lo anteriormente expuesto, el objetivo del presente estudio era analizar, en primer lugar, la percepción de diferentes ocupaciones en España incluyendo el Emprendimiento, ya que no es una de las ocupaciones habituales que hayan recogido otros estudios. En segundo lugar, explorar si en castellano se produce el mismo efecto que se ha encontrado en alemán, italiano o francés en relación a las diferencias en percepción de las ocupaciones en función de si se emplean el masculino genérico o las formas lingüísticas femeninas y masculinas. Frente a otros estudios en los que se presentaban las palabras completas para las formas

femeninas / masculinas (Gabriel et al., 2008; Horvath et al., 2016), en el presente estudio se optó por la forma o / a (por ejemplo, arquitecto/a, en lugar de arquitecto/arquitecta o arquitecto y arquitecta).

Las ocupaciones presentadas en el presente estudio (Medicina, Abogacía, Emprendimiento, Ciencia, Dirección, Periodismo, Profesorado, Trabajo Social, Psicología, Informática, Ingeniería, Enfermería y Policía) fueron seleccionadas a partir de los estudios de Malach-Pines et al. (2005), Horvath et al. (2016) y Gabriel et al. (2008), y se incluyeron otras dos ocupaciones que se consideraron relevantes, Fisioterapia (dado que la palabra fisioterapeuta designa tanto a una mujer como a un hombre) y Arquitectura (por el elevado número de mujeres que trabajan por cuenta propia; véase la Tabla 2.3). En estas 15 ocupaciones se consideraron tanto ocupaciones tradicionalmente femeninas como masculinas. Dado que el objetivo principal era el estudio de la percepción del Emprendimiento, no se emplearon largos listados de ocupaciones como ocurre en otros estudios en los que se analiza la percepción de ocupaciones desde la perspectiva de género (Gabriel et al., 2008; Muñoz Sastre, Fouquereau, Igier, Salvatore y Mullet, 2000).

## 1. MÉTODO

### 1.1. Participantes

En el estudio han participado 906 personas (52.5% mujeres;  $M_{edad} = 37.8$  años,  $DT = 11.5$ , rango: 18 – 80 años). En el momento de responder al cuestionario, un 41.4% trabajaba en una empresa privada, un 19.8% en un organismo público y un 1.5% en una asociación u ONG; un 16.4% eran estudiantes, un 11.9% trabajaban por cuenta propia y un 8.8% estaban en situación de desempleo. La mayoría tenían estudios universitarios (grado o licenciatura/ingeniería, 54.1%; máster, 12.5%; o doctorado, 2.1%), y en menor medida un título de Formación Profesional (15.7%) o estudios de Bachillerato (10.5%) u otro tipo de estudios (5.1%).

En cuanto a la experiencia laboral, en media contaban con 14.2 años ( $DT = 11.6$ ), aunque un 0.8% de las personas participantes no tenía experiencia o esta era inferior a 3 meses. Únicamente un 37.9% declaró haber asistido a un curso o charla sobre cómo crear una empresa o qué es ser emprendedor/a, aproximadamente la mitad (49.4%) en su universidad y, en general, de forma presencial (86%). Mientras que un 13.1% indicó que no conocía a nadie en su entorno que hubiese emprendido, el resto de participantes señalaron que conocían entre 1 y 3 personas (46.6%), entre 3 y 5 personas (21.1%), entre 5 y 10 personas (11.4%) o más de 10 personas (7.9%).

## **1.2. Instrumentos**

*Intención laboral.* La intención laboral de la muestra (esto es, la intención de seguir una carrera profesional en el emprendimiento, el emprendimiento social o el empleo por cuenta ajena en una empresa privada, una entidad pública o una organización no gubernamental) se midió con la escala empleada por (Moriano, 2005). Se utilizó una escala de respuesta tipo Likert de siete puntos desde 1 (*ningún interés*) a 7 (*total interés*).

*Prestigio en la sociedad, éxito económico y nivel educativo.* A partir del estudio de Horvath et al. (2016), se pedía que se valorase para cada ocupación cuál era su prestigio profesional, éxito económico y nivel educativo requerido (nivel de formación o nivel de estudios), con una puntuación de 1 (*muy bajo*) a 7 (*muy alto*).

*Estimación de cuánto gana cada grupo profesional en comparación con el salario medio en España.* Para ello, se adaptó un ítem del estudio de Horvath et al. (2016) y se presentó una escala de 11 puntos, desde -50% a +50% con variaciones de 10% y un punto central denominado “en la media”.

*Ocupación femenina o masculina.* A continuación, se pedía indicar si se trataba de una ocupación masculina (más típicamente realizada por hombres), femenina (más típicamente realizada por mujeres) o ni masculina ni femenina.



*Porcentaje de mujeres/hombres que sigue cada opción profesional y que aparecen en televisión.* Por último, se dividió aleatoriamente a la muestra en dos bloques para preguntar qué porcentaje de las personas que seguían cada opción profesional eran: (a) mujeres, o (b) hombres, y “De las personas de las que se habla o que aparecen en los medios de comunicación y que siguen estas opciones profesionales, ¿qué porcentaje dirías que son [mujeres/hombres]?”. A cada participante se le mostró únicamente una opción (mujeres u hombres). Para responder, tenían que arrastrar el curso en una barra en el rango 0-100%. Por un error en la creación de esta pregunta en el cuestionario, no se presentó una de las 15 ocupaciones, Psicología.

*Datos sociodemográficos y de control.* Los participantes indicaron sexo, edad, nivel educativo, años de experiencia laboral, asistencia a cursos de emprendimiento (en caso afirmativo, se pedía indicar duración y lugar de impartición y modalidad -presencial, online o mixto-) y número de personas conocidas que hubiesen emprendido en su entorno (familiar, vecindario, amistades, etc.) con opciones: ninguna, entre 1 y 3 personas, entre 3 y 5 personas, entre 5 y 10 personas, más de 10 personas.

### **1.3. Análisis de datos**

Se utilizó el programa SPSS para calcular los estadísticos descriptivos (puntuaciones medias, desviaciones típicas y frecuencias) así como las correlaciones, ANOVA y comparación de puntuaciones medias entre mujeres y hombres (*t* de Student).

## **2. RESULTADOS**

En primer lugar, se analizó la intención laboral de las personas que participaron en el estudio (Tabla A1). El emprendimiento se sitúa como preferencia por debajo de otras opciones profesionales tradicionales (trabajo en una empresa privada o un organismo público). De las cinco opciones profesionales presentadas, la que suscita menor interés es el emprendimiento social. No se encontraron diferencias entre mujeres y hombres, a excepción de trabajar en

una ONG, donde las mujeres muestran un interés significativamente más alto que los hombres.

Tabla A1

*Intención laboral*

Ocupación	Mujer ( <i>n</i> = 476) <i>M</i> ( <i>DT</i> )	Hombre ( <i>n</i> = 430) <i>M</i> ( <i>DT</i> )	<i>t</i> ( <i>p</i> )
Desarrollar tu carrera profesional en una empresa privada	4.79 (1.87)	4.74 (1.89)	-0.402 (.69)
Trabajar en la Administración Pública (ser funcionario/a)	4.75 (2.14)	4.60 (2.14)	-1.020 (.31)
Crear tu propia empresa (ser emprendedor/a)	4.06 (2.10)	4.24 (2.09)	1.294 (.20)
Trabajar en una ONG	3.96 (1.91)	3.16 (1.88)	-6.367 ( <i>&lt;</i> .001)
Crear tu propia empresa para solucionar problemas sociales y medioambientales (ser un/a emprendedor/a social)	3.57 (2.00)	3.41 (1.95)	-1.266 (.21)

*Nota.* *N* = 906. Mínimo: 1 (*ningún interés*). Máximo: 7 (*total interés*).

Siguiendo los estudios de Gabriel et al. (2008) y Horvath et al. (2016), se dividió aleatoriamente a la muestra en dos grupos de forma que contestasen a cada pregunta utilizando: (a) el masculino plural genérico (por ejemplo, médicos), o (b) las formas femeninas y masculinas (médico/a). El primer grupo estaba compuesto por 474 personas (50.4% mujeres;  $M_{edad} = 37.7$  años,  $DT = 11.2$ , rango: 18 – 80 años); mientras que el segundo grupo constaba de 432 personas (54.9% mujeres;  $M_{edad} = 37.9$  años,  $DT = 11.9$ , rango: 18 – 76 años). Frente a otros estudios (Gabriel et al., 2008; Horvath et al., 2016) en los que se emplean las palabras completas para las formas femeninas / masculinas, en el presente estudio se optó por la forma o / a. En contra de lo esperado, los ANOVA en función de esta asignación revelaron que no existían diferencias significativas entre las dos formas excepto en el caso del éxito económico percibido de directivos ( $M = 6.34$ ,  $DT = 0.89$ ) y directivo/a ( $M = 6.21$ ,

$DT = 0.98$ ,  $p = .03$ ) y el salario medio percibido de arquitectos ( $M = 8.42$ ,  $DT = 2.19$ ) y arquitecto/a ( $M = 8.73$ ,  $DT = 2.05$ ,  $p = .03$ ). Por tanto, no se encontraron diferencias entre la percepción de las ocupaciones para las formas masculinas genéricas y las formas femeninas y masculinas utilizando solo la terminación o / a. Estos resultados coinciden con los de (Horvath y Sczesny, 2016) en los que se percibió una menor adecuación de las mujeres candidatas, en comparación con los hombres candidatos, para un anuncio de trabajo de un puesto de liderazgo cuando se empleó el masculino plural o la forma (m / f), frente a una percepción de una adecuación similar de candidatas y candidatos cuando se emplearon parejas de palabras en masculino y femenino. En consecuencia, para el resto de los análisis se consideran las dos muestras de forma conjunta y se explora la percepción general de las distintas ocupaciones.

A continuación, se analizó la percepción de prestigio social, éxito económico y nivel educativo de las 15 ocupaciones (Tabla A2; véase también la Tabla 2.1 en el Capítulo 2). Las ocupaciones consideradas con mayor prestigio son Medicina, Ingeniería o Arquitectura, ocupando el Emprendimiento un modesto décimo lugar. En cuanto al éxito económico percibido, destacan los puestos de Dirección, Medicina e Ingeniería, estando el Emprendimiento relegado a la posición undécima. Por último, los mayores niveles educativos se atribuyen a las ocupaciones de Ciencia, Medicina, Ingeniería y Arquitectura; por su parte, el Emprendimiento se sitúa en penúltima posición, solo por delante de ser Policía.

Por otra parte, se percibe que el mayor salario corresponde a los puestos de Dirección y a ocupaciones como Medicina, Ingeniería y Arquitectura (Tabla A3). En el extremo opuesto, se considera que están en la media o ligeramente por encima o por debajo ocupaciones como Trabajo Social, Emprendimiento, Enfermería o Periodismo.

Tabla A2

Percepción ocupaciones: prestigio social, éxito económico y nivel educativo

Ocupación	Prestigio social		Éxito económico		Nivel educativo	
	Mujer	Hombre	Mujer	Hombre	Mujer	Hombre
	<i>M (DT)</i>	<i>M (DT)</i>	<i>M (DT)</i>	<i>M (DT)</i>	<i>M (DT)</i>	<i>M (DT)</i>
Medicina	<b>6.67</b> <b>(0.70)</b>	<b>6.55</b> <b>(0.74)</b>	<b>6.10</b> <b>(1.05)</b>	<b>5.89</b> <b>(1.07)</b>	6.58 (0.88)	6.55 (0.84)
Profesorado	4.97 (1.32)	4.92 (1.41)	4.55 (1.15)	4.40 (1.23)	5.47 (1.29)	5.41 (1.29)
Ciencia	<b>6.07</b> <b>(1.24)</b>	<b>5.74</b> <b>(1.38)</b>	<b>4.80</b> <b>(1.48)</b>	<b>4.59</b> <b>(1.48)</b>	6.64 (0.80)	6.54 (0.87)
Abogacía	<b>5.87</b> <b>(1.09)</b>	<b>5.36</b> <b>(1.34)</b>	<b>5.74</b> <b>(1.06)</b>	<b>5.52</b> <b>(1.12)</b>	<b>5.93</b> <b>(1.03)</b>	<b>5.65</b> <b>(1.15)</b>
Emprendimiento	<b>5.09</b> <b>(1.34)</b>	<b>4.86</b> <b>(1.41)</b>	4.50 (1.26)	4.44 (1.29)	4.55 (1.27)	4.42 (1.27)
Periodismo	<b>4.83</b> <b>(1.24)</b>	<b>4.47</b> <b>(1.42)</b>	<b>4.59</b> <b>(1.21)</b>	<b>4.25</b> <b>(1.19)</b>	<b>5.24</b> <b>(1.24)</b>	<b>4.77</b> <b>(1.34)</b>
Dirección	<b>6.14</b> <b>(1.00)</b>	<b>5.78</b> <b>(1.28)</b>	6.30 (0.93)	6.26 (0.95)	5.11 (1.35)	5.04 (1.29)
Trabajo Social	<b>4.58</b> <b>(1.31)</b>	<b>4.33</b> <b>(1.37)</b>	<b>3.92</b> <b>(1.14)</b>	<b>3.59</b> <b>(1.20)</b>	<b>4.99</b> <b>(1.22)</b>	<b>4.53</b> <b>(1.30)</b>
Fisioterapia	<b>5.09</b> <b>(1.18)</b>	<b>4.81</b> <b>(1.24)</b>	<b>4.90</b> <b>(1.15)</b>	<b>4.57</b> <b>(1.18)</b>	<b>5.39</b> <b>(1.13)</b>	<b>4.99</b> <b>(1.30)</b>
Psicología	<b>5.24</b> <b>(1.17)</b>	<b>4.83</b> <b>(1.27)</b>	<b>4.77</b> <b>(1.12)</b>	<b>4.47</b> <b>(1.21)</b>	<b>5.86</b> <b>(1.02)</b>	<b>5.53</b> <b>(1.12)</b>
Informática	<b>4.99</b> <b>(1.27)</b>	<b>4.75</b> <b>(1.24)</b>	<b>4.97</b> <b>(1.22)</b>	<b>4.76</b> <b>(1.20)</b>	<b>5.43</b> <b>(1.20)</b>	<b>5.27</b> <b>(1.20)</b>
Ingeniería	<b>6.23</b> <b>(0.96)</b>	<b>6.01</b> <b>(0.98)</b>	5.88 (1.03)	5.77 (1.04)	<b>6.33</b> <b>(0.88)</b>	<b>6.15</b> <b>(0.97)</b>
Arquitectura	<b>6.09</b> <b>(0.97)</b>	<b>5.96</b> <b>(0.98)</b>	5.82 (1.12)	5.67 (1.19)	<b>6.14</b> <b>(0.99)</b>	<b>5.98</b> <b>(1.06)</b>
Enfermería	<b>5.20</b> <b>(1.20)</b>	<b>4.98</b> <b>(1.22)</b>	<b>4.61</b> <b>(1.17)</b>	<b>4.30</b> <b>(1.19)</b>	<b>5.39</b> <b>(1.23)</b>	<b>5.09</b> <b>(1.23)</b>
Policía	<b>5.10</b> <b>(1.39)</b>	<b>4.87</b> <b>(1.43)</b>	<b>4.65</b> <b>(1.21)</b>	<b>4.28</b> <b>(1.25)</b>	<b>4.10</b> <b>(1.40)</b>	<b>3.80</b> <b>(1.46)</b>

Nota. N = 906. n mujer = 476. n hombre = 430. Mínimo: 1 (muy bajo). Máximo: 7 (muy alto). En negrita se han resaltado las diferencias de medias significativas entre las puntuaciones de mujeres y hombres participantes ( $p < .05$ ).

Asimismo, se pidió indicar si se trataba de una ocupación masculina (más típicamente realizada por hombres), femenina (más típicamente realizada por mujeres), o ni femenina ni masculina (Tabla A3). Algunas ocupaciones son mayoritariamente percibidas femeninas (Trabajo Social o Enfermería) o masculinas (Informática, Policía, Ingeniería, Dirección o Arquitectura), aunque en el resto de ocupaciones se percibe que no son ni femeninas ni masculinas. En general, en estas percepciones hay consenso entre mujeres y hombres. Sin embargo, en Profesorado y en Fisioterapia sí se encuentran diferencias; las mujeres estiman en mayor medida que el Profesorado es una ocupación femenina mientras que los hombres estiman que Fisioterapia se trata de una ocupación femenina. El Emprendimiento es visto como una ocupación más masculina (29.9%) que femenina (3.2%), aunque la opinión mayoritaria la sitúa como ocupación ni femenina ni masculina (66.9%).

Tabla A3

*Percepción ocupaciones: salario y género*

Ocupación	Salario		Género			
	Mujer (n = 476)	Hombre (n = 430)	Femenina	Masculina	Ni femenina ni masculina	<i>Chi- cuadrado</i> (mujeres - hombres)
	<i>M (DT)</i>	<i>M (DT)</i>	%	%	%	<i>p</i>
Medicina	8.91 (2.13)	8.94 (2.18)	6.1	15.6	78.4	.20
Profesorado	7.11 (1.93)	6.87 (1.84)	30.0	1.8	68.2	.02
Ciencia	7.11 (2.49)	6.85 (2.38)	4.3	33.6	62.1	.24
Abogacía	8.49 (2.09)	8.35 (1.99)	3.4	27.4	69.2	.96
Emprendimiento	6.65 (2.13)	6.53 (2.21)	3.2	29.9	66.9	.35
Periodismo	<b>7.07</b> <b>(1.91)</b>	<b>6.66</b> <b>(1.90)</b>	16.1	7.5	76.4	.35
Dirección	9.44 (2.09)	9.59 (2.09)	1.2	66.9	31.9	.31

Ocupación	Salario		Género			
	Mujer (n = 476)	Hombre (n = 430)	Femenina	Masculina	Ni femenina ni masculina	Chi- cuadrado (mujeres - hombres)
	M (DT)	M (DT)	%	%	%	p
Trabajo Social	<b>6.03</b> <b>(1.69)</b>	<b>5.63</b> <b>(1.78)</b>	64.2	2.1	33.7	.36
Fisioterapia	7.16 (1.83)	6.97 (1.79)	16.8	19.9	63.4	.01
Psicología	7.02 (1.85)	6.97 (1.84)	33.6	4.9	61.6	.44
Informática	7.32 (1.99)	7.10 (1.98)	1.9	76.6	21.5	.53
Ingeniería	8.61 (2.08)	8.54 (2.02)	1.0	69.1	29.9	.59
Arquitectura	8.55 (2.15)	8.60 (2.10)	1.7	57.5	40.8	.57
Enfermería	6.94 (1.89)	6.77 (1.74)	65.2	1.3	33.4	.62
Policía	<b>7.15</b> <b>(1.92)</b>	<b>6.85</b> <b>(1.83)</b>	1.4	73.8	24.7	.16

Nota. N = 906. Mínimo: 1 (-50%) y máximo: 11 (+50%), siendo el valor 6 “en la media”. En negrita se han resaltado las diferencias de medias significativas entre las puntuaciones de mujeres y hombres participantes ( $p < .05$ ).

Estos resultados coinciden con la percepción de un mayor porcentaje de mujeres que de hombres en ciertas ocupaciones, por ejemplo, Enfermería o Trabajo Social, y un mayor porcentaje de hombres en otras, por ejemplo, Policía, Informática o Dirección (Tabla A4). Sin embargo, llama la atención que en todas las ocupaciones se estima que, de las personas de las que se habla o que aparecen en los medios de comunicación y que siguen estas opciones profesionales, el porcentaje de mujeres es inferior al porcentaje de mujeres que siguen esas ocupaciones mientras que el porcentaje de hombres que aparecen en los medios es superior al porcentaje de hombres que se cree que siguen esas ocupaciones. Es decir, se percibe una infrarrepresentación de mujeres y una sobrerrepresentación de hombres, fenómeno que parece consistente a pesar de que las muestras que han evaluado los porcentajes de mujeres y hombres son diferentes.

Tabla A4

*Percepción ocupaciones: porcentaje de mujeres / hombres que siguen cada opción profesional y que aparecen en los medios de comunicación*

Ocupación	¿Qué porcentaje de mujeres crees que sigue cada opción profesional? (n = 433)	De las personas de las que se habla o que aparecen en los medios de comunicación y que siguen estas opciones profesionales, ¿qué porcentaje dirías que son mujeres? (n = 433)	¿Qué porcentaje de hombres crees que sigue cada opción profesional? (n = 472)	De las personas de las que se habla o que aparecen en los medios de comunicación y que siguen estas opciones profesionales, ¿qué porcentaje dirías que son hombres? (n = 473)
	M (DT)	M (DT)	M (DT)	M (DT)
Medicina	57.72 (16.03)	44.94 (20.33)	54.80 (17.16)	63.92 (16.81)
Profesorado	66.37 (15.24)	58.36 (18.91)	45.15 (15.97)	49.05 (17.20)
Ciencia	45.30 (17.54)	34.01 (19.14)	57.44 (19.62)	66.04 (17.84)
Abogacía	52.00 (16.08)	40.96 (19.18)	57.88 (16.92)	67.05 (16.53)
Emprendimiento	44.24 (18.15)	36.26 (20.26)	57.96 (18.59)	64.81 (17.05)
Periodismo	57.22 (16.09)	55.11 (18.24)	47.58 (15.60)	54.63 (16.15)
Dirección	34.45 (18.34)	28.48 (18.89)	69.11 (21.87)	77.13 (17.01)
Trabajo Social	67.82 (17.38)	59.71 (22.11)	33.51 (17.85)	35.93 (19.60)
Fisioterapia	53.55 (17.56)	41.84 (22.43)	49.35 (18.80)	53.99 (19.57)
Informática	31.11 (16.63)	23.45 (17.19)	71.32 (19.34)	75.22 (17.69)
Ingeniería	35.69 (17.64)	26.82 (18.49)	67.43 (19.42)	74.62 (16.35)
Arquitectura	39.41 (16.78)	28.36 (18.98)	62.00 (19.40)	71.09 (17.86)
Enfermería	73.26 (14.95)	64.21 (21.96)	34.46 (17.22)	35.70 (19.37)
Policía	33.33 (16.12)	27.58 (17.69)	71.65 (18.59)	76.26 (16.10)

*Nota.* N = 906 (n preguntas mujeres = 433, 53.6% mujeres; n preguntas hombres = 473, 51.6% mujeres). Mínimo 0 y máximo 100%.

Un análisis desagregado en función del sexo de la persona participante indicó algunas diferencias, aunque escasas entre mujeres y hombres. Así, las mujeres participantes percibieron que hay más mujeres en Profesorado ( $M = 69.58$ ,  $DT = 16.04$ ) que los hombres participantes ( $M = 62.68$ ,  $DT = 13.39$ ,  $p < .001$ ). Igualmente, las mujeres participantes percibieron que hay más mujeres en Abogacía ( $M = 53.58$ ,  $DT = 16.65$ ) que los hombres participantes ( $M = 50.17$ ,  $DT = 15.23$ ,  $p = .03$ ). Por el contrario, las mujeres participantes percibieron que hay más hombres en Dirección ( $M = 71.23$ ,  $DT = 21.03$ ) que los hombres participantes ( $M = 66.84$ ,  $DT = 22.56$ ,  $p = .03$ ), al igual que en Fisioterapia (mujeres:  $M = 51.24$ ,  $DT = 17.50$ ; hombres:  $M = 47.33$ ,  $DT = 19.94$ ;  $p = .03$ ). Las mujeres y los hombres participantes sí que difirieron más en su estimación de los porcentajes de personas que aparecían en los medios de comunicación.

Los hombres participantes percibieron, en comparación con las mujeres participantes, que hay más mujeres en los medios en las siguientes ocupaciones: Medicina (mujeres:  $M = 42.44$ ,  $DT = 21.42$ ; hombres:  $M = 47.83$ ,  $DT = 18.63$ ;  $p = .01$ ), Ciencia (mujeres:  $M = 31.78$ ,  $DT = 19.08$ ; hombres:  $M = 36.58$ ,  $DT = 18.92$ ;  $p = .01$ ), Dirección (mujeres:  $M = 26.47$ ,  $DT = 18.62$ ; hombres:  $M = 30.80$ ,  $DT = 19.98$ ;  $p = .02$ ), Fisioterapia (mujeres:  $M = 39.72$ ,  $DT = 22.46$ ; hombres:  $M = 44.29$ ,  $DT = 22.21$ ;  $p = .03$ ), Informática (mujeres:  $M = 21.90$ ,  $DT = 16.50$ ; hombres:  $M = 25.25$ ,  $DT = 17.82$ ;  $p = .04$ ), Arquitectura (mujeres:  $M = 28.98$ ,  $DT = 18.94$ ; hombres:  $M = 31.10$ ,  $DT = 18.71$ ;  $p = .01$ ) y Enfermería (mujeres:  $M = 62.25$ ,  $DT = 23.69$ ; hombres:  $M = 66.47$ ,  $DT = 19.60$ ;  $p = .04$ ).

Sin embargo, las mujeres participantes percibieron, en comparación con los hombres participantes, que hay más hombres en los medios en las siguientes ocupaciones: Medicina (mujeres:  $M = 66.65$ ,  $DT = 16.55$ ; hombres:  $M = 61.01$ ,  $DT = 16.64$ ;  $p < .001$ ), Ciencia (mujeres:  $M = 68.08$ ,  $DT = 17.27$ ; hombres:  $M = 63.87$ ,  $DT = 18.21$ ;  $p = .01$ ), Abogacía (mujeres:  $M = 69.55$ ,  $DT = 16.20$ ; hombres:  $M = 64.38$ ,  $DT = 16.50$ ;  $p = .001$ ), Dirección (mujeres:  $M = 79.51$ ,  $DT = 15.47$ ; hombres:  $M = 74.59$ ,  $DT = 18.21$ ;  $p = .002$ ), Fisioterapia (mujeres:



$M = 55.79$ ,  $DT = 20.19$ ; hombres:  $M = 52.07$ ,  $DT = 18.73$ ;  $p = .04$ ), Ingeniería (mujeres:  $M = 76.94$ ,  $DT = 15.89$ ; hombres:  $M = 72.14$ ,  $DT = 16.51$ ;  $p = .001$ ), Arquitectura (mujeres:  $M = 73.52$ ,  $DT = 17.19$ ; hombres:  $M = 68.51$ ,  $DT = 18.24$ ;  $p = .002$ ) y Policía (mujeres:  $M = 77.95$ ,  $DT = 15.08$ ; hombres:  $M = 74.45$ ,  $DT = 19.97$ ;  $p = .02$ ).

Los hombres participantes parecen por tanto sobreestimar la aparición de mujeres en los medios en diversas ocupaciones mientras que las mujeres participantes sobreestiman la aparición de hombres. En cualquier caso, tanto mujeres como hombres coinciden en que se muestran a más hombres en los medios para esas ocupaciones. Cabe mencionar que en el caso del Emprendimiento no se encuentran diferencias significativas en la percepción de mujeres y hombres.

### 3. CONCLUSIÓN

El interés por el Emprendimiento es menor que hacia otras opciones profesionales tradicionales como el trabajo por cuenta ajena en una empresa o una organización pública. Asimismo, se percibe que el Emprendimiento tiene un prestigio social medio-bajo (puesto 10 de 15 ocupaciones presentadas), un éxito económico moderado (puesto 11 de 15), que no requiere un alto nivel educativo (puesto 14 de 15) y que el salario recibido está en la media de la población (es decir, no se asocia a grandes ingresos). Por otra parte, el Emprendimiento es visto como una ocupación ni femenina ni masculina (66.9%), pese a que tradicionalmente se ha considerado una ocupación masculina (Ahl, 2006; Bird y Brush, 2002). No obstante, un 29.9% de la muestra sí percibe el Emprendimiento todavía como una ocupación masculina y se estima que más hombres que mujeres siguen esta opción profesional (58% vs. 44%). En cuanto a las personas de las que se habla o que aparecen en los medios de comunicación, estas diferencias son más acusadas: un 65% hombres frente a un 36% mujeres. Estos resultados están en la línea de los datos del informe internacional GEM (Singer et al., 2018), donde el 53.8% de las personas encuestadas en España cree que el emprendimiento es una

buena opción de carrera profesional, en menor medida que la media europea (58.5%) y en otras regiones (64.3% en Norteamérica y 60.8% en Latinoamérica y Caribe).

Como toda investigación, presenta limitaciones que hacen que los resultados deban interpretarse con cautela. En primer lugar, se trata de un estudio exploratorio en el que se han seleccionado 15 ocupaciones, algunas de ellas muy ligadas a estudios universitarios de larga duración, como Medicina, Arquitectura o Ciencia, por lo que el Emprendimiento puede ser percibido de forma menos exigente en cuanto a estudios requeridos. De hecho, personas emprendedoras famosas como Bill Gates o Steve Jobs no llegaron a finalizar sus estudios universitarios. Por último, en futuros estudios es necesario incluir las formas lingüísticas femeninas y masculinas completas, y no solo la terminación o / a, para analizar las posibles diferencias en la percepción de la visibilidad de las mujeres y el estatus social de las distintas ocupaciones, en particular del Emprendimiento.

## APÉNDICE B. VALIDACIÓN DEL CUESTIONARIO DE INTENCIÓN EMPRENDEDORA EN UNA MUESTRA DE ESTUDIANTES DE COLOMBIA

### Abstract

This paper presents the validation of the Entrepreneurship Intention Questionnaire (EIQ) in Colombia. This questionnaire, developed and validated in Spain (Rueda et al., 2015), draws on the theory of planned behaviour (TPB; Ajzen, 1991). The TPB is the most widely used model for predicting entrepreneurial intention nowadays. With a sample of 316 Colombian university students, the results of the structural equation modeling confirm that the EIQ has a high reliability and predictive validity of entrepreneurial intention. The availability of reliable measurement scales validated in different cultural contexts allows comparisons among institutions and/or within an institution along the time (e.g., before and after a course on entrepreneurship). A deep understanding of the psychosocial antecedents (i.e., attitudes toward entrepreneurship, subjective norms, and entrepreneurial self-efficacy) that lead young university students to become entrepreneurs might contribute to a better design of the entrepreneurial education programs that are being developed from universities and other institutions.

### 1. INTRODUCCIÓN

La actividad emprendedora tiene un impacto reconocido sobre el crecimiento económico, la innovación y el empleo (Acs et al., 2012; Carree y Thurik, 2010). En Colombia, los diversos informes realizados en el marco del *Global Entrepreneurship Monitor* (GEM) ponen de manifiesto que existe una percepción muy positiva del emprendimiento en este país (véase Varela, Gómez, Vesga y Pereira, 2014; Varela, Moreno y Bedoya, 2013, 2015). De hecho, Colombia ocupa una de las primeras posiciones en la tasa de actividad emprendedora en el mundo.

El nivel educativo es una de las variables que influyen en la intención de emprender, de tal forma que a mayor nivel educativo, mayor tasa de actividad emprendedora. En esta línea, se ha realizado recientemente un estudio sobre las prácticas en los procesos de promoción, formación e investigación en emprendimiento en las Facultades de Administración en Bogotá llevado a cabo con docentes de nueve universidades a petición de la Cámara de Comercio de Bogotá y coordinado por la Asociación Colombiana de Facultades de Administración (ASCOLFA). En dicho estudio, se analiza la implicación institucional en el emprendimiento así como las herramientas y actividades empleadas. Los resultados ponen de manifiesto el interés en potenciar el emprendimiento desde las universidades. Cabe destacar que un 81% de las instituciones participantes indica en sus documentos institucionales que hay una preocupación por incluir el emprendimiento en sus procesos de formación, y se constata la creación de cátedras y la realización de actividades como conferencias, seminarios, visitas, etc. (Herrera y Ortiz, 2010).

Emprender no es un hecho puntual, sino que se considera un proceso compuesto por diferentes etapas (para una revisión, véase Moriano, 2005): antes del lanzamiento de la nueva empresa (fase pre-lanzamiento), el período de lanzamiento de la nueva empresa (fase de lanzamiento) y el desarrollo posterior de la empresa (fase de post-lanzamiento). Dentro del estudio de la conducta emprendedora, la intención emprendedora (fase pre-lanzamiento) es el antecedente más estudiado de la creación de empresas (Krueger, 2009; Liñán et al., 2013; Moriano et al., 2012). Se ha constatado que la intención resulta ser el mejor predictor de cualquier tipo de conducta planificada, particularmente cuando esta conducta resulta poco común, difícil de observar, y/o implica imprevisibles retrasos (Krueger et al., 2000). Crear una empresa conlleva una serie de requisitos que hacen que pueda considerarse un tipo de conducta planificada, por ello los modelos de intención conductual resultan ideales en este ámbito de investigación (Lortie y Castogiovanni, 2015).

La teoría de la acción planificada (TAP; Ajzen, 1991, 2011), ampliamente utilizada en diversas áreas para predecir diferentes tipos de intenciones conductuales (Armitage y Conner, 2001), constituye el modelo más utilizado en el estudio de la intención emprendedora en diferentes países (Autio et al., 2001; Krueger et al., 2000; Liñán y Fayolle, 2015; Moriano et al., 2012; Thompson, 2009). Frente a la perspectiva de los rasgos de personalidad, este marco teórico se encuadra en una aproximación cognitiva al estudio de las actitudes y conductas de emprendimiento, aproximación que se está acometiendo desde diferentes ángulos (véase por ejemplo Sánchez García, Boada-Grau, Prizmic-Kuzmica y Hernández-Sánchez, 2014).

Ahora bien, la medida de la intención emprendedora ha sido abordada en muchas ocasiones con métricas dispares y escalas de medida no validadas, que consisten en algunos estudios únicamente en un ítem. Es por tanto destacable la disponibilidad de una herramienta en castellano como es el Cuestionario de Intención Emprendedora (CIE), desarrollado y validado en España por Rueda et al. (2015). El objetivo de la presente investigación es validar en Colombia con una muestra de estudiantes de nivel universitario este cuestionario de reciente desarrollo que se enmarca dentro de la TAP.

### **Antecedentes de la intención emprendedora**

La TAP propone que la intención de llevar a cabo una conducta depende de la influencia que tienen sobre ella tres componentes: (a) la actitud hacia dicha conducta, (b) la norma subjetiva, y (c) el control conductual percibido (CCP). Estudios previos sobre intención emprendedora ponen de manifiesto que la influencia de cada uno de los componentes del modelo varía entre investigaciones (Krueger et al., 2000; Liñán y Chen, 2006) y también en función de variables sociodemográficas como el sexo y la edad (Haus et al., 2013; Moriano, 2005). La mayoría de los estudios muestran que el CCP es el componente de mayor peso. Además, únicamente este componente y la intención son considerados predictores directos de la conducta. Específicamente para la intención emprendedora, la varianza explicada a partir de los tres

componentes varía según los estudios entre el 20% y el 65% (Autio et al., 2001; Kolvereid e Isaksen, 2006; Liñán y Chen, 2009; Liñán et al., 2013).

**Actitud hacia la conducta emprendedora.** De acuerdo al modelo de la expectativa-valor de las actitudes (Fishbein y Ajzen, 1975), las actitudes de una persona están conformadas por la fuerza de cada creencia combinada de forma multiplicativa con su valor subjetivo. Cada creencia asocia la conducta en particular con ciertos resultados u otros atributos, como el coste de llevar a cabo la conducta (Ajzen, 1991). De este modo se desarrollan actitudes favorables hacia las conductas con consecuencias deseables y actitudes desfavorables hacia las conductas con consecuencias no deseables.

**Norma subjetiva.** Entre estas normas se encuentran las expectativas familiares sobre la deseabilidad de llegar a ser un o una profesional de la abogacía, la medicina o el emprendimiento (Krueger et al., 2000). Las creencias normativas hacen referencia a la probabilidad con la que personas o grupos referentes aprueban o desaprueban la realización de una determinada conducta (Ajzen, 1991), que en el caso de emprender es la presión social percibida hacia crear o no una empresa. La norma subjetiva es proporcional a la suma de los pesos de cada creencia normativa multiplicada por la motivación de la persona para cumplir con cada referente. Cuanto más positiva sea la norma subjetiva, mayor será la intención de emprender. De los tres componentes de la TAP, la norma subjetiva es el que tiene un peso más débil (Ajzen, 1991; Armitage y Conner, 2001), y en el área de la intención emprendedora, no todas las investigaciones han encontrado una influencia significativa (Krueger et al., 2000; Liñán y Chen, 2006; Liñán y Chen, 2009; Liñán et al., 2011).

**Control conductual percibido.** Las creencias de control incorporan al modelo de la TAP la influencia de la presencia o ausencia de ciertos recursos y oportunidades que determinan la intención y la conducta (Ajzen, 1991). Se trata de creencias sobre la capacidad para ejecutar con éxito determinadas conductas. Estas creencias se pueden asentar en la propia experiencia en relación a la conducta o en información vicaria sobre la conducta a partir de

familiares y amigos, así como también pueden depender de otros factores que incrementen o reduzcan la dificultad percibida de realizar la conducta. Es decir, cuanto mayor sea el número de recursos y oportunidades que se perciban y menor el de obstáculos que se anticipen, mayor será el control conductual percibido. Posteriormente, se ha puesto de manifiesto la similitud de este concepto con el de autoeficacia de Bandura (Krueger et al., 2000), ya que ambos hacen referencia a la habilidad percibida para realizar una determinada conducta. Armitage y Conner (2001) consideran que la autoeficacia está más claramente definida y operacionalizada que el control conductual percibido y, de su meta-análisis con 185 estudios, concluyen que, aunque ambos constructos permiten explicar proporciones equivalentes de la varianza de la conducta, la autoeficacia permite explicar una mayor varianza de la intención, por lo que recomiendan emplear la autoeficacia en lugar del control conductual percibido. De hecho, en distintos estudios se utiliza una medida de la autoeficacia en lugar del control (Kolvereid e Isaksen, 2006; Krueger et al., 2000; Moriano, 2005). La autoeficacia explica en gran medida las diferencias étnicas y en función del sexo en la elección de carrera (Krueger et al., 2000). La educación selectiva hace posible incrementar la eficacia emprendedora lo que redundará en un incremento en la percepción de viabilidad.

De acuerdo a la TAP, estos tres componentes comprenden la información más relevante sobre los determinantes de una conducta (Ajzen, 2011). Por tanto, en línea con lo anteriormente expuesto, las hipótesis de este estudio se centran en la relación de cada uno de los componentes de TAP con la intención emprendedora (Figura B1):

*Hipótesis 1:* La actitud hacia la conducta emprendedora se relacionará positivamente con la intención de emprender.

*Hipótesis 2:* La norma subjetiva se relacionará positivamente con la intención de emprender.

*Hipótesis 3:* La autoeficacia emprendedora se relacionará positivamente con la intención de emprender.

En la Figura B1 se resume el modelo teórico y las hipótesis planteadas en esta investigación. Estudios previos aconsejan tener en cuenta en el modelo de intención emprendedora una serie de variables control. Se ha constatado la influencia positiva de la experiencia laboral previa y tener modelos de emprendedores en la familia (Moriano, 2005; Moriano, Palací y Morales, 2006b; Zhang et al., 2014). En cuanto al sexo, la mayoría de los estudios encuentran que los hombres puntúan más alto en intención emprendedora (Haus et al., 2013; Maes et al., 2014; Moriano, 2005; Zhang et al., 2014). Al tratarse normalmente de muestras homogéneas, la edad no siempre es una variable incluida, aunque algunos estudios sí contemplan su inclusión como variable control (Autio et al., 2001; Liñán y Chen, 2009; Zhang et al., 2014). No obstante, estas variables no suelen presentar efectos significativos con todos los antecedentes de la intención y en todo caso, a excepción de la variable sexo, los valores de sus coeficientes tienden a ser pequeños (Liñán y Chen, 2009; Liñán et al., 2013).

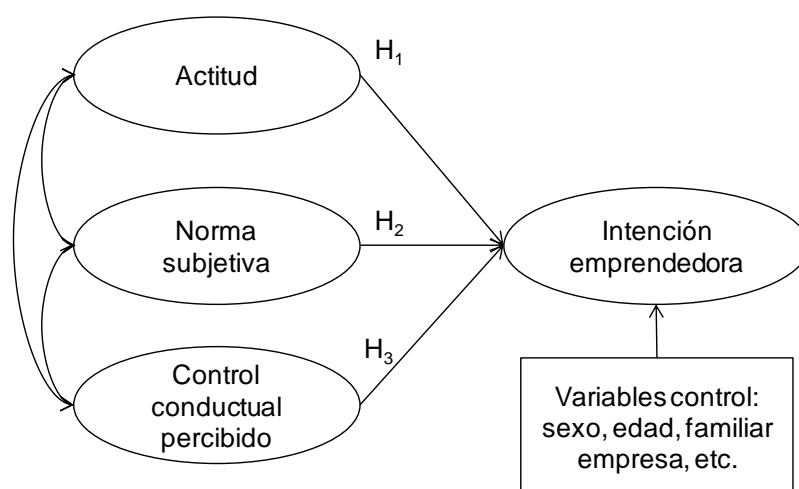


Figura B1. Modelo teórico e hipótesis.

En los estudios de intención emprendedora son habituales las muestras de estudiantes de nivel universitario (Autio et al., 2001; Krueger et al., 2000), dado que es un fenómeno que debe estudiarse antes de que ocurra. Algunas investigaciones se centran en titulaciones relacionadas con las Ciencias Económicas y Empresariales (Liñán y Chen, 2009; Liñán et al., 2011) o en estudiantes de máster (Hamidi et al., 2008; Salazar-Carvajal et al., 2014), aunque



también hay estudios con estudiantes en los niveles educativos previos a la universidad (Ferreira et al., 2012) o que comparan la intención en estudiantes en diferentes etapas del sistema educativo (Moriano, 2005; Varamäki et al., 2012). En particular, Liñán y Chen (2006) justifican la adecuación de la elección de una muestra de estudiantes de nivel universitario de último año debido a que: (a) este tipo de muestra es común en la investigación empírica sobre intención emprendedora; (b) el alumnado de último año está cercano a formar parte del grupo de población con mayor tendencia a emprender, que es el segmento de 25 a 34 años con estudios universitarios; y, (c) al tener que afrontar en un futuro próximo su elección de carrera profesional, pueden responder a las preguntas de forma más consciente. Además, las edades y cualificaciones similares hacen que sean grupos homogéneos. Por tanto, en diversos estudios se emplean muestras de estudiantes próximos a graduarse (Krueger et al., 2000; Liñán y Chen, 2009; Liñán et al., 2011).

## **2. MÉTODO**

### **2.1. Participantes**

En este estudio han participado 316 estudiantes universitarios de Colombia, 63.6% mujeres y 36.4% hombres, con edades comprendidas entre 18 y 43 años ( $M = 25.01$  años,  $DT = 5.04$ ). Las titulaciones son variadas y abarcan, entre otros, Administración de Empresas (12.7%), Medicina (6.6%), Contaduría pública (6.3%), Economía (6%), así como diferentes Ingenierías (de sistemas, civil, ambiental, eléctrica, etc.; 19.6%). En cuanto al grupo socioeconómico de pertenencia, la mayoría se definió como medio (63.6%), medio-bajo (19.3%) o medio-alto (14.2%) y únicamente un 1.9% como bajo y un 0.9% como alto.

Un 17.1% de la muestra indicó haber tenido contacto con un centro/organismo de apoyo al emprendimiento en los últimos meses. Asimismo, un 71.8% afirmó tener un miembro cercano de su familia que sea o haya sido empresario o tenga un negocio propio (padres, hermanos,

abuelos, tíos o primos); de estos, la mayoría de los negocios pertenecían al sector servicios (63.9%).

## **2.2. Instrumento**

Para medir la intención emprendedora así como los tres componentes de la TAP (actitud, norma subjetiva y autoeficacia) se empleó el Cuestionario de Intención Emprendedora (CIE; Rueda et al., 2015). Todos los ítems del cuestionario tienen un formato de respuesta tipo Likert de siete puntos. A continuación, se recoge la descripción de cada una de las escalas empleadas en el CIE.

**Actitud hacia la conducta emprendedora.** Dado que las actitudes no solo dependen de las creencias, sino también de la evaluación que se realiza sobre dichas creencias, para medir este componente se emplea: (a) un grupo de seis ítems sobre lo que supondría para la persona ser emprendedora, cuyas puntuaciones pueden oscilar entre 1 (*totalmente improbable*) y 7 (*totalmente probable*), y (b) otro grupo de seis ítems que valora en qué medida es deseable cada uno de esos aspectos (1 = *nada deseable* a 7 = *totalmente deseable*). Para calcular la puntuación total se ha multiplicado la puntuación en cada una de las expectativas sobre lo que supondría ser emprendedor por su deseabilidad y se ha dividido este resultado entre siete. Las puntuaciones altas reflejan una actitud positiva hacia la conducta de emprender. La fiabilidad de esta subescala (alfa de Cronbach) fue .82, por lo que se considera que la consistencia interna es adecuada ya que supera el valor recomendado de .70 (Nunnally, 1978).

**Norma subjetiva.** La norma subjetiva consta de: (a) un grupo de tres ítems sobre la opinión que otras personas significativas o referentes (familia, amigos y compañeros o colegas) mostrarían si el participante decidiese emprender (1 = *nada de acuerdo* a 7 = *totalmente de acuerdo*); y, (b) otro grupo de tres ítems en los que se valora la importancia de la opinión de estas personas al respecto (1 = *nada importante* a 7 = *muy importante*), que refleja la motivación para acomodarse a las directrices de los referentes. La puntuación en cada ítem

del primer grupo se ha multiplicado por la importancia correspondiente y se ha dividido este resultado entre siete. A mayor puntuación global, mayor será la importancia de la norma subjetiva. La fiabilidad de esta subescala (alfa de Cronbach) fue .83.

**Autoeficacia emprendedora.** Esta escala, que consta de seis ítems con un formato de respuesta tipo Likert de siete puntos (1 = *totalmente ineficaz* a 7 = *totalmente eficaz*), es una versión reducida de la escala de autoeficacia emprendedora (Moriano et al. (2006a) a la que se añadió un nuevo factor relativo a los pasos básicos para la creación de una nueva empresa: definir la idea, escribir el plan de negocio y realizar los trámites administrativos. La fiabilidad de esta escala fue satisfactoria (alfa de Cronbach = .77).

**Intención emprendedora.** Para evaluar la intención en este modelo se utiliza una escala de cuatro ítems en los que se valoran diferentes afirmaciones sobre la creación de una empresa (por ejemplo, “Estoy decidido a crear una empresa en el future”), con opción de respuesta según una escala Likert de 1 (*nada*) a 7 (*totalmente*). La fiabilidad de esta escala fue muy satisfactoria (alfa de Cronbach = .91). Adicionalmente, se plantea una pregunta sobre el motivo para crear una empresa para evaluar el emprendimiento por necesidad vs. por oportunidad.

**Variables sociodemográficas y otras variables de control.** Además se recogieron los siguientes datos: sexo, edad, departamento de nacimiento (o país si no era Colombia), ciudad de residencia, situación laboral o de estudio, nivel de estudios alcanzado por los padres y grupo socioeconómico de pertenencia. Por otra parte, se registró información sobre: experiencia laboral por cuenta ajena y por cuenta propia, contacto en los últimos meses con un centro/organismo de apoyo al emprendimiento y tener familiares emprendedores.

### 2.3. Procedimiento

Se realizó un muestreo no probabilístico de conveniencia o accidental (Alaminos, 2006), acudiendo a 36 instituciones universitarias colombianas durante los meses de junio a

noviembre de 2014 para contactar con los estudiantes. Los participantes, estudiantes próximos a finalizar sus estudios universitarios, cumplieron un cuestionario en papel donde se recogía, en primer lugar, información sobre datos personales, profesionales y formación académica. A continuación, se presentaban las distintas escalas del estudio, descritas en el apartado Instrumento. Todos los cuestionarios fueron administrados durante las clases y se cumplieron de forma anónima para garantizar la confidencialidad.

## **2.4. Análisis de datos**

Se realizó un análisis factorial confirmatorio para evaluar la estructura factorial del CIE mediante el modelado de ecuaciones estructurales (SEM). Se utilizaron los programas estadísticos SPSS (*Statistical Package for Social Science*) 19, para estadísticos descriptivos y cálculo de correlación, y EQS 6.3 para Windows (Bentler, 2006; Bentler y Wu, 2015) para la puesta a prueba del modelo confirmatorio. Se seleccionó el método de estimación de máxima verosimilitud robusto, que proporciona aproximaciones de los errores y estadísticos de ajuste en presencia de desviaciones de la asunción de normalidad multivariante (Brown, 2015; Satorra y Bentler, 1994).

Para analizar la bondad de ajuste del modelo se aplicó el estadístico Chi-cuadrado de Satorra-Bentler ( $S-B\chi^2$ ), cuyos valores no significativos ( $p > .05$ ) y el cociente entre  $S-B\chi^2$  y los grados de libertad inferior a 2 indican que el modelo propuesto se ajusta a los datos. Dada la sensibilidad del estadístico Chi-cuadrado al tamaño de la muestra, es necesario tener en cuenta otros índices de ajuste como el índice RMSEA (*Root Mean Square Error of Approximation*), el índice de ajuste relativo CFI (*Comparative Fit Index*) y el índice NNFI (*Non-Normed Fit Index o Tucker Lewis Index, TLI*). Un ajuste aceptable tendría unos valores próximos a .95 para el CFI y .90 para el NNFI (el ajuste perfecto estaría indicado por el valor 1), y .05 para RMSEA (valores en torno a .08 representan un error razonable de aproximación a la población; valores superiores a .10 son indicativos de una aproximación inadecuada).

### 3. RESULTADOS

#### Análisis correlacional y descriptivo

Todas las variables de estudio presentaron una relación positiva y significativa con la intención de emprender (Tabla B1). Los resultados obtenidos mostraron que los participantes puntuaron relativamente alto en intención emprendedora ( $M = 5.19$ ,  $DT = 1.02$ ). Respecto a los otros componentes de la TAP, la media más alta se observó en la autoeficacia emprendedora ( $M = 5.53$ ,  $DT = 0.88$ ). En cuanto a las variables de control, no presentaron relaciones significativas con la intención de emprender ni la edad ( $r = -.04$ ,  $p = .46$ ), ser hombre o mujer ( $t_{(314)} = 1.16$ ,  $p = .25$ ), haber estado en contacto con un centro/organismo de apoyo al emprendimiento ( $t_{(314)} = 1.10$ ,  $p = .27$ ) o tener un familiar emprendedor ( $t_{(314)} = -1.33$ ,  $p = .19$ ).

Tabla B1

#### Estadísticos y correlaciones de las variables de estudio y variables control

	<i>M</i>	<i>DT</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>5</i>
1. Actitud	4.84	0.97	<i>.72</i>			
2. Norma subjetiva	4.34	1.40	<i>.54***</i>	<i>.85</i>		
3. Autoeficacia emprendedora	5.53	0.88	<i>.49***</i>	<i>.34***</i>	<i>.69</i>	
5. Intención emprendedora	5.19	1.02	<i>.57***</i>	<i>.49***</i>	<i>.44***</i>	<i>.89</i>

*Nota.*  $N = 316$ . Las variables intención emprendedora, actitud, norma subjetiva y autoeficacia se han medido con escalas tipo Likert de siete puntos. En la diagonal se ha indicado en cursiva el valor de  $\sqrt{AVE}$  para las variables latentes (modelo de medida SEM). \*\*\* $p < .001$ .

La fiabilidad (alfa de Cronbach) de estas cuatro subescalas superó en todos los casos el valor de .70, tal y como se detalla en el apartado Instrumento. En cuanto a la pregunta sobre emprendimiento por necesidad vs. por oportunidad (*push vs. pull*), con una escala de -3 (*Falta de una alternativa laboral mejor*) a 3 (*Aprovechamiento de una oportunidad de negocio*), la

mayoría de los estudiantes apuestan por la oportunidad ( $M = 1.61$ ,  $DT = 2.26$ ). A continuación, se realizó el análisis factorial confirmatorio (AFC) del modelo (Figura B2).

Tabla B2

*Cargas factoriales ( $\lambda$ ), coeficientes de fiabilidad ( $\rho_c$ ) y AVE*

Variable latente		Ítem	$\lambda$	AVE	$\rho_c$
Actitud	A1	Enfrentarse a nuevos retos	.75	.55	.86
	A2	Crear empleo para otras personas	.69		
	A3	Ser creativo e innovar	.75		
	A4*	Tener altos ingresos económicos			
	A5	Asumir riesgos calculados	.63		
	A6	Ser propio jefe (independencia)	.57		
Norma subjetiva	NS1	Familia directa	.74	.73	.89
	NS2	Amigos íntimos	.92		
	NS3	Compañeros o colegas	.75		
Autoeficacia emprendedora	AE1	Definir idea de negocio y la estrategia de una nueva empresa	.69	.60	.86
	AE2	Mantener bajo control el proceso de creación de una nueva empresa	.84		
	AE3	Negociar y mantener relaciones favorables con potenciales inversores y bancos	.68		
	AE4	Reconocer oportunidades en el mercado para nuevos productos y/o servicios	.55		
	AE5*	Relacionarse con personas clave para obtener capital para crear una nueva empresa			
	AE6*	Crear y poner en funcionamiento una nueva empresa			
Intención emprendedora	IE1	Probabilidad de llegar a crear una empresa algún día	.87	.79	.94
	IE2	Disposición a esforzarse lo que sea necesario para ser empresario	.89		
	IE3	Decisión de crear una empresa en el futuro	.87		
	IE4	Objetivo profesional de ser empresario	.72		

Nota. \*Ítem eliminado del modelo debido al bajo ajuste.

**Validez convergente y fiabilidad de las medidas.** La validez convergente se determinó a través de la significación estadística de las cargas factoriales de los indicadores de cada constructo latente. En la Tabla B2 se comprueba que la mayoría de las cargas estandarizadas ( $\lambda$ ) son superiores a .60 (Lévy-Magin, Martín y Román, 2006), con la excepción de un ítem perteneciente a la escala de actitud (A4) y otros dos de la escala de autoeficacia (AE5 y AE6), por lo que se procedió a su eliminación del modelo.

Para evaluar la fiabilidad de las medidas se calculó el coeficiente de fiabilidad compuesta ( $\rho_c$ ) que resulta más adecuado que el alfa de Cronbach, ya que no depende del número de atributos asociados a cada concepto (Hair, Black, Babin, Anderson y Tatham, 2006). El valor mínimo que se considera adecuado para este coeficiente es .70 (Nunnally, 1978). Por su parte, la varianza media extraída (*Average Variance Extracted*, AVE) refleja la cantidad total de la varianza de los indicadores recogida por la variable latente. Cuanto mayores sean los valores de AVE, más representativos son los indicadores de la variable latente en la que cargan. Generalmente, se recomienda que el valor de AVE sea superior .50 (Bagozzi y Yi, 1988; Hair et al., 2006). En este estudio, ambas pruebas de fiabilidad pueden considerarse satisfactorias (Tabla B2).

**Validez discriminante.** Para evaluar la presencia de validez discriminante entre constructos, es necesario que la raíz cuadrada del AVE sea superior a la correlación entre constructos (Chin, 1998; Fornell y Larcker, 1981). En la Tabla B1 se presentan las correlaciones entre constructos y, en la diagonal, la raíz cuadrada del AVE. A la vista de estos resultados, se puede afirmar que existe validez discriminante entre los constructos, aunque todos ellos están muy relacionados.

**Validez predictiva.** Las correlaciones positivas y significativas obtenidas entre las variables propuestas por la TAP (Tabla B1) constituyen un primer apoyo a las hipótesis planteadas en este estudio. Con el mismo propósito, se puso a prueba el modelo estructural representado en la Figura B2. Los índices de ajustes para este modelo, obviando el valor de la Chi-cuadrado

de Satorra-Bentler ( $S-B\chi^2(97) = 201.37, p < .000; S-B\chi^2 / gl = 2.07$ ), resultan adecuados: NNFI = .93, CFI = .94 y RMSEA = .06 (90% CI [.05, .07]). Respecto a la relación entre las variables de la TAP, la actitud tiene el mayor impacto sobre la intención emprendedora ( $\beta = .48, p < .05$ ), seguida de la autoeficacia emprendedora ( $\beta = .16, < .05$ ) y la norma subjetiva ( $\beta = .15, p < .05$ ). Asimismo, estas tres variables en conjunto permiten explicar el 46.5% de la varianza de la intención emprendedora. Por lo tanto, se confirman las tres hipótesis de este estudio que señalaban la influencia positiva y significativa de los componentes de la TAP sobre la intención emprendedora.

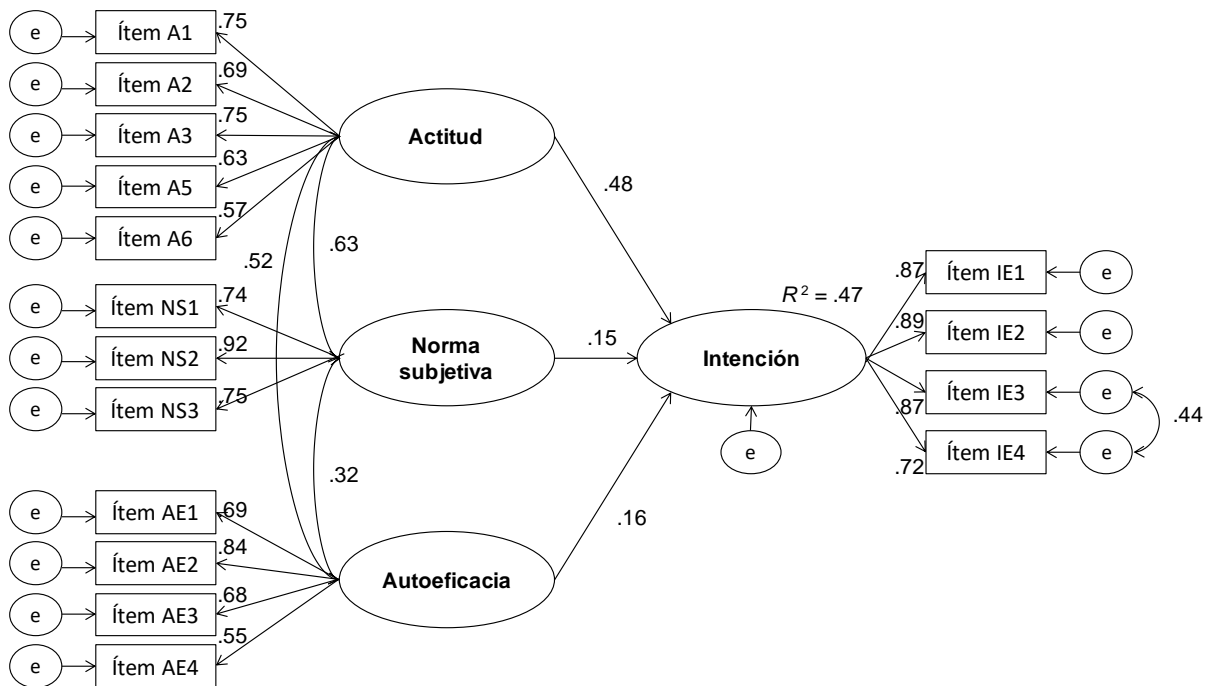


Figura B2. Análisis factorial confirmatorio.

#### 4. DISCUSIÓN

La presente investigación fue diseñada con el objetivo de realizar la validación en Colombia del Cuestionario de Intención Emprendedora (CIE), un instrumento desarrollado en España que ha demostrado adecuadas características psicométricas y alta capacidad predictiva en el estudio de la intención emprendedora en el marco de la teoría de la acción planificada (TAP).



De los 19 ítems que componen la escala original, se han eliminado tres debido a su baja carga factorial: uno de la escala de actitudes A4 (*crear una nueva empresa -ser emprendedor- para Ud. supondría tener altos ingresos económicos*); y dos ítems de la escala de autoeficacia emprendedora (*Por favor, indique hasta qué punto sería Ud. capaz de realizar eficazmente las siguientes tareas... AE5: Relacionarme con personas clave para obtener capital para crear una nueva empresa; y, AE6: Crear y poner en funcionamiento una nueva empresa*). Los parámetros del AFC realizado del modelo resultante se consideran adecuados. Así, de acuerdo con las hipótesis planteadas, los tres componentes de la TAP (actitud, norma subjetiva y autoeficacia) presentaron una relación positiva y significativa con la intención de emprender ( $H_1$ ,  $H_2$  y  $H_3$ ).

El modelo propuesto en este estudio permitió explicar un 46.5% de la varianza de la intención emprendedora, lo que resulta un valor medio en comparación con los encontrados en otras investigaciones previas que varían entre el 20 y 65% (Autio et al., 2001; Kolvereid e Isaksen, 2006; Liñán et al., 2013). Por otra parte, la motivación principal que el alumnado indica para emprender es la oportunidad, en contraposición a la necesidad. Esta diferencia en cuanto a la motivación también ha sido apuntada en otros estudios en Colombia (véase Varela et al., 2014; Varela et al., 2013, 2015). Cabe destacar que un 71.8% afirmó tener un miembro cercano de su familia que sea o haya sido empresario o tenga un negocio propio (padres, hermanos, abuelos, tíos o primos). Este porcentaje es más alto que el encontrado en España (62.1%) en el estudio realizado por Jaén y Liñán (2013).

Según los resultados obtenidos, el CIE es una escala con una buena fiabilidad y validez en muestras colombianas.

#### **4.1. Limitaciones y futuras líneas de investigación**

Aunque este estudio profundiza en el análisis empírico de las variables consideradas antecedentes de la conducta emprendedora, adolece de ciertas limitaciones por lo que los resultados deben ser interpretados con cautela. En primer lugar, se trata de un estudio

transversal y a pesar de que diversos autores han señalado las altas correlaciones entre la intención y la autoeficacia sobre la conducta efectiva, es preciso profundizar con estudios longitudinales en esta relación en el ámbito del emprendimiento. La intención permite explicar el 30% o valores superiores de la varianza de la conducta (Krueger et al., 2000) y diversos meta-análisis encuentran que, para distintos campos, la correlación varía entre .43 y .53 (Ajzen, 2011). El periodo de tiempo entre la medida de la intención y la observación de la conducta modera esta influencia ya que, cuanto mayor es la distancia considerada, un potencial número de factores puede intervenir en el cambio de las actitudes, la norma subjetiva o el control percibido modificando las intenciones (Ajzen, 2011). Asimismo, la falta de control sobre la conducta tenderá a reducir la validez predictiva de la intención. En el área de la conducta emprendedora es todavía necesario profundizar con más estudios longitudinales que confirmen los resultados encontrados en las escasas investigaciones longitudinales hasta la fecha, como la realizada por Kautonen et al. (2013) en la que el modelo de la teoría de la acción planificada permite explicar el 41% de la varianza de la intención y el 39% de la varianza de la conducta medida 3 años después.

Por otra parte, para la selección de la muestra no se ha seguido un procedimiento probabilístico. El 63.6% de la muestra son mujeres, y todas las personas que han participado son estudiantes de nivel universitario, por lo que sería necesario realizar más estudios con otros grupos de población de diferentes edades y niveles educativos y con una mayor proporción de hombres. Además, a diferencia de otros estudios que se centran únicamente en titulaciones relacionadas con la administración de empresas (Liñán y Chen, 2009; Zampetakis et al., 2011), la diversidad de las titulaciones no ha permitido un análisis en detalle de si ciertas áreas presentan un mayor espacio para el emprendimiento. Estos aspectos limitan la generalizabilidad de los resultados. Asimismo, se ha asumido la independencia de casos aunque los participantes se encuentran agrupados en un nivel superior de ordenamiento, la universidad y facultad o escuela en la que estudian. Cabe esperar que los estudiantes de una misma institución y titulación sean más parecidos entre sí que los

estudiantes de otras instituciones/titulaciones, por lo que no se puede garantizar la independencia entre casos y quizá sería adecuado considerar una estructura jerárquica (Pardo, Ruiz y San Martín, 2007). Por tanto, sería necesario profundizar en futuras investigaciones sobre el impacto de la titulación ya que por ejemplo Zhang et al. (2014) encontraron que el alumnado de universidades técnicas presentaba mayor intención emprendedora.

### **Implicaciones**

Por último, cabe señalar algunas implicaciones teóricas y prácticas. En primer lugar, disponer de medidas fiables validadas en distintos contextos culturales contribuye a una medición más ajustada del constructo que se pretende evaluar. Por otra parte, permite las comparaciones entre distintas entidades y/o para una misma entidad en diferentes momentos temporales (por ejemplo, antes y después de impartir un curso orientado al emprendimiento).

Desde el punto de vista práctico, un mejor conocimiento de los aspectos que conducen a jóvenes estudiantes a emprender puede contribuir a un diseño más adecuado de los programas de formación emprendedora que se están impulsando en muchas universidades y desde otro tipo de instituciones. Además, como señalan Krueger et al. (2000), promover la intención emprendedora no es sólo deseable, sino también posible. Por tanto, la pregunta actual en la investigación en este ámbito no es si se puede enseñar a emprender, dado que la investigación ha aportado numerosas evidencias que lo confirman, sino qué se debe enseñar y cómo (Kuratko, 2005).

Algunos estudios señalan que se puede influir en las características personales y las habilidades de los emprendedores mediante estos programas y que favorecen que emprender se plantee como una opción de carrera así como se tenga una actitud más favorable hacia emprender (Liñán y Chen, 2009; Packham et al., 2010; Peterman y Kennedy, 2003). No obstante, es necesario profundizar en qué aspectos de estos programas de educación emprendedora tienen una mayor influencia en la intención.



## APÉNDICE C. INTENCIÓN EMPRENDEDORA SEGÚN TITULACIÓN UNIVERSITARIA QUE SE ESTÁ CURSANDO

En los estudios 1 y 2 la muestra está compuesta por estudiantes. En este apéndice se exploran las diferencias en intención emprendedora en función de la titulación o rama de conocimiento que se está cursando.

### Estudio 1 – El entorno universitario y la intención emprendedora: el papel mediador de los componentes de la teoría de la acción planificada

En primer lugar, la Tabla C1 presenta las puntuaciones medias en intención emprendedora en función del tipo de estudio (licenciatura/grado, máster, doctorado, postdoctorado y MBA). La mayoría de las personas que participaron en el estudio estaban cursando estudios de licenciatura o grado. Aunque las personas que estaban estudiando un MBA representan un minoría ( $n = 39$ ), en media muestran la mayor intención emprendedora ( $M = 4.06$ ,  $DT = 1.79$ ).

Tabla C1

*Puntuaciones medias en intención emprendedora en función del tipo de estudio*

	<i>n</i>	<i>M</i>	<i>DT</i>
Licenciatura/grado	7909	3.98	1.72
Máster	1659	3.84	1.69
Doctorado	117	3.49	1.62
Postdoctorado	15	3.44	1.96
MBA	39	4.06	1.79

*Nota.*  $N$  total = 9739. Puntuaciones intención emprendedora: mínimo = 1; máximo = 7.

Pese a la diferencia de participación en cada nivel educativo, se ha realizado un ANOVA que muestra diferencias significativas entre algunos grupos,  $F(4, 9734) = 4.531$ ,  $p = .001$ . Las comparaciones múltiples de Bonferroni a posteriori revelaron que únicamente diferían entre sí las personas que estaban estudiando una licenciatura o grado ( $M = 3.98$ ,  $DT = 1.72$ ) con

respecto al máster ( $M = 3.84$ ,  $DT = 1.69$ ) o el doctorado ( $M = 3.49$ ,  $DT = 1.62$ ), de tal forma que parece que decae el interés hacia el emprendimiento conforme hay una especialización en los estudios. No obstante, estos resultados deben interpretarse con cautela dada la sobrerrepresentación de estudiantes de licenciatura/grado.

A continuación, se profundizó en las diferencias en intención emprendedora para las titulaciones de licenciatura/grado (Tabla C2). Esta submuestra estaba formada por 7.909 estudiantes (59.5% mujeres,  $M = 22.24$ ,  $DT = 4.21$ ).

Tabla C2

*Puntuaciones medias en intención emprendedora en función de la titulación de licenciatura o grado*

	<i>n</i>	%	<i>M</i>	<i>DT</i>
Negocios/Administración	1584	20.0	4.53	1.62
Economía	534	6.8	4.26	1.73
Otros	652	8.2	4.12	1.68
Arte y Ciencias del Arte	70	0.9	4.11	1.81
Tecnologías de Información y Comunicaciones	318	4.0	4.06	1.68
Ingeniería y Arquitectura	1415	17.9	4.01	1.62
Ciencias Agrícolas, Forestales y Ciencia de la Nutrición	72	0.9	3.94	1.57
Derecho	475	6.0	3.90	1.77
Otras Ciencias Sociales (incluyendo Educación)	943	11.9	3.63	1.63
Lengua y Humanidades (incluyendo Psicología, Filosofía, Religión,...)	618	7.8	3.60	1.78
Medicina y Ciencias de la Salud	935	11.8	3.54	1.74
Matemáticas y Ciencias Naturales	293	3.7	3.36	1.77

*Nota.*  $N$  total = 7.909. Puntuaciones en intención emprendedora ordenadas de mayor a menor media: mínimo = 1; máximo = 7.

Se realizó un ANOVA para analizar si existían diferencias en las puntuaciones medias entre titulaciones. Dadas las diferencias en la muestra, se compararon aquellas titulaciones en las que al menos hubiese 500 participantes (Negocios/Administración, Economía, Otros, Ingeniería y Arquitectura, Otras Ciencias Sociales -incluyendo Educación-, Lengua y Humanidades -incluyendo Psicología, Filosofía, Religión-, y Medicina y Ciencias de la Salud). Los resultados mostraron diferencias significativas,  $F(6, 6673) = 54.804$ ,  $p < .001$ . Las comparaciones post hoc (Games-Howell), revelaron que quienes estudiaban Negocios/Administración presentaron una mayor intención de emprender ( $M = 4.53$ ,  $DT = 1.62$ ) que el resto de estudiantes ( $p < .03$ ). Las personas que estudiaban Economía, Otros e Ingeniería y Arquitectura no difirieron significativamente en sus puntuaciones medias ( $p > .05$ ), aunque sí indicaron una menor intención emprendedora que quienes estudiaban Negocios/Administración ( $p = .025$ ,  $p < .001$  y  $p < .001$ , respectivamente) y una mayor intención ( $p < .001$ ) que en el resto de titulaciones (Otras Ciencias Sociales, Lengua y Humanidades y Medicina y Ciencias de la Salud). Las puntuaciones en intención emprendedora para las titulaciones en Otras Ciencias Sociales (incluyendo Educación), Lengua y Humanidades (incluyendo Psicología, Filosofía, Religión) y Medicina y Ciencias de la Salud, no difirieron significativamente entre sí ( $p > .90$ ).

De igual forma, se han explorado las diferencias entre titulaciones en relación a las distintas variables consideradas (actitud hacia emprender, norma subjetiva, autoeficacia emprendedora, entorno universitario, entorno familiar y riesgo percibido). Estas puntuaciones medias son mostradas en la Tabla C3. Se ha realizado un ANOVA para cada una de las variables comparando aquellas titulaciones en las que al menos hubiese 500 participantes (Negocios/Administración, Economía, Otros, Ingeniería y Arquitectura, Otras Ciencias Sociales, Lengua y Humanidades, y Medicina y Ciencias de la Salud). Los resultados mostraron diferencias significativas entre titulaciones en todas las variables, por lo que se llevaron a cabo comparaciones de Games-Howell a posteriori.

En primer lugar, quienes estudiaban Negocios/Administración y Economía no presentaron diferencias significativas en *actitud hacia el emprendimiento* ( $p = .06$ ), aunque su actitud fue más positiva que para el resto de estudiantes. Las personas que estudiaban Economía y Otros tampoco difirieron en sus puntuaciones medias ( $p = .63$ ), mientras que el grupo de Ingeniería y Arquitectura no difirió del grupo Otros ( $p = .53$ ). Las menores puntuaciones en actitud las reportaron quienes estudiaban Otras Ciencias Sociales, Lengua y Humanidades y Medicina y Ciencias de la Salud, quienes no difirieron significativamente entre sí ( $p > .85$ ).

En cuanto a la *norma subjetiva*, se localizan dos grupos: (a) estudiantes de Negocios/Administración, con puntuaciones ligeramente superiores, y (b) estudiantes de Ingeniería y Arquitectura, Otras Ciencias Sociales, Lengua y Humanidades y Medicina y Ciencias de la Salud. Por su parte, la categoría Otros no difiere significativamente de ninguno de estos dos grupos.

En el caso de la *autoeficacia emprendedora*, se encontraron diferencias entre las distintas titulaciones de tal modo que quienes estudiaban Negocios/Administración y Economía no presentaron diferencias significativas ( $p = .61$ ), así como tampoco las personas que estudiaban Economía, Ingeniería y Arquitectura y Otros ( $p > .33$ ). Las menores puntuaciones las reportaron quienes estudiaban Otras Ciencias Sociales, Lengua y Humanidades y Medicina y Ciencias de la Salud; mientras que el estudiantado de Lengua y Humanidades no difirió de quienes estudiaban Otras Ciencias Sociales ( $p = .34$ ) o Ciencias de la Salud ( $p = .94$ ), estas dos últimas titulaciones sí presentaron diferencias entre sí ( $p = .01$ ).

Respecto al *entorno universitario*, quienes estudiaban Negocios/Administración y Economía no presentaron diferencias significativas ( $p = .75$ ), así como tampoco las personas que estudiaban Economía y Otros ( $p = .61$ ), ni las que estudiaban Ingeniería y Arquitectura y Otras Ciencias Sociales ( $p = .33$ ) o Ciencias de la Salud ( $p = .74$ ), aunque el estudiantado de Otras Ciencias Sociales valoró más positivamente el entorno universitario que quienes estudiaban Ciencias de la Salud ( $p = .01$ ). Por último, las personas que estudiaban Lengua y Humanida-



Tabla C3

*Puntuaciones medias en las restantes variables en función de la titulación de licenciatura o grado*

			<i>Actitud</i>		<i>Norma subjetiva</i>		<i>Autoeficacia emprendedora</i>		<i>Entorno universitario</i>		<i>Entorno emprendedor</i>		<i>Riesgo percibido</i>	
	<i>n</i>	<i>%</i>	<i>M</i>	<i>DT</i>	<i>M</i>	<i>DT</i>	<i>M</i>	<i>DT</i>	<i>M</i>	<i>DT</i>	<i>M</i>	<i>DT</i>	<i>M</i>	<i>DT</i>
Negocios/Administración	1584	20.0	5.01	1.44	5.76	1.05	5.00	1.01	4.21	1.35	1.49	1.33	4.68	1.34
Economía	534	6.8	4.79	1.58	5.77	1.10	4.91	1.08	4.10	1.38	1.27	1.29	4.81	1.32
Otros	652	8.2	4.64	1.55	5.60	1.22	4.83	1.11	3.96	1.46	1.32	1.35	4.83	1.37
Arte y Ciencias del Arte	70	0.9	4.42	1.65	5.41	1.42	4.63	1.32	3.35	1.58	1.14	1.08	4.44	1.52
Tecnologías de Información y Comunicaciones	318	4.0	4.58	1.59	5.47	1.21	4.87	1.21	4.02	1.43	1.17	1.13	4.78	1.47
Ingeniería y Arquitectura	1415	17.9	4.50	1.49	5.49	1.14	4.80	1.08	3.60	1.44	1.27	1.23	4.87	1.29
Ciencias Agrícolas, Forestales y Ciencia de la Nutrición	72	0.9	4.49	1.35	5.26	1.31	4.66	1.12	3.92	1.46	1.31	1.29	5.06	1.34
Derecho	475	6.0	4.44	1.62	5.51	1.27	4.69	1.22	3.87	1.49	1.27	1.25	4.68	1.50
Otras Ciencias Sociales (incluyendo Educación)	943	11.9	4.26	1.54	5.54	1.16	4.57	1.20	3.73	1.51	1.14	1.13	4.78	1.41
Lengua y Humanidades (incluyendo Psicología, Filosofía, Religión,...)	618	7.8	4.23	1.69	5.43	1.28	4.44	1.28	3.27	1.48	1.14	1.15	4.68	1.44
Medicina y Ciencias de la Salud	935	11.8	4.17	1.66	5.43	1.24	4.37	1.33	3.48	1.52	1.16	1.17	4.74	1.42
Matemáticas y Ciencias Naturales	293	3.7	4.03	1.70	5.39	1.18	4.38	1.30	3.59	1.43	1.22	1.24	4.84	1.51
ANOVA			$F(6, 6673) = 46.061,$ $p < .001$		$F(6, 6673) = 14.695,$ $p < .001$		$F(6, 6673) = 44.784,$ $p < .001$		$F(6, 6673) = 53.043,$ $p < .001$		$F(6, 6673) = 12.122,$ $p < .001$		$F(6, 6673) = 3.046,$ $p = .005$	

*Nota. N total = 7.909.*

des estimaron menores puntuaciones en esta variable que el resto de estudiantes, a excepción del área Ciencias de la Salud ( $p = .10$ ).

No existen por el contrario diferencias en el *entorno emprendedor*, salvo para el área de Negocios/Administración que presentó una puntuación ligeremante superior a todos los grupos excepto Otros ( $p = .10$ ). Ninguna de las otras áreas presentó diferencias significativas en esta puntuación.

Tampoco se encuentran diferencias en el *riesgo percibido de emprender*, excepto para quienes estudian Ingeniería y Arquitectura ya que perciben un mayor riesgo. No obstante, esta diferencia es solo estadísticamente significativa para la comparación con el área de Negocios/Administración ( $p < .01$ ).

En resumen, el análisis para esta muestra refleja que quienes estudian Negocios/Administración indican en general una mayor intención de emprender, una actitud más positiva, un mayor apoyo social percibido y más autoeficacia emprendedora, así como puntuaciones más altas en la valoración del entorno universitario y en el entorno emprendedor y más bajas en riesgo percibido de emprender. En el extremo opuesto se situaría el estudiantado de Lengua y Humanidades. No obstante, las diferencias encontradas son pequeñas y en algunas variables no parecen existir apenas diferencias entre áreas de estudio.

## **Estudio 2 - Estudio psicosocial de la creatividad percibida y la intención emprendedora en una muestra de estudiantes de nivel universitario**

En la Tabla C4 se presentan las puntuaciones medias en intención emprendedora en función del tipo de estudio (licenciatura/grado, máster y doctorado). La mayoría de las personas que participaron en este segundo estudio estaban también cursando estudios de licenciatura o grado. Pese a la diferencia de participación en cada nivel educativo, se ha realizado un ANOVA que muestra que no existen diferencias significativas entre grupos,  $F(2, 556) = 0.843$ ,  $p = .43$ ).

Tabla C4

*Puntuaciones medias en intención emprendedora en función del tipo de estudio*

	<i>n</i>	<i>M</i>	<i>DT</i>
Licenciatura/grado	496	3.61	1.55
Máster	57	3.89	1.61
Doctorado	6	3.42	2.06

*Nota.* *N total* = 559. Puntuaciones intención emprendedora: mínimo = 1; máximo = 7.

A continuación, se profundizó en las diferencias en intención emprendedora, actitud hacia emprender, norma subjetiva, autoeficacia emprendedora, creatividad autopercebida, apoyo percibido de la universidad y apoyo percibido de la familia a la creatividad para las titulaciones de licenciatura/grado (Tabla C5). Esta submuestra estaba formada por 496 estudiantes (57.9% mujeres,  $M = 24.02$ ,  $DT = 4.17$ ), aunque se descartó un cuestionario por no especificar la titulación cursada. Se realizó un ANOVA de una vía para cada variable con el fin de analizar si existían diferencias en las puntuaciones medias entre titulaciones. Dado que la muestra de Filologías fue inferior a 15 participantes, no se incluyó en las comparaciones.

En primer lugar, los resultados mostraron que no existían diferencias significativas entre las nueve titulaciones/áreas consideradas en cuanto a la *intención emprendedora*, la *actitud*, la *autoeficacia emprendedora* o el *apoyo* a la creatividad percibido *de la familia*. Sí se encontraron diferencias en el caso de la *norma subjetiva*. Las comparaciones de Bonferroni a posteriori revelaron que quienes estudiaban Ingeniería y Arquitectura presentaron una mayor norma subjetiva que las personas que estudiaban Psicología ( $p < .01$ ) y Arte, Historia y Geografía ( $p = .01$ ), aunque no difirieron significativamente del resto de estudiantes. A su vez, el estudiantado de Arte, Historia y Geografía presentó también una menor puntuación en norma subjetiva que las personas que estudiaban Ciencias ( $p = .03$ ).

Tabla C5

Puntuaciones medias en las variables de estudio en función de la titulación de licenciatura o grado (N total = 495)

			Intención emprendedora		Actitud		Norma subjetiva		Autoeficacia emprendedora		Creatividad percibida		Apoyo universidad		Apoyo familia	
	n	%	M	DT	M	DT	M	DT	M	DT	M	DT	M	DT	M	DT
ADE y Económicas	43	8.7	3.95	1.60	4.20	1.35	4.13	1.40	4.95	0.86	3.06	0.89	2.94	0.79	3.57	1.01
Ingeniería y Arquitectura	133	26.8	3.82	1.57	4.12	1.12	4.48	1.45	4.83	0.86	3.50	0.76	3.16	0.95	3.38	0.80
Psicología	117	23.6	3.71	1.56	3.90	1.16	3.73	1.53	4.58	0.93	3.52	0.75	2.93	0.77	3.47	0.94
Ciencias Sociales y de la Educación	53	10.7	3.65	1.72	3.64	1.26	3.89	1.49	4.53	0.87	3.58	0.72	3.20	0.76	3.33	0.80
Arte, Historia y Geografía	21	4.2	3.39	1.60	3.97	1.11	3.25	1.66	4.64	0.86	3.62	0.54	3.06	0.96	3.24	1.00
Ciencias de la Salud (Medicina...)	19	3.8	3.29	1.32	3.67	1.10	3.93	1.44	4.37	1.10	3.11	0.76	3.07	0.86	3.37	0.78
Ciencias (Biología, Físicas...)	46	9.3	3.23	1.29	4.07	1.15	4.52	1.25	4.51	1.10	3.31	0.81	2.67	0.72	3.25	1.02
Derecho	59	11.9	3.21	1.48	3.91	1.25	3.91	1.45	4.71	1.05	3.29	0.74	3.15	0.90	3.55	0.84
Filologías	4	0.8	3.13	1.74	2.61	0.63	3.74	1.24	4.00	0.33	3.00	0.99	2.42	0.84	3.33	1.31
ANOVA			$F(7, 483) = 1.856,$ $p = .075$		$F(7, 483) = 1.428,$ $p = .192$		$F(7, 483) = 4.193,$ $p < .001$		$F(7, 483) = 1.917,$ $p = .065$		$F(7, 483) = 3.275,$ $p = .002$		$F(7, 483) = 2.450,$ $p = .018$		$F(7, 483) = 0.897,$ $p = .508$	

En cuanto a la *creatividad autopercebida*, únicamente se encontraron diferencias significativas para quienes estudiaban ADE y Económicas, quienes puntuaron más bajo que el estudiantado de Ingeniería y Arquitectura ( $p = .03$ ), Psicología ( $p = .02$ ) y Ciencias Sociales y de la Educación ( $p = .02$ ). Respecto al apoyo a la creatividad percibido de la universidad, solo hubo diferencias entre el estudiantado de Ciencias y quienes estudiaban Ingeniería y Arquitectura, ya que en Ciencias se percibió menor apoyo.

En resumen, las diferencias encontradas son pequeñas y en algunas variables no parecen existir apenas diferencias entre áreas de estudio. Por tanto, estudiantes de todas las titulaciones podrían beneficiarse de la educación en emprendimiento y creatividad.



**APPENDIX D. SUPPLEMENTARY DATA TO STUDY 2 - A PSYCHOSOCIAL STUDY  
OF SELF-PERCEIVED CREATIVITY AND ENTREPRENEURIAL INTENTION  
IN A SAMPLE OF UNIVERSITY STUDENTS**

**1. STUDENTS' INTENTION TO PURSUE DIFFERENT CAREER PATHS**

Students were directly asked about their intention to pursue different career paths: being an entrepreneur, developing a professional career in a private company, being a civil servant, working in a NGO, and being a social entrepreneur (Table D1). With respect to the three traditional career options (which correspond to the first three alternatives), entrepreneurial intention obtained the lowest scores ( $M = 3.92$ ,  $SD = 1.84$ ).

Table D1

*Labor intention*

	<i>M</i>	<i>SD</i>	1	2	3	4
1. Creating a new company (being an entrepreneur)	3.92	1.84	-			
2. Developing your career in a private company	4.85	1.57	.04	-		
3. Working as a civil servant for the government	4.31	1.89	-.22***	.03	-	
4. Working in a Non Profit Organization	3.62	1.80	-.07	.01	.23***	-
5. Being a social entrepreneur	3.64	1.81	.40***	-.00	-.01	.46**

*Note.*  $N = 559$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Regarding the compatibility of labor intentions, being an entrepreneur appears to be incompatible with being a civil servant ( $r = -.22$ ,  $p < .001$ ), although there is no significant correlation with working in a private company. In the case of the two new alternatives proposed in this study, working in a NGO and becoming a social entrepreneur, both had lower mean scores than traditional options. Being a social entrepreneur correlated highly with being an entrepreneur ( $r = .40$ ,  $p < .001$ ), as well as working in an NGO ( $r = .46$ ,  $p < .001$ ).

## **2. CORRELATES OF SELF-PERCEIVED CREATIVITY**

Motivational beliefs, classroom experiences, and leisure activities have an influence on creative self-efficacy (Beghetto, 2006). With respect to university and family contexts, these aspects are considered under the generic label of correlates of creativity. On the basis of the work of Beghetto (2006), a set of eight items about the frequency of occurrence of several events or activities was included. For instance, regarding receiving supportive feedback (e.g., “Your teachers say you are a creative person”) or description of activities (e.g., “Practice on a sports team”). Correlates score from 0 (*never or almost never*), 1 (*sometimes a month*), 2 (*once a week*), 3 (*sometimes a week*), to 4 (*several times a day*). These items are correlates of creative self-efficacy (i.e., self-judgments of creative ability). The inclusion of these items grounds on the assumption that creativity ability is necessary for creative expression, but not sufficient. As well as other behaviors, the expression of creativity appears to be influenced by self-judgments of one’s ability (Beghetto, 2006). An additional item (a passive activity, “play with video games”) was added as control and it is not supposed to have a significant correlation with creativity.

Further, three items inquire about having new ideas in the shower, while going to office/university, or while sharing time with other people. This kind of daily activities is usually related to incubation moments that precede flashes of insight. According to Pinchot and Pellman (1999), everyone can be creative and there are times (e.g., driving a car) “when the brain is able to run free without feeling it a waste of time” (p. 45). Generating ideas is considered to be the start point to innovation.

Thus, the influence of 12 correlates of creativity on the other variables was analyzed (Table D2). Self-perceived creativity presented positive and significant correlations with all the correlates except for playing videogames. This item was not significant either in Beghetto’s (2006) study. The occurrence of new ideas in different circumstances highly correlated with de perception of creativity (while having a shower:  $r = .44$ ,  $p < .001$ ; going to office/university:



$r = .51, p < .001$ ; with other people:  $r = .47, p < .001$ ). Furthermore, when other people praise the creativity of the person, their self-perception of creativity is higher, mainly if these reference people are their colleagues/classmates ( $r = .56, p < .001$ ), their family ( $r = .49, p < .001$ ), and their teachers ( $r = .44, p < .001$ ). Leisure activities (items 7-11) were slightly related to self-perceived creativity. However, they had no significant relationship with family or university support to creativity (except for cultural activities and family support, although  $r = .08, p < .05$ ).

Table D2

*Correlates of creativity*

	Correlate	<i>M</i>	<i>SD</i>	Family support to creativity	University support to creativity	Self-perceived creativity
1.	New ideas come to you in the shower	1.85	1.26	.15***	.14**	.44***
2.	New ideas come to you on your way to office/university	2.13	1.13	.15***	.09*	.51***
3.	New ideas come to you while you are with other people	2.38	1.09	.13**	.08	.47***
4.	Your teachers say you are a creative person	1.51	1.26	.13**	.12**	.44***
5.	Your colleagues/classmates say you are a creative person	1.95	1.24	.17***	.10*	.56***
6.	Your relatives say you are a creative person	2.04	1.30	.25***	.11*	.49***
7.	You read or write (when not mandatory for your work/study)	2.55	1.13	.02	-.04	.20***
8.	You play activities such as band, drama, other artistic activities	1.20	1.30	.08*	.00	.23***
9.	You practice sports alone (run, swim, other)	2.06	1.26	.02	.03	.14**
10.	You practice on a sports team	1.35	1.34	.03	.07	.12**
11.	You do activities in an association/club	1.12	1.27	.03	.03	.21***
12.	You play video games	1.16	1.31	-.06	.01	.05

*Note.*  $N = 559$ . Correlates score from 0 (*never or almost never*), 1 (*sometimes a month*), 2 (*once a week*), 3 (*sometimes a week*), to 4 (*several times a day*). \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .



## **APPENDIX E. VALIDATION OF A TASK AND RELATIONSHIP SCALE TO MEASURE GENDER STEREOTYPES IN ENTREPRENEURSHIP**

Building on the “think manager – think male” paradigm, in this Appendix the psychometric properties of an “Entrepreneurial Task and Relationship” (ETR) scale are tested to assess gender stereotypes in entrepreneurship. The sample was composed of 1,056 non-entrepreneurs and 178 entrepreneurs<sup>42</sup>. Non-entrepreneurs rated the characteristics of: 1) *successful entrepreneurs* ( $n = 348$ ); 2) *successful female entrepreneurs* ( $n = 360$ ); and 3) *successful male entrepreneurs* ( $n = 348$ ). Entrepreneurs rated to what extent they ascribe themselves entrepreneurial characteristics. Results revealed psychometric adequacy of a two-dimensional 13-item ETR scale.

### **1. “ENTREPRENEURIAL TASK AND RELATIONSHIP” (ETR) SCALE**

The ETR scale focuses on two dimensions, task and relationship orientation, as opposed to general personality traits of masculine/feminine stereotypes (e.g., Gupta et al., 2009). While general personality traits can be seen as irrelevant or even misleading in the fields of leadership (e.g., Sczesny, 2003) and entrepreneurship (e.g., Rauch & Frese, 2007), the feminine personal characteristics do not well describe entrepreneurs, or even they are just the opposite of the entrepreneurship domain (Ahl, 2006). In comparison with the “think manager – think male” paradigm (García-Ael et al., 2013; Sczesny, 2003), which has been extensively studied in the leadership domain, research on gender stereotypes within entrepreneurship is still scarce. With the aim to improve the understanding of the “think entrepreneur – think male” phenomenon, the scale developed by García-Ael et al. (2013) to measure task and relationship orientation in leadership is adapted here into the field of entrepreneurship. The fields of entrepreneurship and leadership theoretically converge in several areas, although

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<sup>42</sup> This group is comprised of business owners and self-employees. The term entrepreneurs is used to distinguish it from the other group of participants (non-entrepreneurs).

entrepreneurship is a younger field that might benefit from leadership research (Cogliser & Brigham, 2004; Vecchio, 2003). For example, entrepreneurs take advantage of opportunities and convince others about the feasibility, strength and value of their business ideas. These attempts to influence can be assigned equally to any manager in established organizations. However, contrary to management involving largely routine administration (e.g., decision making and control of others), entrepreneurship illustrates the perception and exploitation of new opportunities in the realm of business (Hartman, 1959). Furthermore, in comparison with managers, (solo)entrepreneurs must play multiple roles in a business, including management (general manager, sales manager and so on), marketing, planning, or leadership (Fuller-Love, 2006; Onstenk, 2003).

In sum, the aim is to adapt and validate a task and relationship orientation scale to measure gender stereotypes from the “think manager – think male” framework into the “think entrepreneur – think male” perspective in two samples (non-entrepreneurs and entrepreneurs). By so doing, the most relevant items for entrepreneurship are identified and long traits inventories are avoided. The availability of an adequate scale will allow us to deepen in how the perception of entrepreneurs (high in one of the identified dimensions, high in both, or none of them) can influence future career intention. In the same vein, self-perception of task and relationship orientation can influence entrepreneurial intention. Further, entrepreneurial skills perceptions have a very significant effect over personal attraction, subjective norms, and perceived behavioral control, which, in turn, influence entrepreneurial intention (Liñán, 2008). People who perceive they fit the entrepreneur stereotype might become more confident they will make a good entrepreneur and show a higher intention to become entrepreneurs.

## **2. METHOD**

### **2.1. Procedure and participants**

Participants completed an online questionnaire and were guaranteed anonymity and confidentiality. Questionnaire completion took approximately 17 minutes. The sample

consisted of 1,056 Spanish participants who were not entrepreneurs at the moment of completing the questionnaire and 178 entrepreneurs (solo or with partners). Non-entrepreneurs were on average 34.80 years old ( $SD = 10.07$ ), 55.7% were women and 68.1% had university degrees (20.2% were still students). The group of entrepreneurs was slightly older ( $M = 40.54$ ,  $SD = 9.74$ ), better educated (75% with a university degree) and comprised significantly fewer women (39.9%) and student participants (11.2%). Most participants were from Madrid (25.1% of non-entrepreneurs and 21.3% of entrepreneurs), and other main cities (e.g., Barcelona, Zaragoza, Valencia and Seville, 30.1% of non-entrepreneurs and 29.8% of entrepreneurs).

## 2.2. Measures

The ETR scale is based on the scale of García-Ael et al. (2013) to measure task- and relationship-oriented leadership styles. The original scale is composed of one task-oriented factor including 14 items (e.g., “competent,” “self-confident,” “able to work in teams”) and one relationship-oriented factor containing 11 items (e.g., “able to motivate others,” “understanding,” “sincere”). Only one item was changed: the characteristic “sensitive to the needs of co-workers” was replaced by one referring to “customers’ needs,” which better fit entrepreneurship.

The answering format was the same as the original scale, that is, a five-point Likert-type scale ranging from 1 (*not at all typical*) to 5 (*very typical*). Three versions of the questionnaire matched the three conditions. The instruction was formulated as follows: *To what extent do you consider that these characteristics and behaviors are typical of successful entrepreneurs / successful female entrepreneurs / successful male entrepreneurs?* In the successful entrepreneurs condition, information about the gender of the entrepreneur was omitted. The non-entrepreneur participants were randomly assigned to one of the three conditions, that is, *successful entrepreneurs* ( $n = 348$ , 55.7% female participants), *successful female entrepreneurs* ( $n = 360$ , 58.9% female participants), and *successful male entrepreneurs*

( $n = 348$ , 55.7% female participants). No significant differences were found regarding age of participants among these conditions,  $F(2, 1053) = 1.210$ ,  $p = .298$ ; gender,  $\chi^2(2, 1056) = 2.859$ ,  $p = .239$ ; and education (no university, university degree, master/PhD),  $\chi^2(4, 1056) = 3.496$ ,  $p = .478$ . Participants who are entrepreneurs were instructed to report how characteristics included in the ETR scale were typical of themselves.

### **2.3. Data analysis**

Descriptive statistics were performed with the program SPSS 19 (see Table E4). An exploratory factor analysis (EFA) was performed using the FACTOR software (Lorenzo-Seva & Ferrando, 2006). Two ETR scale dimensions were extracted using the polychoric correlations matrix, parallel analysis method, and robust unweighted least squares with the oblique promax rotation.

To test the hypothesized two-factorial underlying structure of the ETR scale, invariance analyses were conducted using AMOS 22 program and maximum likelihood estimation. Given the sensitivity of the chi-square statistic to the sample size, a combination of adjustment indices was considered to evaluate the model fit such as the index RMSEA (Root Mean Square Error of Approximation), the relative adjustment index CFI (Comparative Fit Index), and the AGFI (Adjusted Goodness of Fit Index). A good fit would have values close to .95 for CFI and .90 for AGFI (the perfect fit would be indicated by the value 1), and .05 for RMSEA (values around .08 represent a reasonable error of approximation to the population, values above .10 are indicative of an inadequate approximation) (Bagozzi & Yi, 1988; Browne & Cudeck, 1993). Together with these indices, the Akaike Information Criterion (AIC) was considered for model comparisons, so that the most adequate model is considered to be the one with the lowest value in this parameter.

Configural, metric, and scalar invariance was calculated for multigroup analyses regarding the three questionnaire conditions (*successful entrepreneurs / successful female entrepreneurs / successful male entrepreneurs*). Invariance of the ETR scale was also tested across

participants' gender (female vs. male participants). First, the configural invariance model was examined by estimating the same model in all groups without cross-groups constraints. Then, metric invariance was tested (i.e., that each of the items saturates in an equivalent way in the same factor in all groups, restricting that the factor loading of each item is equivalent in all the groups). Finally, scalar invariance was calculated by constraining equivalent intercepts. In case full invariance is not achieved, partial invariance can be still tested by freeing some parameters (Steenkamp & Baumgartner, 1998); when at least two items per factor exhibit metric and scalar invariance, comparisons of means across groups can be then conducted. The comparison among models is based on changes in the indices CFI and RMSEA. A change of  $\leq .010$  in CFI supplemented by a change of  $\leq -.015$  in RMSEA would indicate noninvariance (Chen, 2007).

### 3. RESULTS

#### Factor structure of the ETR scale

##### *Item characteristics*

All 25 items of the ETR scale showed acceptable values for skewness and kurtosis for the overall sample. Only three items showed values slightly over 1 for the entrepreneurs' sample: "sensitive to the needs of their clients," "sincere," and "ready to work overtime". The item "ambitious" showed a slight departure from normality in the *successful entrepreneurs* and *successful male entrepreneurs* conditions. Most of the task-oriented characteristics (stereotypically masculine) received the higher assessment (e.g., "self-confidence," "make decisions easily," or "ready to work overtime"), while most of the relationship-oriented characteristics (stereotypically feminine) exhibited the lowest assessment (e.g., "lets their feelings run away with them" or "aggressive" – reversed item). Table E1 illustrates mean values and standard deviations of the 25 items across conditions and entrepreneurs' self-assessment.

##### *Exploratory factor analysis*

The non-entrepreneur sample was selected to conduct exploratory factor analysis. The Kaiser-Meyer-Olkin test value was .91, which indicated the matrix was well suited to factor analysis.

Table E1

*Descriptives of characteristics across conditions and entrepreneurs' self-assessment*

Characteristics	Successful entrepreneurs		Successful female entrepreneurs		Successful male entrepreneurs		Self-assessment entrepreneurs	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Self-confident	4.47	0.59	4.44	0.64	4.47	0.61	3.98	0.91
Make decisions easily	4.47	0.58	4.33	0.68	4.38	0.64	4.11	0.80
Ready to work overtime	4.40	0.71	4.29	0.75	4.32	0.73	4.19	0.96
Ambitious	4.30	0.77	4.07	0.82	4.43	0.69	3.54	1.01
Able to cope with stress	4.25	0.69	4.10	0.82	4.20	0.74	4.06	0.80
Negotiation skills	4.21	0.65	4.09	0.79	4.26	0.71	3.83	0.88
Ready to take risks	4.19	0.72	4.00	0.76	4.23	0.71	3.62	0.90
Adaptable	4.16	0.65	4.14	0.72	4.07	0.74	4.24	0.74
Assertive (firm and energetic)	4.14	0.73	4.18	0.75	4.15	0.70	3.80	0.95
Deep knowledge of their work	4.11	0.73	4.26	0.66	4.19	0.71	4.34	0.65
Competent in their work	4.08	0.73	4.26	0.66	4.01	0.72	4.26	0.69
Efficient	4.03	0.69	4.25	0.67	3.97	0.68	4.16	0.73
Able to work in teams	3.91	0.86	4.07	0.83	3.76	0.88	4.19	0.79
Sensitive to the needs of their clients	3.84	0.88	4.00	0.81	3.59	0.94	4.31	0.80
Agreeable	3.68	0.83	3.90	0.81	3.63	0.81	4.43	0.70
Ability to motivate their employees	3.67	0.86	3.86	0.81	3.57	0.90	3.85	0.85
Try to impose their own ideas on others	3.55	0.89	3.42	0.95	3.70	0.91	3.12	1.08
Intelligent	3.45	0.79	3.91	0.75	3.49	0.78	3.65	0.82
Able to delegate	3.28	0.89	3.54	0.90	3.31	0.93	3.50	0.89
Individualistic	3.24	1.03	3.05	1.03	3.45	1.04	3.06	1.17
Share their knowledge	3.13	0.97	3.49	0.89	2.93	0.93	3.98	0.84
Understanding	3.09	0.89	3.52	0.92	2.87	0.94	4.35	0.69
Sincere	2.99	0.96	3.40	0.95	2.78	0.93	4.31	0.73
Aggressive	2.83	1.05	2.75	1.05	3.01	1.07	2.24	1.10
Lets their feelings run away with them	2.30	0.94	2.76	1.04	2.31	0.90	3.13	0.97

*Note.*  $n$  successful entrepreneurs = 348.  $n$  successful female entrepreneurs = 360.  $n$  successful male entrepreneurs = 348.

$n$  entrepreneurs = 178. Ordered by mean value. Range from 1 (*not at all typical*) to 5 (*very typical*).



The Bartlett test of sphericity,  $\chi^2(300) = 9406.5$ ,  $p < .001$ , supported the model was significant; adjustment indexes were also adequate (Table E2).

All items loaded on the factors proposed in the original leadership scale provided by García-Ael et al. (2013) with exception of the items “able to work in teams” and “able to delegate” (superscript <sup>a</sup> in Table E2). Four items were excluded from subsequent analyses: two items (“lets their feelings run away with them” and “intelligent”) which did not achieve the recommended cut-off value of .40 and two further items (“ambitious” and “try to impose their ideas”) that showed cross-loadings (superscript <sup>b</sup> in Table E2).

Table E2

*Exploratory factor analysis of the ETR scale*

	<i>Relationship-Orientation</i>	<i>Task-Orientation</i>
<b>Make decisions easily</b>		.78
<b>Self-confident</b>		.71
<b>Negotiation skills</b>		.70
<b>Able to cope with stress</b>		.69
<b>Adaptable</b>		.67
<b>Ready to take risks</b>		.66
<b>Assertive (firm and energetic)</b>		.65
Deep knowledge of their work		.62
Ambitious <sup>b</sup>	-.53	.62
Efficient		.62
Competent in their work		.60
<b>Ready to work overtime</b>		.59
Intelligent <sup>b</sup>		.38
<b>Understanding</b>	.86	
<b>Sincere</b>	.82	
<b>Share their knowledge</b>	.69	
Able to motivate their employees	.52	
<b>Agreeable</b>	.51	
Individualistic	-.50	

	<i>Relationship-Orientation</i>	<i>Task-Orientation</i>
Aggressive	-.48	
Able to work in teams <sup>a</sup>	.48	
Able to delegate <sup>a</sup>	.47	
Try to impose their own ideas on others <sup>b</sup>	-.46	.31
<b>Sensitive to the needs of their clients</b>	.44	
Lets their feelings run away with them <sup>b</sup>	.38	
Variance explained	30.07%	15.90%
Correlation between factors		.33
AGFI		.97
CFI		.95
RMSEA		.08

Note.  $N = 1,056$ . Values under .30 are omitted. Final ETR scale items are marked in bold.

<sup>a</sup> Items loading on the opposite factor than proposed by García-Ael et al. (2013).

<sup>b</sup> Items deleted from the ETR scale after exploratory factor analysis.

### Confirmatory factor analyses

Using the remaining 21 items, several alternative models were tested within the non-entrepreneur sample, regardless of the three different questionnaire conditions (Table E3). First, the hypothesized two-factor model of the ETR scale (Model 1) was tested, followed by an alternative unifactorial model (Model 2) in which all items loaded on one latent factor. The model fit was much better for Model 1 than for Model 2. To further increase the model fit to the data, the items “individualistic” and “aggressive” (presenting low factor loadings) were excluded, as well as three items related to working in groups (“able to work in teams,” “able to delegate,” and “able to motivate their employees”) from the relationship factor (see refined Model 3). These three items appear to be less appropriate to entrepreneurship, since in the early stages it is usually one person (solo entrepreneur) or a small group of people who create and manage a company.

Finally, to keep balance in the number of items assigned into task and relationship factors, three items were deleted from the task orientation dimension: “deep knowledge of their work,” “competent in their work,” and “efficient” (Model 4). These items demonstrated low mean values indicating their minor relevancy in entrepreneurial contexts. Conducted adjustments considerably increased the fit of the final Model 4. Thus, this 13-item model (Model 4; task orientation: “make decisions easily,” “self-confident,” “negotiation skills,” “able to cope with stress,” “adaptable,” “ready to take risks,” “assertive (firm and energetic),” and “ready to work overtime;” relationship orientation: “understanding,” “sincere,” “share their knowledge,” “agreeable,” and “sensitive to the needs of their clients”) is used for subsequent analyses (final ETR scale items are also marked in bold in Table E2).

Table E3

*Comparisons among alternative models*

	$\chi^2$	<i>p</i>	<i>df</i>	CFI	AGFI	RMSEA	AIC	Model comparison
Model 1: Bifactorial model	1503.43	<.001	188	.83	.84	.08	1589.43	-
Model 2: Alternative unifactorial model	3158.83	<.001	189	.61	.61	.12	3242.83	Model 2 - Model 1
Model 3: Bifactorial model (five items deleted from relationship factor)	671.11	<.001	103	.91	.89	.07	737.11	Model 3 - Model 1
Model 4: Final model (re-specified bifactorial model with 13 items)	355.66	<.001	64	.94	.93	.07	409.66	Model 4 – Model 3

*Note.* *N* = 1,056.

**ETR scale reliability and validity**

Reliability of task and relationship dimensions of the ETR scale was considered satisfactory in all three conditions, for male and female participants as well as for the group of entrepreneurs (Table E4). Cronbach’s alpha internal consistency ranged from .73 to .85, composite reliability from .83 to .89. The Average Variance Extracted (AVE) values either exceeded the

Table E4

Comparisons among conditions, reliability, and correlations (based on re-specified bifactorial model with 13 items, Model 4, Table E3)

	$\chi^2/df$	$p$	CFI	AGFI	RMSEA	Factor	Cronbach's alpha	Composite reliability	AVE	Mean	SD	Pearson correlation
Successful entrepreneurs condition 1	2.36	< .001	.93	.90	.06	Task	.78	.84	.40	4.29	0.42	.34***
						Relationship	.80	.87	.57	3.35	0.68	
Successful female entrepreneurs condition 2	2.20	< .001	.96	.92	.06	Task	.85	.89	.50	4.20	0.52	.31***
						Relationship	.83	.88	.59	3.66	0.67	
Successful male entrepreneurs condition 3	2.77	< .001	.92	.89	.07	Task	.82	.86	.44	4.26	0.46	.26***
						Relationship	.79	.85	.54	3.16	0.67	
Male participants	3.15	< .001	.92	.91	.07	Task	.80	.86	.43	4.19	0.47	.24***
						Relationship	.80	.86	.56	3.33	0.68	
Female participants	3.63	< .001	.94	.92	.07	Task	.83	.87	.47	4.29	0.47	.28***
						Relationship	.84	.88	.61	3.44	0.72	
Self-assessment entrepreneurs	1.83	< .001	.91	.91	.07	Task	.79	.85	.42	3.98	0.56	.31***
						Relationship	.73	.83	.49	4.28	0.52	

Note.  $n$  successful entrepreneurs = 348.  $n$  successful female entrepreneurs = 360.  $n$  successful male entrepreneurs = 348.  $n$  male participants = 468.  $n$  female participants = 588.  $n$  entrepreneurs = 178.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

recommended value of .50 (Hair et al., 2006) or were close to that value (over .40). Both factors, task orientation and relationship orientation, correlated positively and significantly ranging from .24 to .34 and were lower than the square root of the AVE, thus confirming discriminant validity between these two ETR scale dimensions (Fornell & Larcker, 1981).

### **Invariance of the ETR scale across different questionnaire conditions**

To test the “think entrepreneur – think male” paradigm within the conditions (i.e., *successful entrepreneurs, successful female entrepreneurs, and successful male entrepreneurs*), first the goodness of the model fit was examined (final Model 4, Table E3) separately for each condition. As presented in Table E4, in all three conditions, the CFI, AGFI, and RMSEA were acceptable to satisfactory: *successful entrepreneurs* (CFI = .93, AGFI = .90, RMSEA = .06), *successful female entrepreneurs* (CFI = .96, AGFI = .92, RMSEA = .06), and *successful male entrepreneurs* (CFI = .92, AGFI = .89, RMSEA = .07).

Further, the configural, metric, and scalar invariance of the ETR scale across different conditions was analyzed (Table E5). To obtain the configural invariance, factor loadings unrestricted among the three groups (i.e., conditions) were estimated. This model showed satisfactory CFI and RMSEA (Model A: CFI = .936, RMSEA = .037). In the next step, the metric invariance of the ETR scale was tested by restricting the factor loadings to be equivalent among the three groups. Constraining factor loadings of the items to be equal across the groups showed no significant deterioration of the model fit (Model B:  $\Delta$ CFI = .000,  $\Delta$ RMSEA = -.002).

Scalar invariance was also tested by assuming all intercepts to be equal (Model C:  $\Delta$ CFI = -.036,  $\Delta$ RMSEA = .006). As Model C significantly deteriorated, full scalar invariance cannot be assumed across conditions in this sample. However, partial scalar invariance was obtained by freeing intercepts (Model D:  $\Delta$ CFI = -.010,  $\Delta$ RMSEA = -.004), such that at least two items per dimension exhibited scalar invariance.

Table E5

*Testing invariance among the conditions: Successful entrepreneurs, successful female entrepreneurs, and successful male entrepreneurs (based on re-specified bifactorial model with 13 items, Model 4, Table E3)*

	$\chi^2$	df	p	CFI	RMSEA	Model comparison	$\Delta \chi^2$	p	$\Delta$ CFI	$\Delta$ RMSEA
Model A: Configural invariance	468.696	192	<.001	.936	.037	-	-	-	-	-
Model B: Metric invariance	491.778	214	<.001	.936	.035	Model B - Model A	23.082	.397	.000	-.002
Model C: Scalar invariance	673.431	240	< .001	.900	.041	Model C - Model B	181.652	<.001	-.036	.006
Model D: Partial scalar invariance	544.084	222	< .001	.926	.037	Model C' - Model B	52.305	<.001	-.010	-.004

*Note.*  $n$  successful entrepreneurs = 348.  $n$  successful female entrepreneurs = 360.  $n$  successful male entrepreneurs = 348.

**Invariance of the ETR scale across participants' gender and ETR scale adequacy within entrepreneurs' sample**

The two-factorial ETR scale structure fit well both male (CFI = .92, AGFI = .91, RMSEA = .07) and female (CFI = .94, AGFI = .92, RMSEA = .07) participants (Table E4). The invariance across the female and male participants was empirically supported (Table E6). The fit indices of the three increasingly restrictive models, that is, the unconstrained configural model (Model E: CFI = .933, RMSEA = .048), the metric invariance model (Model F:  $\Delta$ CFI = .000,  $\Delta$ RMSEA = -.003), and the scalar invariance model (Model G:  $\Delta$ CFI = -.005,  $\Delta$ RMSEA = .000) were satisfactory; no significant deterioration of the model was observed. Moreover, the two-factorial model reasonably fit the group of entrepreneurs (CFI = .91, AGFI = .91, RMSEA = .07), who self-assessed on the ETR scale (see Table E4, last row).

Table E6

*Testing invariance between female and male study participants (based on re-specified bifactorial model with 13 items, Model 4, Table E3)*

	$\chi^2$	<i>df</i>	<i>p</i>	CFI	RMSEA	Model comparison	$\Delta \chi^2$	<i>p</i>	$\Delta$ CFI	$\Delta$ RMSEA
Model E: Configural invariance	433.752	128	<.001	.933	.048	-	-	-	-	-
Model F: Metric invariance	442.042	139	<.001	.933	.045	Model K - Model J	8.290	.687	.000	-.003
Model G: Scalar invariance	476.482	152	<.001	.928	.045	Model L - Model K	34.440	.001	-.005	.000

*Note.*  $n$  male participants = 468.  $n$  female participants = 588.

### Task and relationship orientation

Entrepreneurship were perceived by non-entrepreneurs as more task-oriented (stereotypically masculine,  $M = 4.25$ ,  $SD = 0.47$ ) than relationship-oriented (stereotypically feminine,  $M = 3.39$ ,  $SD = 0.70$ ),  $t_{paired}(1055) = 37.872$ ,  $p < .001$ . On the contrary, the sample of entrepreneurs self-perceived themselves as more relationship-oriented ( $M = 4.28$ ,  $SD = 0.52$ ) than task-oriented ( $M = 3.98$ ,  $SD = 0.56$ ),  $t_{paired}(177) = 6.269$ ,  $p < .001$  (Table E4). While females and males entrepreneurs self-perceived similar task orientation ( $M_{females} = 3.94$ ,  $M_{males} = 4.00$ ),  $t(176) = .66$ ,  $p = .51$ , females self-assessed higher in relationship orientation ( $M_{females} = 4.43$ ,  $M_{males} = 4.17$ ),  $t(176) = -3.38$ ,  $p = .001$ .

### Task orientation across conditions

First, a 3 (condition - successful entrepreneurs' gender: in general, female or male) x 2 (participant's gender: female vs. male) univariate analysis of variance (ANOVA) was conducted on the task orientation for the non-entrepreneurs sample. Bonferroni tests were applied to analyze multiple comparisons. Results showed a main effect of condition,

$F(2, 1050) = 5.23, p = .01, \eta_p^2 = .01$ , such that *successful entrepreneurs* were perceived to exhibit a higher task orientation ( $M = 4.29, SD = 0.42$ ) than *successful female entrepreneurs* ( $M = 4.20, SD = 0.52, p = .01$ ); there was no significant difference between these conditions and *successful male entrepreneurs* ( $M = 4.26, SD = 0.46; p = 1.00$  and  $p = .60$ , respectively). A main effect of participants' gender was found,  $F(1, 1050) = 13.60, p < .001, \eta_p^2 = .01$ , such that female participants ( $M = 4.29, SD = 0.47$ ) ascribed more task orientation to the entrepreneurs than male participants ( $M = 4.19, SD = 0.47$ ). The interaction effect was significant as well,  $F(2, 1050) = 4.75, p = .01, \eta_p^2 = .01$ , such that male participants considered as less characteristic the task orientation for *successful female entrepreneurs* ( $M = 4.06, SD = 0.52$ ) than for *successful entrepreneurs* ( $M = 4.26, SD = 0.43, p = .001$ ) or *successful male entrepreneurs* ( $M = 4.24, SD = 0.43, p = .002$ ). On the contrary, female participants did not exhibit differences across conditions.

#### *Relationship orientation across conditions*

Similarly, a 3 (condition - successful entrepreneurs' gender: in general, female or male) x 2 (participant's gender: female vs. male) ANOVA was conducted on the relationship orientation for the non-entrepreneurs sample, using Bonferroni tests to analyze multiple comparisons. Results showed a main effect of condition,  $F(2, 1050) = 45.89, p < .001, \eta_p^2 = .08$ , such that *successful female entrepreneurs* were perceived to have higher relationship orientation ( $M = 3.66, SD = 0.67$ ) than *successful entrepreneurs* ( $M = 3.35, SD = 0.68, p < .001$ ) and *successful male entrepreneurs* ( $M = 3.16, SD = 0.68, p < .001$ ). *Successful entrepreneurs* were also perceived to be more relationship-oriented than *successful male entrepreneurs* ( $p = .002$ ).

A main effect of participants' gender was found,  $F(1, 1050) = 4.85, p = .03, \eta_p^2 = .004$ , such that female participants ( $M = 3.44, SD = 0.72$ ) ascribed more relationship orientation to the entrepreneurs than male participants ( $M = 3.33, SD = 0.68$ ). Additionally, the interaction between entrepreneurs' gender and participants' gender was significant,  $F(2, 1050) = 8.81, p < .001, \eta_p^2 = .02$ , such that female participants considered as more characteristic the



relationship orientation for *successful female entrepreneurs* ( $M = 3.76$ ,  $SD = 0.70$ ) than for *successful entrepreneurs* ( $M = 3.43$ ,  $SD = 0.64$ ,  $p < .001$ ) or *successful male entrepreneurs* ( $M = 3.09$ ,  $SD = 0.65$ ,  $p < .001$ ); the difference between *successful entrepreneurs* and *successful male entrepreneurs* was also significant ( $p < .001$ ). In a similar vein, male participants considered *successful female entrepreneurs* ( $M = 3.52$ ,  $SD = 0.61$ ) to exhibit higher relationship orientation than *successful entrepreneurs* ( $M = 3.25$ ,  $SD = 0.71$ ,  $p = .001$ ) and *successful male entrepreneurs* ( $M = 3.24$ ,  $SD = 0.69$ ,  $p = .001$ ).

#### 4. DISCUSSION

The aim of this study was to validate an “Entrepreneurial Task and Relationship” (ETR) scale, based on the two-dimensional leadership styles scale introduced by García-Ael et al. (2013) and developed within the “think manager – think male” paradigm. Thus, this study addressed the applicability of the “think manager – think male” paradigm to entrepreneurship. In so doing, the “think entrepreneur – think male” (characteristics, attitudes, and temperaments of successful entrepreneurs are more commonly ascribed to men than to women) was tested as it is highly relevant to better understanding the gender gap and gender stereotypes in this domain. In general, the results from the sample of 1,056 Spanish non-entrepreneurs and 178 entrepreneurs show that the ETR scale has satisfactory factorial validity as well as internal consistency.

Regarding the factorial validity, fit indices indicated that a two-factor model was an adequate fit to the data, confirming the underlying structure of the scale. The final 13-item ETR scale revealed psychometric adequacy of a two-dimensional, task and relationship orientation. The first factor (task orientation) reflects traits and behaviors such as self-confidence and risk-taking, stereotypically masculine. The second factor (relationship orientation) encompassed traits and behaviors such as agreeableness and knowledge-sharing, stereotypically feminine. The ETR scale also proved to be fully configural and metric-invariant across three study conditions

(i.e., *successful entrepreneurs / successful female entrepreneurs / successful male entrepreneurs*), as well as partially scalar-invariant. Additionally, the ETR scale showed full invariance across male and female participants. The ETR scale seems also applicable for entrepreneurs' self-evaluations, with a similar adjustment to the sample of non-entrepreneurs. Overall, the reliability and validity of the ETR scale was satisfactory.

The analysis of the proposed characteristics confirms that entrepreneurship is perceived as strongly associated with task orientation (Baron et al., 2001; Bird & Brush, 2002; Marlow, 2002). Consistent with the "think entrepreneur – think male" approach, task orientation was considered more characteristic of entrepreneurship than relationship orientation in all conditions ( $p < .001$ ). Most of the task-oriented characteristics got the higher assessment (e.g., "self-confidence"), whereas relationship-oriented characteristics showed the lowest assessment (e.g., "understanding"). However, the sample of entrepreneurs self-perceived themselves as more relationship- than task-oriented ( $p < .001$ ), supporting the importance of considering both dimensions. Therefore, looking at both different perspectives is relevant. Entrepreneurs in this sample are somehow experts and other participants are laypeople. It proves how important is to include both groups to get a better understanding. It also gives first evidence that stereotypes and entrepreneurial reality differ.

Based on a 25-item leadership-oriented scale, the questionnaire used to measure the stereotype of the entrepreneur contained some items that were not specific to the creation and management of a new company and which might not apply to all entrepreneurs (e.g., "ability to motivate their employees" or "ability to work in teams"). Thus, the reduced scale obtained from the confirmatory factor analysis is, on the one hand, a shorter and more easily applicable scale, and on the other, it is better suited to the target population. Further, unlike other studies (de Pillis & Meilich, 2006; Gupta & Fernández, 2009), the ETR scale focuses on aspects proximal to entrepreneurship instead of the application of general inventories (e.g., measuring characteristics such as "vulgar" or "neat").

## Implications

The ETR scale might potentially be used by future studies interested in deepening the knowledge of how the perception of entrepreneurs' task and relationship orientation affects future labour intention. Gender plays a relevant role in entrepreneurial intention (Díaz-García & Jiménez-Moreno, 2010) as well as in entrepreneurial orientation (Lim & Envik, 2013). While persons who see themselves higher in masculinity place greater importance on status-based career satisfiers associated with business ownership, individuals higher in femininity are more likely to value socioemotional career satisfiers such as employee and customer relationships (Eddleston & Powell, 2008). The present study contributes here by highlighting that both task and relationship dimensions are associated with entrepreneurship; particularly, entrepreneurs consider the relationship component to be of utmost importance. These results challenge the dominance of masculine models presented in media and entrepreneurship education (Achtenhagen & Welter, 2011; Ahl, 2006; Hamilton, 2013).

Gender stereotypes also shape perceptions of entrepreneurs' potential when evaluated by others. According to the lack of fit model in work settings (Heilman, 2001), stereotyped views of what women are like (prescriptive component of stereotypes) and the male sex typing of roles and positions combine to elicit gender bias from financiers and other evaluators, decreasing the chance of women to receive support to start a new business. For instance, governmental venture capitalists make differences in funding distributions between female and male entrepreneurs disadvantaging women entrepreneurs (Malmström et al., 2017).

In line with gender stereotypes, the relatively young participants ( $M = 34.80$  years old, 37.8% under 30) consistently perceived higher task orientation than relationship orientation in the three conditions (i.e., *successful entrepreneur* / *successful female entrepreneur* / *successful male entrepreneur*). To encourage participants high in relationship orientation to pursue a career as entrepreneurs, and to prevent undermining women entrepreneurs, the ETR scale can be used for reflecting and challenging own gender stereotypes and beliefs.

Results from distinct studies are not conclusive about the influence of biological sex on entrepreneurial intention, finding, only on occasions, significant differences between females and males. Incorporating gender perspective as a social construction in the entrepreneurial context, as this research does, might help to better understand the differences in entrepreneurial intention between female and male participants. Taking into account that entrepreneurship is associated to a greater extent to task competencies (stereotypically masculine) than relationship competencies (stereotypically feminine), the availability of an adequate scale such as the ETR scale allows researchers to explore how self-perception of task and relationship orientation influence entrepreneurial intention. Thus, this scale can be seen as a first step to continue working on this line of research.

Finally, as entrepreneurs are likely to manifest both masculine and feminine attributes (Bird & Brush, 2002) training should focus on the development of skills and abilities that are not only predominantly masculine. The ETR scale may allow to measure the effects of interventions targeting on building a more gender neutral and unbiased view on entrepreneurship. As entrepreneurship education is one of the key instruments related to entrepreneurial intention (Liñán et al., 2011), promoting more balanced models starting early in the formal education may foster entrepreneurial actions and benefit both female and male entrepreneurs.

### **Limitations and future research**

First, the study participants were randomly assigned to one of the three conditions and social desirability of their evaluations was not controlled. As participants considered task orientation to be more relevant in all conditions, social desirability bias seems unlikely. This might not be the case for entrepreneurs, thus, it is recommendable in future studies to control for socially desirable responding particularly in this subsample. Future studies should also account for the impact of business sector, size, and performance on entrepreneurs' self-evaluations of task and relationship dimensions, and increase the number of entrepreneurs' participants.

Second, this study is monocultural. Although it extends previous research by including non-students from non-US context, cross-cultural replication of the structure of the ETR scale is advisable. Particularly, differences would be expected in factor loadings and mean scores of task and relationship dimensions within gender egalitarian participants from Nordic cultural cluster (House, Hanges, Javidan, Dorfman, & Gupta, 2004). Alike contextual variation of the “think manager – think male” phenomenon in management (Ryan, Haslam, Hersby, & Bongiorno, 2011), context variables such as occupational setting of social entrepreneurship would be expected to affect the “think entrepreneur – think male” paradigm.

The availability of the ETR scale also paves the way for future research. As exposure to women in leadership positions can temporarily undermine women’s automatic gender stereotypic beliefs (Dasgupta & Asgari, 2004), thinking about successful female entrepreneurs could also influence female participants’ views on entrepreneurship by inhibiting the stereotype threat that implies being a member of a negatively stereotyped group (Davies et al., 2005). In this line, it is not only important to analyze differences between women and men in entrepreneurial intention, but other related variables that influence intention should be also considered, for instance, attitudes, subjective norms, and entrepreneurial self-efficacy (Ajzen, 1991). Particularly, entrepreneurial self-efficacy is key for promoting entrepreneurship (Spagnoli, Caetano, & Santos, 2015) and it may be influenced by gender or gender-orientation (e.g., Mueller & Conway Dato-on, 2013; Spagnoli et al., 2015).