

# GO FOR IT. ANALYZING THE IMPACT OF ENTREPRENEURIAL AWARENESS PROGRAMMES AT THE UNIVERSITY OF DEUSTO (SPAIN). THE CASE OF INGENIO AND EKin-IT

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## Abstract

Nowadays, universities are increasing their efforts to foster entrepreneurship awareness programmes in order to promote the entrepreneurial intention and entrepreneurial activity of their students. However, research on the consequences of those programmes in the real entrepreneurial activity is still scarce. Thus, the purpose of this study is to do a follow-up of the participants of two Entrepreneurship Programmes for undergraduates from the University of Deusto by analyzing their entrepreneurial activity up to 5 years after the completion of the programme. 90 former participants (75% of the participants) of the Ingenio and Ekin-IT programmes participated in the study. Results show that 20% of the working participants have created a company and 54% are working in entrepreneurship-related areas (e.g., intrapreneurship, innovation departments, entrepreneurship research and education). Moreover, proactiveness was found to predict the entrepreneurial and intrapreneurial activity and the entrepreneurial intention of the participants. Our results provide an initial promising perspective of the consequences of entrepreneurship programmes at the university level.

Keywords: Entrepreneurship, entrepreneurial awareness, innovation, University of Deusto, Ekin-It, entrepreneurial intention, entrepreneurial programmes, university level..

## 1 INTRODUCTION

In the last decade, entrepreneurship education has increased significantly in most industrialised countries (Matlay & Carey, 2006); universities are increasing their efforts to foster entrepreneurship awareness programmes in order to promote the entrepreneurial intention and entrepreneurial activity of their students.

The growing interest in entrepreneurship education has led to a wide variety of articles on this topic and an ongoing debate about whether entrepreneurship can be learned (Henry et al, 2005; DeTienne & Chandler, 2004; Peterman & Kennedy, 2003). In fact, the key assumption underlying education programs in entrepreneurship is that entrepreneurial skills can be taught and beyond stable aspects of personality.

Previous research (Tkachev & Kolvereid, 1999; Fayolle, 2002; Fayolle, Gailly, & Lassas-Clerc, 2006) has found that education and training in entrepreneurship influences the present and future intention and entrepreneurial behavior of students. However, research about the consequences of those programmes in the real entrepreneurial activity is still scarce.

In this context, our study addresses two questions: First, the entrepreneurial activity (in terms of business creation and entrepreneurship-related career) of the participants of two Entrepreneurship Programmes is examined up to 5 years after the completion of the programme. Second, the relationship between entrepreneurial intention and activity and programme-related skills (proactiveness and innovation orientation) is analyzed. Thus, the purpose of this study is to contribute to the literature of entrepreneurship education by studying the entrepreneurial activity of students who attend entrepreneurship programmes, and proactiveness as a key variable that may contribute to increasing entrepreneurial intention and activity on students.

## 2 ENTREPRENEURIAL INTENTION AND ACTIVITY

In recent years, the importance of entrepreneurial intentions as antecedents of entrepreneurial activity, such as creating a new business, has been highlighted (Krueger, Reilly, & Carsrud, 2000). Intention

has been found to be a predictor of planned behavior, mainly when the behavior is hard to observe or involves unpredictable time lags. The Theory of Planned Behavior (TPB) is based on the assumption that human beings always behave considering the information available and the implications of their actions. The theory posits that the performance of a specific behavior is a function of the intention to perform that behavior (Ajzen, 1988). The TPB has been used to study different types of human behavior (Armitage & Conner, 2001; Cooke & Sheeran, 2004; Ravis & Sheeran, 2003; Schwenk & Moser, 2009) and has received empirical support as a predictor of behavior (Armitage & Conner, 2001).

Entrepreneurship behavior is considered to be a planned and intentional behavior (Bird, 1988; Katz & Gartner, 1988; Krueger & Brazeal, 1994), and entrepreneurial intention has been subject of considerable interest in entrepreneurship research (Krueger & Carsrud, 1993; Kolvereid, 1996b). These research focuses on entrepreneurial intention as the immediate antecedent of entrepreneurial activity, which may, in turn, be determined by attitudes and situational variables (Ajzen, 1991; Krueger et al., 2000).

Together with entrepreneurial intentions, proactiveness has also been judged to be a trait of the personality that might determine the intention of an entrepreneur to start a business (Crant, 1996) or even to work on entrepreneurial- related activities, areas and context. Those are the reason why specifically, this study will focus on the relationship between proactiveness and entrepreneurial intention and activity.

## **2.1 Entrepreneurship and proactiveness**

Consistent with the interactional psychology perspective, proactiveness refers to active attempts made by the individual to effect changes in his or her environment (Bandura 1977; Schneider 1983). According to Bateman and Crant (1993), a person high in proactiveness shows initiative, and perseveres until they reach closure by bringing about change. Furthermore, some empirical investigations have demonstrated not only that proactive individuals are more successful but also that they respond more adaptively to their environments (Crant, 2000). Moreover, other research on proactiveness shows a conceptual overlap with personal initiative and is positively related to extraversion, conscientiousness, self-confidence, need for achievement, and need for dominance, while it is unrelated to openness, neuroticism, agreeableness, and locus of control (Claes, Beheydt, & Lemmens, 2005).

Research in this area suggests that there is a relationship between proactiveness and entrepreneurial intentions. In this sense, Crant (1996) reported a strong positive association between business students' proactiveness and intentions to start a business. He also explained that more proactive people tend to envision creating situations--such as forming or buying a business--that will allow them to capitalize on their personality.

More recently, Zampetakis (2008) examined the effects of creativity, proactiveness on entrepreneurial desirability and intent, and found that students' proactiveness is related to their perceived entrepreneurial desirability and entrepreneurial intent.

Based on the previous ideas, the following hypothesis are proposed:

H<sub>1</sub>: Proactiveness will be positively related to entrepreneurial intention

H<sub>2</sub>: Proactiveness will be positively related to entrepreneurial activity

H<sub>3</sub>: Proactiveness will be positively related to entrepreneurship-related career

## **2.2 Psychosocial variables**

Entrepreneurial intention depends on psychosocial factors, such as socio-demographic and cultural factors (Shapero & Sokol, 1982). The relationship between these factors and entrepreneurial intention has been previously examined in the entrepreneurship literature. For example, factors related to the family environment have been found to be positively related to entrepreneurship (Moriano, Palací, & Morales, 2006; Fayolle, Gailly, & Lassas-Clerc, 2006). Thus, a family background where one parent is an entrepreneur has been linked to a more positive attitude towards entrepreneurship as a career

(Drennan, Kennedy, & Renfrow, 2005) and stronger entrepreneurial intention (Fayolle, Gailly, & Lassas-Clerc, 2006). Gender is another relevant psychosocial variable that has been studied in the entrepreneurship literature. Regarding entrepreneurial activity, the GEM 2012 Global Report (Xavier, Kelley, Kew, Herrington, & Vorderwülbecke, 2013) consistently reported greater involvement in entrepreneurship among men than women in most economies. With respect to intention, Moriano et al. (2006) found that being a man is significantly related to entrepreneurial intention. Therefore, those control variables of a socio-demographic nature have been included in our analysis.

### **3 INGENIO & EKin-IT. ENTREPRENEURSHIP AWARENESS AT THE UNIVERSITY OF DEUSTO**

Ingenio programme, the predecessor of Ekin-It ([www.ekinit.deusto.es](http://www.ekinit.deusto.es)), was launched in July 2007. Since then, more than six years have passed, that is, four generations of Ingenio, three generations of EKin-IT and more than 150 participants, students from different faculties in the Bilbao campus of the University of Deusto. Nowadays, Ekin-It is possible thanks to the Bizkailab agreement signed with the Bizkaia Council (Spain) and Deusto Entrepreneurship Centre (University of Deusto).

EKin-IT is an entrepreneurial awareness and training program that aims to boost and foster an entrepreneurial spirit among undergraduate students while different competences are developed, among others, self-motivation, innovation and creativity, communication, team building or fears and risks management (Arruti, 2012). Furthermore, as Arruti (2013) reported Ekin-It enabled the responsible team to think that being an entrepreneur is possible whilst the desire to do so forms part of your dreams, those that oneself reflects through clear life objectives and a plan to reach them. This statement is supported by the active and proactive participants through expressions as the following ones (Arruti, 2013):

“With a clear view to where we want to go, in a few years anything is possible. It only depends on us, our continuous training, development and knowledge. To persevere with our objective, searching for something different and getting to know ourselves is how we will reach our goal.”

“The speeches have made me see that the only limits which exist in my life are those which I set myself; that I'm able to do anything I propose provided that I create it and believe in myself.”

“Now I truly believe that any effort reaps its reward. It has served to make it clear to me that if I want to make it in life I have to be persistent and fight for it. And it's clear to me that from now on I'm going to fight for what I want to be and what I want to have and nobody who tries will stop me from achieving it.”

“Ekin-IT has shown me the paths in order to continue training myself as an entrepreneur.”

“EKin-IT has shown me the path and has ignited my entrepreneurial flame. It will now always depend on me that my flame is not extinguished...the workshops have given me the key and the push that I needed to show me that in life you only live once and that we have everything at our disposal to grab it... I'm sure that I'm going to pursue my business dreams given that EKin-IT has guided me on how to do so and I'm boasting that I'm going to do it, not that I'm going to try because “trying is not doing, but you still sweat more”.

In short, EKin-IT is an experience which is worthwhile recommending for all those with different concerns (proactive), with the desire to do something with their lives (intention) and who wish to contribute to changing the world and do so as entrepreneurs.

It is necessary to highlight that no one is forced to take part in the programme. On the contrary, the students are eager to participate in it for what it is and what they expect from it (being entrepreneurs).

## **4 METHODOLOGY**

### **4.1 Sample**

90 former participants of the Ingenio and Ekin-IT entrepreneurship programmes of the University of Deusto (75% of the total participants) took part in this study. 55.6% were women, with an average age of 24.87 years (SD = 3.11), and 74.4% of the participants had work experience.

## 4.2 Procedure

Participants received an invitation to participate in the research via an e-mail, in which the objectives of the investigation were briefly described and the confidentiality of their responses guaranteed. In the invitation, a link was sent to the online questionnaire, which took approximately 10 minutes to complete. IBM Statistics SPSS (version 21) was used to analyze our data.

## 4.3 Measures

### 4.3.1 Entrepreneurial intention

Entrepreneurial intention was measured using a scale of 5 items used in previous studies on entrepreneurial intention (Liñan & Chen, 2009; Moriano et al., 2007) of the type "One day I'm going to create a business initiative" with the answer format in 7 categories, ranging from 0 (*I do not agree at all*) to 6 (*I agree completely*). The alpha coefficient for this scale in the current study was .92.

### 4.3.2 Proactiveness

Proactiveness was assessed with a shortened, six-item scale version of Bateman and Crant's (1993) scale described in Claes, Beheydt, and Lemmens (2005). Previously used by Zampetakis (2008). Responses were indicated on a 5-point Likert-type scale, ranging from 1 (*totally disagree*) to 5 (*totally agree*). A sample item is: "If I see something I do not like, I fix it". The alpha coefficient for this scale in the current study was .70.

### 4.3.3 Socio-demographic data

Socio-demographic data were collected from the participants: age, gender, province, employment status, work and self-employed experience, and existence of family entrepreneurs.

## 5 RESULTS

### 5.1 Descriptive statistics

Regarding the entrepreneurial activity of Entrepreneurship Programme participants, results revealed high rates of entrepreneurial activity among the participants: 18.9% had experience as freelance 14.4% of the participants created a business and 41.1% of the participants Works in entrepreneurship related areas (entrepreneur, intrapreneur, innovation, entrepreneurship awareness and research). Among the working participants, 20% created a business and 54% works in entrepreneurship related areas.

The descriptive results (Table 1) revealed medium-high levels of proactiveness ( $M = 4.18$ ;  $SD = .45$ ). The correlations between the variables of the study were calculated, obtaining significant and positive relationships between entrepreneurial intention and activity ( $r = .44$ ,  $p < .01$ ), and proactiveness ( $r = .44$ ,  $p < .01$ ), between entrepreneurial activity and entrepreneurship-related career ( $r = .23$ ,  $p < .05$ ), and proactiveness ( $r = .44$ ,  $p < .01$ ), and entrepreneurship-related career and proactiveness ( $r = .53$ ,  $p < .01$ ). Few relationships were found between the demographics and the study variables. Gender and age were found to be related to entrepreneurial activity ( $r = .25$ ,  $p < .05$ ;  $r = .21$ ,  $p < .05$ ), and family background was found to be related to entrepreneurial intention and entrepreneurship-related career ( $r = .48$ ,  $p < .01$ ;  $r = .31$ ,  $p < .01$ ).

Table 1. Means, standard deviations and correlation coefficients of the study variables

	M (SD)	Entrepreneurial intention	Entrepreneurial activity	Entrepreneurship-related career
Entrepreneurial activity	.14 (.35)	.44**		

Entrepreneurship-related career	.41 (.49)	.19	.23*	
Proactiveness	4.18 (.45)	.44**	.32**	.53**
Gender	.55 (.49)	-.15	-.25*	-.16
Age	24.87 (3.11)	-.14	.21*	.01
Family	.73 (.44)	.48**	.09	.31**

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

## 5.2 Regression analysis

Regarding entrepreneurial intention, proactiveness was posited to positively predict participants' entrepreneurial intention. As shown in Table 2, 32% of the variance in entrepreneurial intention was explained by proactiveness ( $R^2 = .32$ ,  $F = 11.79$ ,  $p < .01$ ). Furthermore, proactiveness was a significant predictor of entrepreneurial intention ( $\beta = .29$ ,  $t = 3.13$ ,  $p < .01$ ), supporting Hypothesis H<sub>1</sub>. Among the control variables, family background was found to be related with entrepreneurial intention ( $\beta = .38$ ,  $t = 4.20$ ,  $p < .01$ ).

With respect to entrepreneurial activity, proactiveness explained 8% of the variance ( $R^2 = .08$ ,  $F = 2.32$ ,  $p < .05$ ). Proactiveness significantly predicted entrepreneurial activity ( $\beta = .21$ ,  $t = 2.06$ ,  $p < .05$ ) supporting Hypothesis H<sub>2</sub>.

Finally, proactiveness was found to explain 16% of the variance in entrepreneurship-related career ( $R^2 = .16$ ,  $F = 5.28$ ,  $p < .01$ ). Proactiveness was found to significantly predict entrepreneurship-related work ( $\beta = .33$ ,  $t = 3.24$ ,  $p < .01$ ), supporting Hypothesis H<sub>3</sub>. Among the control variables, age was found to be related with entrepreneurship-related career ( $\beta = .21$ ,  $t = 2.18$ ,  $p < .05$ ).

Table 2. Regression models

(N=90)	Entrepreneurial intention	Entrepreneurial activity	Entrepreneurship-related career
	B	$\beta$	$\beta$
Gender	-.11	-.15	-.17
Age	-.14	-.04	.21*
Family	.38**	.04	-.03
Proactiveness	.29**	.21*	.33**
$\Delta R^2$	.35**	.22*	.22*

\*  $p < 0,05$ ; \*\*  $p < 0,01$

## 6 CONCLUSIONS

This study indicates that there exist significant and positive relationships between entrepreneurial intention and activity; entrepreneurial activity and entrepreneurship-related career, and proactiveness; and entrepreneurship-related career and proactiveness. It also suggests that the proactiveness is seen as a significant predictor of entrepreneurial intention, entrepreneurial activity and entrepreneurship-related work.

Although the study has some limitations (a small sample, lack of follow-up research, lack of pre-post research) and there are still lots of things to do and research, we may conclude that proactivity is an important variable to promote entrepreneurial intention and activity, and that entrepreneurial programmes seem to be fruitful and productive to boost entrepreneurial activity and entrepreneurship-related work. That is the reason why we propose to go deeper on this kind of training programmes and on researches focus on the relations existed between proactivity, entrepreneurial intention and activity through a bigger sample.

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