Entrepreneurial careers paths in SMEs creation: a comparative exploratory study of six North-Mediterranean regions

By Najib Afa, Aurélie Kleber, and Mohamed Bayad

Abstract:

National cultures are often seen as central in the conduct of entrepreneurial projects (Hayton, George and Zahra, 2002). Some countries are seen as models of "entrepreneurial societies", while other territories are perceived as "less entrepreneurial" (Freytag and Thurik, 2007). Thus, the role of culture in the development of entrepreneurship in SMEs is more and more questioned.

In a context of increasingly competitiveness, scientific and technologic parks tend to emerge. They gather research activities, high-level training centres and advanced industries. According to the IASP (International Association of Science Parks), a “scientific and technologic park” is an organization managed by specialists whose primary goal is to increase the wealth of its community, by promoting the culture of innovation and competitiveness. In this context, the creation of scientific and technologic parks is often implemented by cities whose economic development strategies rely on the value of potential researches, with the hope that this lead to a new industrialization thanks to high-tech industries attracted up there.

The object of this communication is to establish a comparative study concerning the impact of countries in terms of trajectories of necessity entrepreneurial careers, within the framework of science and technological parks. At first, a theoretical framing around this theme is operated. Then, a presentation of the territorial economic development project in six north-Mediterranean regions baptized "Med Technopolis" is exposed. A questionnaire administered with 79 auditors – necessity’s entrepreneurs following the Training-Action Cycle (TAC) is used to understand how this device of training allows the necessity entrepreneurs to progress by creating their business. Finally, the results of the exploratory study are revealed, establishing a comparison of the trajectories of entrepreneurial careers between six Mediterranean territories. The results show that two territories distance themselves: Andalusia (Spain) and Patras (Greece). Indeed, the device allowed in these countries the business creation by a precarious population, mainly in job search.

Introduction:

The technopolitain phenomenon and the associated science and technological parks knew a strong growth in numerous countries developed since the end of 1970s (Bocquet and al., on 2013). The globalization of economic activities represents the most significant development during the last decades (Linen, on 1997). In this context, a significant number of developed countries or not encourages the development of high-tech industries. So, fact to develop a science and technical park is generally seen as an effective instrument to establish an innovating environment for the regional development (Goldstein and Toboggan, on 1993). Consequently, the development of the innovation and the entrepreneurship has a considerable impact on the economic development of a territory (Linan, Fernandez-Serrano et Romero, 2013).

Science parks, and more particularly the science and technological parks represent a " process of located development which can be accompanied, encouraged, strengthened even by a politics of territorial scientifico-technical animation " (Quéré, 2005, p. 73). For Sharif and Ahmed (2006), these parks can be defined as " *a high-tech and complex geographical concentration which is often characterized by collaborative efforts in research and development between high-tech industries and a university or an institute of R&D sponsored by the government, by the presence of companies of venture capital and spin-offs entrepreneurial* " (Rogers and al., on 1990). Science parks are however far from representing a homogeneous model of the territorial innovation (Bocquet et al., 2013).

In parallel, the national cultures are often perceived as power plants in the conduct of the entrepreneurial projects (Hayton, George and Zahra, on 2002). Some countries are considered as models of "entrepreneurial so" while other territories are perceived as "less entrepreneurial" (Freytag and Thurik, on 2007). However, the studies led on the way a national culture influences the individual entrepreneurial behaviour are polemical (Bowen and Of Clercq, on 2008; Stephan and Uhlaner, on 2010).

The object of this communication is then to establish a comparative study of the impact of the national culture in terms of trajectories of entrepreneurial careers by necessity. So, 6 north-Mediterranean regions are compared within the framework of a project to create structures of technological interfaces (STIs) in each of the target areas, with for ultimate objective to develop the economic fabric of the Mediterranean territories. The exploratory

approach aims at understanding in what the variable "culture" can have different repercussions on the trajectories of entrepreneurial careers in SME according to the country of membership. More particularly, a study carried out within the framework of the project " Med Technopolis " with 79 auditors following a Training-Action Cycle (TAC) was led, in the optics to estimate the efficiency of the CFA towards the forced entrepreneurs.

To do it, a questionnaire was distributed with the trainees avid to obtain the Professional Title Entrepreneur of Small company (PTES) during the jury of defence. The majority of the registered trainees are unemployed or occupy an insecure job, with a raised diploma (Master degree level). The initial will, is to participate to a project that join the entrepreneurial frame, which is called also « entrepreneurial by necessity », looking to assert their the entrepreneurial skills. The results show that the fact of doing the same diploma-awarding training course, to develop an entrepreneurial business by necessity, hasn't the same effects according to the studied territory.

1. Theoretical and problematic Centring of the research:

1.1 The place of the culture in the entrepreneurship by necessity

The relation between the level of economic development of a country and the rate of entrepreneurial activity was highlighted in the literature. However, the attempts of explanation of the level differences of entrepreneurial activity between countries are not sufficient (Linan, Fernandez-Serrano and Romero, on 2013). So, two various types of entrepreneurship are generally discussed: the entrepreneurship by opportunity and the entrepreneurship out of necessity (Reynolds, Bygrave, Autio and Hay, on 2002). For example, the report of the GEM (Global Entrepreneurship Monitor) in 2009 shows that 14 % of the projects of new business start-up in France are considered as being by necessity.

The entrepreneurs by opportunity are seen as entrepreneurs starting a new affair in the optics to get a breach and to seize an opportunity on the market (Linan and al., 2013, p. 25). On the contrary, an entrepreneur is qualified as "necessity" since the new business start-up becomes its only appeal and its unique possibility of finding a job (Hechavarria and Reynolds, on 2009). Bosma and Levie (2009) define the entrepreneur by necessity as being " *every person who decides to get involved in an entrepreneurial activity because he does not arrange other alternatives to find a work* ". Couteret (2010, p. 2) speaks from his part "about forced

entrepreneur": "*entrepreneur whose only motivation is to create its own business to escape the unemployment and which lacked previously project and desire of creation* ". Their number is supposed to increase with the contemporary economic crisis (Bosma and al., on 2009). For Couteret, (2010), it is necessary to help the forced entrepreneurs, by using accompaniment devices, as far as the vocation of their entrepreneurial initiative is not an emotional personal project, but it's only an ultimate way to find a job. Accompanying necessity entrepreneurs therefore has a social dimension even political, hence the need to ensure throughout their entrepreneurial approach to maintain the motivation of entrepreneurs. The specific forms should help the development of autonomous managerial capacities (Olomi et al, 2001) and allow to catalyse the entrepreneurial process . This involves both training (acquiring skills) that "education " (change their representations). Practices such as mentoring or coaching seem particularly appropriate (Couteret 2010).

Today, our society has to face multiple transformations: social inequalities, structural crisis, redundancies, precariousness, social injustice etc. (Nakara and Fayolle, 2012, p. 1). These unfavourable economic factors are considered as susceptible to promote the development of the "necessity" entrepreneurs, coupled with a low rate of economic growth, the increase of the unemployment rate, as well as the increase of social benefits (Maritz, on 2004). Fortin (2002) explains that a company wishing more entrepreneurs to ensure its survival and long-term growth must develop its entrepreneurial culture.

For Mitchell, Smith, Seawright and Walrus (2000), the elements that influence an entrepreneur in his decision to create a company vary according to countries. So, the decision of creation of a company is influenced by the scripts of "arrangements", of "Willingness" and of " ability ". These scripts are influenced themselves by the cultural values which modify their relations with the decision to undertake (Bourguiba, 2007, p. 134). Two levels of analysis are then possible: the global level (collective cultural values) and the individual level (cognition). Thus, this model allows highlighting the role of cultural values as a source of opportunities leading to entrepreneurial career through cognitive elements.

Schwartz (1990, 1994) proposes an alternative model highlighting the fact that values form the motivational goals of individuals. Thus, seven types of guidance in terms of cultural values can be identified: the embedding, the intellectual, the emotional autonomy, hierarchy,

egalitarianism, control and harmony. The author brings together the three bipolar dimensions (see Appendix I):

- Autonomy (intellectual and emotional) versus Embedding (underlining the opposition between the individual and collective aspect)
- Egalitarianism versus Hierarchy (societal problem guaranteeing the responsible behaviour which protect the social fabric)
- Harmony versus Mastery (this dimension helps to regulate the treatment of the nature and the human resources. it solves the problems of relations between the people, and between the men and the nature).

Schwartz (2004) moves forward relations of interdependence between the culture and the economic development. So, developing countries would be typically characterized by an ascendancy of the embedding and hierarchy, while the autonomy and the egalitarianism would prevail in developed countries (Schwartz, on 2008). Furthermore, the autonomy seems to be more strongly associated with the economic growth while the egalitarianism is more connected to the social change (Schwartz, on 2004). Concerning the relations between the harmony, the mastery and the economic development, no link was demonstrated (Schwartz, on 2004). This concept of harmony was connected with the post-materialistic concept of Inglehart (1997) and seems to be more important in the developed countries. The study of Linan and al. (2013) conducted among 57 countries tends to show that the countries where the embedding, egalitarianism and mastery prevail exhibit the highest levels of entrepreneurship.
The Egalitarianism - Hierarchy couple is the dimension that plays the most important role in explaining the incidence of necessity entrepreneurs, since it increases as the hierarchy prevails. Also in developed countries, autonomy accelerates the level of entrepreneurship while this is the embedding that stimulates the entrepreneurial choice in the less economically developed countries. The results indicate that the autonomy and the egalitarianism prevail in the developed countries, while the embedding and the hierarchy prevail in developing countries. More recently, Suddle and al. (2010) led a research that confirms a positive relation between the culture and the economic development. The authors then conclude that the entrepreneurial culture and the nascent entrepreneurship rate maintain a significantly positive relationship.

This brief review of the literature leads us to wonder about the possible impact that could have "culture" variable on entrepreneurship by necessity. Some authors (Linan et al., 2013)

have primed this topic, but the questioning cannot rely on a pre-provided theoretical underpinning. So, we chose to lead our investigation with various north-Mediterranean countries within the framework of a particular project: the Med Technopolis project. The objective of our exploratory research is then to compare the necessity entrepreneurial careers at the end of Training – Action Cycle (TAC) between 6 north-Mediterranean regions (the Var, the Umbria, Sicily, Andalusia, the region of Faro, and the region of Patras), in a context of " technopolis ". Indeed, technopolis represents a " *new process of the economic development and is used as a tool of the regional development* " (Sharif and Ahmed, 2006, p. 1). The technopolis are part of a broader philosophy represented by the science and technology parks, which describe then " a variety of efforts to stimulate the development of the entrepreneurship, based on the knowledge of small and medium-sized enterprises, within a country " (Briggs and al., 2001, quoted by Sharif and Ahmed, 2006).

2. Presentation of the MED TECHNOPOLIS project:

MEDOCC Technopolis is a project that highlights a Mediterranean network of technology interfaces structures (TISs). It has for objective to develop the Mediterranean economic fabric (by business exchanges) and to create interactions between the various partners and all the project leaders thanks to joint actions. Essentially, the project aims to launch a new generation of technology parks (the "technopolis") in the vast Western Mediterranean regions, concerned to be " *more suitable for the conditions of the information age and the economy knowledge*" (Acts of the World Congress of IASP, Estoril, June 2003).

The partners cross from experience exchange to the join action. Aiming at the creation of TISs " Technopolis " And allowing the trainees to drive a project of creation an economic developing activities, integrating a strong dimension of innovation while validating the acquired skills. The target population includes emerging business creation projects of a European character, trainees are directly selected by the partners of each of the participating countries with their own criteria. Then, it’s a question of following the launch of the company and the developing the entrepreneurial skills by cooperation’s weaving.

Within the framework of the project, the entrepreneur is a creator of innovative activity. The innovation is to be taken here in the broad sense: technical, technological but also managerial, financial or organizational. It could also be the fact, for the creative activity

already operating in his company, to develop a new project for his business. Anyway, it's a question to bring a project leader to become an autonomous undertaking that bring a new activity within its region.

The six participants are: Spain, Portugal, Italy (Umbria and Sicily), Greece and France. The selection of these countries was very strict: the ambition of "Med Technopolis" creators was to establish a network in the Mediterranean regions with multiple and well distinctive experiences of TISs generations, created in Europe since the World War II. Thus, the current participants in the Med project gather the necessary conditions to take on the central role in this network through their different experiences.

The Med Technopolis project remains into three phases:

I. The creation of Technology Interfaces Structures (TISs) in these 6 regions, for receiving the future entrepreneurs (as written before, these scientific and technologic parks bring together research, high-level training centres and advanced industries).
II. The implementation of a Training-Action Cycle (TAC) in business management, which role is to develop the entrepreneurial skills of future entrepreneurs. This program helps entrepreneurs in their project of creation (certified by "Professional Title Entrepreneur of Small Business", Level III certification). The title is recognized by the NCRP (National Directory of Professional Certification) and by European level (for an equivalent system ECTS). Two training modules are required: Project Management and Human Resource Management.
III. Create a sustainable connection between actors of these 6 regions by organizing regional partnerships "Research & Education-Action" – "Innovation and Competitiveness".

Our study focuses on Phase II of the Med Technopolis project, that is to say, to the accompaniment of emerging entrepreneurs. Especially, we decided to focus our attention on the evaluation of post-training project in order to make a comparison of entrepreneurial career paths depending on localisations. The public concerned consists mainly of job seekers, students or employees at risk. If most are strongly qualified (Master degree level for the greater part), the professional title of lower level is seen as a certification reaffirming some

skills in the objective to create, to resume or to develop a VSEs or SMEs/SMIs. Trainees of the Training-Action Cycle (TAC) belong then to the typology of forced entrepreneurs. The main motivations before starting the program are highlighted in the survey open questions, which are: " skills ", " validation of a level degree", and “more confidence in itself.” The majority said that they wanted to participate in TAC to have the " *opportunity to take part in a group of European projects* ", Or still " *to discover new professional opportunities* ". Finally, the notion of networking is also omnipresent: " *Meet experts and other project leaders* ", "*Better develop my network*", and analyse " *possibilities of partnerships* ". We will see if the results of the study highlight the disparities in terms of culture effects on entrepreneurial career paths.

3. Context of the study and the results

To study this problem, we used an investigation realized in 2013 with 6 regions having collaborated to the project Med Technopolis. All in all, 137 people participated in this training program, some in diploma-awarding vocation (to obtain entrepreneur's Professional Title of Small company), and others only as an auditor (in Phase I, it was agreed with the Italian partners that support would be mobilized for the 58 Italian students). In the end, 79 participants enrolled administratively, and 58 others (in Italy) attended the courses without intending to validate the degree. A questionnaire was distributed to the students during the final defence in front of a jury. We so have 79 answers at our disposal, that is a rate of 100percent answer if we take all the auditors registered as reference figure. Our rates therefore seems significant to the parent trainees population consisting of six regions involved in the European project Med Technopolis.

Initially, the objective of this survey was to gather what the students perceived about the training provided. Other questions were asked with the aim of knowing if the fact of doing this training course actually ended in the choice of a trajectory of entrepreneurial career or on the contrary in pursuit of a salaried career. Besides, this survey allowed to report the possible evolution post-training on various points: salary level, gain autonomy, decision management responsibilities, increasing the number of people supervised, changing employment status. The results are summarized in two summary tables in Appendix II and III.

3.1 Characteristics of the participants according to the country of origin:

Board 1: distribution of the auditors according to the country and gender

		Country					Total
		France	Italy	Greece	Spain	Portugal	
Gender	Men	9	16	12	16	5	58 (73,4%)
	Women	4	2	7	7	1	21 (26,6%)
Total		13	18	19	23	6	79 (100%)

Regarding the survey sample, the distribution of persons according to their country is almost homogeneous, except for the Portuguese auditors who are less numerous. In terms of gender distribution by country, the number of male auditors is always greater than the number of women. Two countries stand out slightly: Italy appears as the most radical since it has more men (16 women for two) and Greece on the contrary, tends to reduce the gap between the number of men and women (12 men to seven women).

About the age of the questioned population, the great majority are young and belongs to the famous " Generation Y " (47,4percent were born between 1979 and 1994) or in " Generation X " (39,7percent are situated meanwhile on 1965-1978). However, some Boomers are present (only 11.5percent) and only one person born before 1945 participated in the study (1.3percent). These results appear consistent to the extent that it is mostly "young" graduates or young professionals who decide to initiate and follow this degree program. However, the public according to the country is not always the same. As well as Italy contains the sample older auditors (one Veteran, seven Baby Boomers, 10 Generation X and 0 Generation Y!) while Greece and Spain know the inverse trend (one Baby boomer, three Generation X and 15 Generation Y in Greece as an example). If we cross the variable "age" with the "country", we can see appearing disparities: the questioned Italian population is the oldest, come then France and Portugal which are situated in the average, and finally Spain and Greece which contain the youngest auditors.

In the beginning of the Training-Action Cycle (TAC), 43,6percent of the auditors are in a salaried employment and 32,1 are in independent employment or as business manager. For Italy, Greece and Spain, majority of the respondents are in employment, even if 34,8percent

of the Spaniards are jobseekers and 26,3percent of the Greeks are student. Portugal counts so many wage earner then independent employees and jobseekers (33,3percent). France has specificity because 69,2percent of the French people participating in the program are already business managers or independents before the Training-Action Cycle (TAC). So, a relation of dependence exists between the fact of belonging to a country and the initial professional situation (the fact of being rather in employment, in independent employment, an unemployed person or a student in particular). This relation is average (Coefficient of Cramer = 0.39). These elements are to be put in connection with selection criteria appropriate to every country, as well as in the way the communication was operated on these various territories during the recruitment of the promotions.

3.2 Personal data of individuals regarding their situation before the Training-Action Cycle (TAC)

We questioned the auditors about the number of employment that they occupied before the training. Most of the people occupied four jobs and more (39,7percent of the sample), or three jobs (27,9percent). Finally, enough few participants are greenhorns on the labour market (17,6percent only occupied only a single employment). However, if we look at the results, differences appear again according to countries. France (63,6percent) and Italy (58,8percent) are the countries where the questioned exercised the largest number of jobs before the training. Then, Spain and Portugal they a good dispatch and are situated around the average (100percent of the Portuguese and 73,6percent of the Spaniards had either three jobs, or more then four). Finally, Greece distances itself by a low rate of staff turnover: her auditors knew either 1 only employment (25percent), or two (31,2percent), or three (31,2percent), but little beyond four (12,5percent). These results show then a disparity regarding work experience in the access to Training-Action Cycle (TAC) according to the country to which belongs the auditors. Note that this is not surprising given the fact that Italy has the oldest population and Greece the youngest participants. There is indeed a relationship of dependence between the "Country" variable and the "number of exercised before training job," measured by the Eta coefficient (=0.355). This result (Eta ^{2} = 0.126) allows us to assert that the variation in the number of jobs held before the training is explained up to 12.6percent by the variation of the country of the respondent.

These elements are strongly related to the year of entry into the workforce. The median for the entire survey population is represented by the interval [1995-2005]. Indeed, 48.1percent of participants entered the workforce between 1995 and 2005, and 24.7 % in a more recent way (between 2006 and 2013). Let us note that all the same the fifth of the questioned population began to work between 1985 and 1989. Do we find the same differences by country as for the number of exercised employment? Actually, the trend seems similar. Italy is the country where people entered the labour force for a long time (66.7percent between 1985 and 1989, 16.7percent between 1990 and 1994, 8.1percent between 1995 and 2000 and finally 0percent between 2006 and 2013). France, Spain and Portugal are in the median behaviour. In contrast, Greece is the country opposed to Italy, that is to say, 55.6percent of respondents have only just entering the workforce (between 2006 and 2013), 38.9percent between 1995 and 2000, 5.6percent before 1984). There is thus a strong dependency between the two variables, revealed by a chi-square significant at the 0% rate threshold and the intensity is high (in the order of 0.649 according to the Eta coefficient). Thus, the change in the year of entry into working life is explained by variation 42.1percent of the country (Eta^2=0.421).

Most auditors had a status of "Middle management, technician, foreman, VRP and Occupation " before training (35.9percent) or a status of " employee" (29.5percent). Then come the statutes " Senior executive, engineer, professional and teacher" (21.8percent) and " Artisan, business leader, shopkeeper "(2.8percent). However, the dispatch appears to differ between countries. The modal behaviour is especially true for Italy and Spain. The occupational categories are occupied revised upwards for France and Portugal (France: 30.8percent of senior managers and 30.8percent of artisans and business leaders; Portugal: 50percent of middle managers and 33.3percent of artisans and head of business). Greece has the remotest results showing sizeable data ends: 55.6percent of employees (thus a rather low status), 27.8percent of senior managers (the highest level); and finally, 16.7percent of middle managers and 0percent of craftsmen. The Chi-square test suggests a dependence between the country and the professional status strongly enough (Cramer coefficient = 0.343 at significance level of 0.01percent).

Concerning the main business sectors of the last company where the auditors were hired, we find respectively "Corporate services" (20,8percent), " Education, health and social actions " (18,2percent) and finally the " consumer goods industries" (10,4percent). Business areas

also seem related to the country of the respondent. Indeed, the French auditors were mainly employed in sectors of " business services " (41.7percent) and " consumer goods and Industries " (33.3percent). The Greeks were more involved in the activities of "Education, health, social equity " (38.9percent), then the " Business Services " or " Personal Services " (33.3percent). The Italians were working mainly in the " consumer goods industries " (22.2percent) and " Industries of intermediate goods " (22.2percent). Spain has more people in the areas of "Education, health, social equity " (21.7percent) and " business services" (17.4percent) . Finally, Portugal has more auditors turned to agriculture, forestry and fishing (33.3percent). The chi-square test is significant at the 0.01percent, level which allows us to conclude that there is a strong relationship between the sector of the last job and the country of training (Cramer coefficient = 0.520).

It also seemed to us interesting to compare the level of education attained by the auditors before deciding to go through a further diploma courses in vocation as the Training-Action Cycle (TAC) with the professional title "Entrepreneur of Small Business " (level III). 60.3percent of respondents had a degree level I and level II 16.4percent. Only 5.5percent of participants already possessed a level III diploma. Thus, 82.2percent decided to follow a Training-Action Cycle (TAC) curriculum even if they already had a higher degree. Only 17.8percent had a level IV diploma or less and saw their socio -professional category for graduation improve. We can therefore hypothesize that the vast majority of individuals who decided to enrol in the training aimed to enhance their entrepreneurial skills in the market, to become a Small Business "necessity" entrepreneurs, either because they do not find work despite their qualifications, or because they occupied a precarious employment status.

3.3 Comparative study of the elements after the training by country

Intrinsic characteristics of work for those having remained salaried

56.6percent of respondents reported being autonomous in their decisions before the training, which is particularly true for France, Spain and Portugal. 43.4percent replied that they were not. So, 77.8percent of Italians and 61.1percent of Greeks declare non - autonomous. There is a strong link between membership in a country and being independent or not in his mission before the training (at 0percent level of significance and with a Cramer coefficient of 0.518), although this element is linked to the age of the trainee and his previous experience. After training, the same trend is found, with 60.5percent of autonomous people

interviewed. This time, only Italy is distinguished, with a rate of non-autonomous employees equal to 83.3percent. The strength of the relationship is then increased, with a Cramer coefficient equal to 0.851. Finally, the Training-Action Cycle (TAC) has succeeded in increasing the degree of independence of auditors of 3.9 points in general, but the Italians are not autonomous even stronger (77.8percent before the training to 83,3percent after). We can therefore deduce that the home countries affects the possession or not, for a certain autonomy in his work. Only Italy is struggling to develop training on the employment market as a real tool of autonomy taken: 18 respondents, 15 are still not independent in their work. The gap tends to widen post-training between the countries on the "autonomy" variable.

Before the training, 74.3percet of respondents said they had the responsibility of a team. This is very settled in Portugal (100percent), Italy (94.4percent) and Greece (76.5percent). In the other hand, Spain has disparities (61,9percent of persons in charge against 38,1percent of non-persons in charge) and France has an almost equal (53,8percent of persons in charge and 46,2percent of non-persons in charge). The chi-square shows a dependency relationship between the two elements with a medium intensity (Cramer coefficient = 0.37). Note that before the training, the number of people supervised between 1 and 10 (57.1percent of respondents). After the training, 79.4percent of respondents report having a team responsibility (an increase of 5.1 points). Globally, we can say that the Training-Action Cycle (TAC) allowed the grip of team responsibilities for certain participants. On the other hand, the rate decreases in Portugal (-33,3 points) in Italy (6,2 points) but increase in Greece (reaching a 100percent rate, or + 23,5 points) and in Spain (+15,9 points). France knows more or less the same dispatch. The number of framed people remained similar (from 1 to 10) but for more people (92,3percent of respondents) and regardless of the country of origin. However, chi-square test is no longer significant; post-training variables appears as independent. So, if the country of belonging could have an impact on decision responsibilities of an employee before his training, this seems to be the case post-training. We can deduce that the acquisition of a professional title "Small Business Entrepreneur" globally makes increase the fact of being responsible for a team, without this being significant depending on the country in which it is located. This diploma tends to erase disparities in access to decision- responsibilities that existed before training, to achieve a more homogeneous situation after the Training-Action Cycle (TAC), across all countries.

Status, salary, type of employment (employees versus entrepreneurs), details of the created companies

After training, the professional status of the person has again been questioned. Overall, students-entrepreneurs saw an increase of their professional status: we went from 21.8percent of executives to 31.7percent and 12.8percent of artisans and entrepreneurs 29.3percent. The number of employees decreased by 20 points and that of middle managers, supervisor, intermediate profession of the order of 6.6 points. The most significant changes concern Greece and Spain. For Greece, the status "Artisan, entrepreneur, independent retailer" has grown exponentially, from 0% to 63.6 %, the top executives remained stable (27.3percent), Number of employee strongly decreased (from 55.6percent to 0percent). For Spain, the status "Artisan, entrepreneur, independent retailer" also experienced a sharp increase from 4.9percent to 20percent. The statutes before / after training have therefore evolved differently in diverse countries. Both variables are significantly dependent, in a stronger way than before training (Cramer coefficient = 0,512).

After the Training-Action Cycle (TAC), the fact of being employed as a freelancer or entrepreneur is experiencing a significant increase (32.1percent to 53.8percent, or 21.7 points). Conversely, the employment decreases and is only of the order of 37.2percent (-6.4 points). The number of people looking for work has decreased (from 15.4percent to 3.8percent, -11.6 points) and the number of students has also decreased (from 9percent to 3.8percent, or -5.2 points). France is not really impacted by the training, the number of business manager passing from 9 to 10. Italy and Portugal are in the same situation, the number of employed people and business owners remain stable. The impact of training is more to observe the Greeks and Spaniards. Indeed, the impact of training is clearly visible in Spain, where entrepreneurs go from 17.4percent to 59.1percent post-training (41.7 points), where job seekers decreased considerably (from 66.7percent to 4.5percent post- training) and where wage labour decreases by 2.7 points. In Greece, the choice of an entrepreneurial career also grew consistently (from 15.8percent to 47.4percent, or 31.6 points), the number of students is decreasing (-10.5 points) while as wage labour (from 57.9percent to 31.6percent, or -26.3 points). These elements are therefore directly linked to the choice of necessity entrepreneurial career.

Finally, after the training, the number of entrepreneurs considerably increased but in an uneven way. The number of French people in situation of entrepreneurship or independent profession remained stable (from 9 to 10), as well as in Italy (from 7 to 8) and in Portugal (2 before / 2 after). On the other hand, two countries significantly saw their number of entrepreneurs increasing: Spain (crossing from four to 13 people post-training) and Greece (from 3 to 9). If for Greece, the new creators are especially employees deciding to put themself in their account and students going out of the university program, on the other hand it will not be same for the Spaniards. Almost all of the job seekers became creators, what is rather positive for the reflation of the country. Consequently the trend tends to become standardized, and the "least advanced" countries of an entrepreneurial point of view tend to catch up the others. As a result, the chi-square test is not significant anymore, which led us to accept the null hypothesis of independence of the two variables "Country" and "Situation after the Training-Action Cycle (TAC)". So, there is no more relation between the professional situation post-training and the country of origin, everyone tends to move towards the choice of an entrepreneurial career through this support system.

For the entrepreneurs (approximately 44 people), the majority (45,5percent) did it in 2012 during the training (66,7percent of the Greeks, 57,1percent of the Spaniards, 50percent of the French people and 50percent of the Portuguese). For others, 27,3percent created their company before 2010,therefore before the courses of Training-Action Cycle (TAC) (among which 100percent of the Italians, 25percent of the French people and 16,7percent of the Greeks). 13,6percent created their company in 2013 (among which 35,7percent of Spaniards and 8,3 % of French people). For the rest, 6,8percent created it in 2010 (16,7percent of the French people and 7,1percent of the Spaniards) and 6,8percent in 2011 (50percent of the Portuguese and 16,7percent of the Greeks). All in all, we count 14 Spanish companies, 12 French companies, Italian 8, Greek 6 and Portuguese 4, which we know the date of creation. According to the chi-square test, the date of creation depends strongly on the country in which the entrepreneur chooses to implant it (0percent threshold), with a coefficient Êta equal to 0,754. In other words, the variation of the date of creation of the company is explained to 56,9percent by the variation of the country in which it implements (Êta ^{2} = 0.569). This element is to be highlight with the national politics of countries in terms of accessibility in the creation of a business.

As we have just seen, 44 companies are already created (68,8percent, among which 100percent in France, 72,7percent in Italy, 72,2 % in Spain, 66,7 % in Portugal and 41,2 % in Greece), but other respondents would created "soon" (as the survey was realized) at the level of 14,percent which 23,5percent of the Greeks, 16,7percent of the Spaniards, Portuguese 16,7percent and 9,1peecent of the Italians). For companies established before the Training-Action Cycle (TAC), the project is generally pursued; interest residing in a search increase and capacity building. 9.4percent of respondents explain that their project will not be completed in the short term or even be abandoned (7.8percent). The failed projects (because they not mature) or fuzzy nevertheless allowed these entrepreneurs to advance their vision of development of an activity. However, we have not been able to determine a link between the fact of belonging to a country and the progress of the project. All countries are generally well advanced on this issue, the abortion of some projects have no link with the country of the creator.

The companies created or being created are mainly located in the areas of "business services " (31.9percent, including 77.8percent of French and 26.7percent in Spain) or in the field of "Education, health, social action" (14.9percent, including 26.7percent of Spaniards and 14.3percent of Greeks). Then there are services to individuals (10.6percent including 14.3percent of Greeks and 13.3percent in Spain) or the "Energies" (8.5percent including 50percent of Italians and 13.3percent of Spaniards). Trade accounts for 6.4percent and is widely acclaimed by the Greeks (14.3percent). The sector of "the Agriculture, the forestry and the fishing" represents only 6,4 % but includes 40 % of the Portuguese entrepreneurial activities. Finally, the sector of the industries of the intermediate properties represents only 2,1percent but 25percent of the Italians wished to position itself in this niche. Similarly, the construction sector has a low overall result (4.3percent), but 25percent of respondents Italians are moving towards this sector. We can see that business lines correspond to the one in which many participants had their last employment, particularly in France, Greece, Spain and Portugal. Only Italy is trying to position itself in new areas that appear to be benefit (Construction, energy etc).

Thus, the chi-square test was significant (at 0.007percent level): the dependence between variables "Country" and " Choice of the business sector for the created company " is rather strong (Cramer coefficient 0.588). As far as the relation between the activity of the created company and the country of membership is particularly strong, we can suppose that the

choice of an activity during an entrepreneurial creation is not the result of chance but instead of a prior reflection on the development of the economic fabric of the territory, probably in connection with business incubators or local incubators.

3.4 Assessment of the Training-Action Cycle (TAC)

The Training-Action Cycle (TAC) seems working: 94.9percent of respondents believe they have gained skills through training. Among them, the most optimistic are the Greeks (100percent), Spaniards (95.5percent), Italians (94.4percent), French (92.3percent) and Portugal (83.3percent). The 5.1% of people do not mind having developed their skills are divided equally between the countries (except for Greece). Thus, almost all of the trainees feel they have gained skills after the training of the Training-Action Cycle (TAC).

Regarding change of trainees in their vision to drive a business. 70.5percent answered "YES" against 29.5% of "NO". This idea seems to vary by country. Thus, Italy (94.4percent), Spain (86.4percent) and France (84.6percent) have changed their way of seeing how to conduct a post- training organization. Conversely, 68.4percent of Greeks and 66.7percent of Portuguese, match not to have changed their driving skills vision. After Chi-Square test, it appears that the two variables are related (at 0percent significance level) and this rather strong way (Cramer coefficient=0.585). Thus, the country in which it was trained impacts the evolution in his vision to lead a post- training business.

In a more general way, 72,7percent of the respondents saw an improvement of their professional situation after the training. This is especially true for the Italians (88,9percent), the French people (83,3percent), the Portuguese (83,3percent) and the Spaniards (77,3percent). The Greeks think, on the contrary, that their professional situation did not improve (in 57,9percent). This self-assessment is paradoxical as far as Greece is a part of countries, which knew the strongest rate of creation of post-training entrepreneurial business. We can hypothesize that the creation appears more as a "survival" solution than a real change of its socio- economic situation. Therefore, the division between "positive" feelings and "negative" seems to evolve in the same way for each country, except for Greece. This is confirmed by a significant chi-square test at 0.01percent threshold: the sensation of improving his professional life truly depends on the country in which it was trained, and it strongly enough (Cramer coefficient=0.405).

Finally, 45 people being in employment at time T (among them, some have decided to set their business sooner), it was interesting to understand whether the Training-Action Cycle (TAC) has contributed or not to the job. So, 86.7percent answered "yes" and 13.3percent "NO". Among the positive assertions, we find 100percent of the Greeks and the Portuguese, 94,1percent of the Italians and 80percent of the Spaniards. On the other hand, 100percent of the French people answered that the Training-Action Cycle (TAC) has not been used in the search for that new job. The chi-square suggests the presence of dependence between the fact of belonging to such a country and the fact that the Training-Action Cycle (TAC) has contributed or not to the fact of finding a job (significance: 0.00percent). Once again, the fact of belonging to a particular country has a certain influence on the feeling of the contribution that can have a program such as MED Technopolis on a salaried or entrepreneurial career. This dependency relationship is also particularly strong (Cramer coefficient = 0.715).

Conclusion:

This paper aimed to compare six Mediterranean regions highlighting the impact of culture on entrepreneurial career paths and consequences of the same training-action device according to the country concerned. The results shows that following the same training to develop an entrepreneurial business hasn’t the same effects on diverse territories. We Note that the regions of Patras and Andalusia are the most representative of necessity entrepreneurship. The impact of training is clearly visible in Spain, where job seekers decreased significantly (from 66.7percent to 4.5percent post-training) and Greece, where the choice of an entrepreneurial career also grows consistently (from 15.8percent to 47.4percent, or 31.6 points). These elements are directly related to necessity entrepreneurial career paths, especially as 82.2percent of registered auditors when they already had a level upper to second Year University. However we call for caution in generalizing the results. Indeed, the observations do not aim to be extended and generalized to countries. Besides, the different selection modes can explain differences of behaviour in a stronger way than the cultural differences. The "age" factor and the differences of implications in the led national politics can also have effects. Indeed, the fact that certain groups are older (Italy) or inexperienced (Greece) can also explain differences in behaviour beyond cultural differences. Other later researches are therefore called to confirm the results. Like Gaspar Dias (2011), the study nevertheless shows that the selected business sectors of the companies created correspond to

that in which many participants exercised their last job or their last case. Only Italy stands out trying to position itself in promising sectors (Construction, Energies). Our study reveals much Umbria as the most dynamic region in terms of modernization of the advanced economies, reflecting the results of Gaspar Dias (2011). To extend this work, future research must make the reports underlining the Marchesnay et al. (2006) the specifics of a possible "Mediterranean entrepreneurship". Is the entrepreneurship perceived as a solution to the economic crisis on this particular territory?

Bibliography:

Bocquet R., Brion S. et Mothe C. (2013), « Gouvernance et innovation au sein des technopôles, le cas de Savoie Technolac », Revue Française de Gestion, N°232/2013, pp-101-118.

Boje D. et Bosile G. (2003) "Comparison of socio-economic and other transorganizational development methods", *Journal of Organizational Change management*, Vol.16, No1, pp10-20.

Bosma, N., Acs Z., Autio E., Coduras A., et Levie J. (2009), *Global Entrepreneurship Monitor 2008 Executive Report: 65*. London: GERA.

Bourguiba M. (2007), *De l'intention à l'action entrepreneuriale : approche comparative auprès de TPE Françaises et Tunisiennes*, Thèse de doctorat, soutenue le 6 décembre 2007 à l'Université de Nancy 2.

Bowen, H. P., et De Clercq D. (2008), "Institutional Context and the Allocation of Entrepreneurial Effort", *Journal of International Business Studies* 39, pp.1 –21.

Campbell C. (1989) "Change agents in the new economy: business incubators and economic development", *Economic Development Review*, Vol 7., No2, p.56-59.

Couteret P. (2010), « Peut-on aider les entrepreneurs contraints ? Une étude exploratoire », *Revue de l'Entrepreneuriat*, 2010/2, Vol.9, p.6-33.

Davidsson P. (1995), "Culture, Structure and Regional Levels of Entrepreneurship", *Entrepreneurship and Regional Development*, 7(1), pp.41-62.

Dias J.G (2007), *Le Projet Med Technopolis*, Cahiers du réseau, Lagos

Fortin P.A (2002), La culture entrepreneuriale : un antidote à la pauvreté, les éditions Trnascontinental, collection Entreprendre, 208 p.

Frederking, L.C. (2004), "A cross-national study of culture, organization and entrepreneurship in three neighbourhoods", *Entrepreneurship and Regional Development*, 16(3), pp-197-215.

Freytag, A., et R. Thurik (2007), "Entrepreneurship and its Determinants in a Cross-Country Setting." *Journal of Evolutionary Economics* 17, pp.117 – 131.

Gartner W.B (2001), “Is there an elephant in entrepreneurship ? Blind assumptions in theory development”, *Entrepreneurship Theory and Practice*, Vol.25, No4, pp.27-39.

Gaspar F. et De Pinho L.F (2007) “Environmental determinants of firm creation across Portuguese regions”, *Institute for Small Business & Entrepreneurship 30th conference*, Glasgow, 9 november.
Gaspar F. et Dias J. (2011), “A comparative study of four West-Mediterranean regions : the role of technology interface structure”, *International Journal of Innovation and Regional Development*, Volume 3, Numbers 3-4, pp.370-394.

Goldstein H.A et Luger M.I, (1993), “Theory and Practice in high-tech economic development, *In* Bingham R. et Mier R. (eds), *Theories of Local Economic Development*, pp.147-174, Newbury Park.

Haugen T.M (1990) “Getting a head start: the rise if business incubators”, Business Forum, Vol 15., No 1, pp.25-27.

Hayton, J., George G. et S. Zahra S. (2002), “National Culture and Entrepreneurship: A Review of Behavioral Research.” *Entrepreneurship: Theory and Practice, Vol.26,* p.33.

Hechavarria D. et Reynolds P. (2009), “Cultural norms and business start-ups : the impact of national values on opportunity and necessity entrepreneurs”, *International Entrepreneurship and Management Journal*, Vol.5, pp.417-437.

Hofstede G. (1984), *Culture’s consequences: International differences in work-related values*, Beverly Hills, Sage.

Hofstede G. (2003), *Culture’s Consequences: Comparing values, behaviors, institutions and Organizations Across Nations* (2nd edition), Sage Publications, Newbury Park.

Hu T-S, Chang S-L, Lin C-Y et Chien H-T (2006) “Evolution of knowledge intensive services in a high-tech region : the case of Hsinchu, Taiwan”, *European Planning Studies*, Vol.14, No 10, pp.1363-1385.

Inglehart R. (1997), *Modernization and Postmodernization*, Princeton University Press, Princeton.

Kuratko D-F et LaFollette W.R (1987) “Small business incubators for local economic development”, *Economic Development Review*, Vol.5, No2, pp.49-55.

Lin C-Y (1997) “Technopolis development: an assessment of the Hsinchu experience”, *International Planning Studies*, Vol 2, No 2, pp.257-272.

Linan F., Fernandez-Serrano J. et Romero I. (2013), “Necessity and Opportunity Entrepreneurship : the mediating effect of culture”, *Revue d’Economie Mondiale*, Vol.33, pp.21-47.

Marchesnay M., Chabchoub Kammoun S. et Ellouze Karray H. (2006), «Y a-t-il un entrepreneuriat méditerranéen? », *Revue Française de Gestion*, N°166, pp.101-118.

Maritz A. (2004), “New Zealand necessity entrepreneurs”, *International Journal of Entrepreneurship and Small Business*, Vol.1, N°1, pp.255-263.

Mitchell R.K., Smith J.B., Seawright K.W., Morse E.A. (2000), “Cross-cultural cognitions and the venture creation decision”, *Academy of Management Journal*, 43(5), 974-993.

Nakara W.A et Fayolle A. (2012), « Faut-il repenser les pratiques d’accompagnement? Le cas des entrepreneurs par nécessité », A*ctes du congrès “Etats généraux du management”*, Strasbourg 11-12 octobre 2012.

Olomi D.R., Nilsson P. et Jaensson J.E (2001), « Evolution of entrepreneurial motivation: the transition from economic necessity to entrepreneurship », *Frontiers of Entrepreneurship Research*, Babson College.

Peters L., Rice M. et Sundararajan M. (2004) “The role of incubators in the entrepreneurial process”, *Journal of Technology Transfer*, Vol.29, No1, pp.83-91.

Reynolds P.D., Bygrave W., Autio E., et Hay M. (2002), *Global Entrepreneurship Monitor, 2002 Summary Report*, Ewin Marion Kauffman Foundation, Kansas City.

Rogers E. et Chien Y. (1990), “Technology Transfer and the Technopolis”, In Glinow et al. (ed.): *Managing Complexity in high Technology Organizations*, New York, Oxford University Press.

Quéré M. (2005), « Le développement technopolitain en France, Quels enseignements pour l’attractivité des territoires ? », *Revue de l’OFCE*, Vol.3 n°94, pp.71-96.

Schwartz, S. H. (1990): "Individualism-Collectivism. Critique and proposed refinements". *Journal of cross-cultural psychology*, 2/(2), 1 59-1 57.

Schwartz, S. H. (1994): "Beyond Individualism-Collectivism: New Cultural Dimensions of Values". In U. Kim, H. C. Triandis, C. Kagitçibasi, S. C. Choiand G. Yoon (Eds.), *Individualism and collectivism. Theory, method, and applications* (pp. 85-119), Sage, Thousand Oaks, CA.

Schwartz, S. H. (2004): "Mapping and Interpreting Cultural Differences around the World". In H. Vinken, J. Soeters and P. Ester (Eds.), *Comparing Cultures, Dimensions of Culture in a Comparative Perspective*, Brill, Leiden, The Netherlands.

Schwartz, S. H. (2008): *Cultural Value Orientations: Nature and Implications of National Differences*, Publishing House of SU HSE, Moscow.

Shane, S. (1995): "Cultural Influences on National Rates of Innovation", *Journal of Business Venturing*, 8(1), 59-75.

Sharif T. et Ahmed J.U (2006), “Structuring Special Technology Infrastructures (SITs): a conceptual proposition”, *South Asian Journal of Management*, Vol.13, n°2, Avril-Juin 2006, pp.36-65.

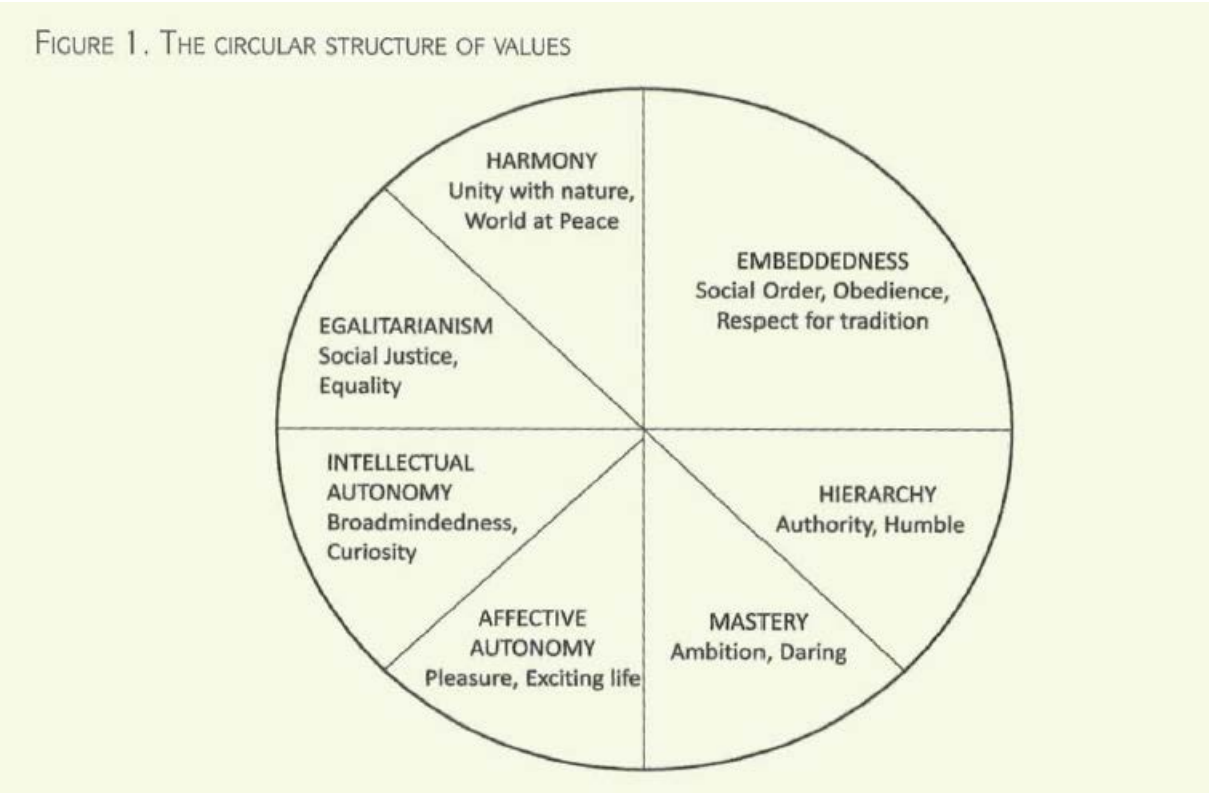
Stephan, U., et Uhlaner L. (2010) “Performance-Based vs Socially Supportive Culture: A Cross-National Study of Descriptive Norms and Entrepreneurship.” *Journal of International Business Studies*, Vol.41, pp.1347 – 1364.

Suddle K., Beugelsdijk S. et Wennekers S. (2010), “Entrepreneurial culture and its effect on the nascent entrepreneurship”, in Freytag A. et Thurik A.R (eds), *Entrepreneurship and Culture*, Springer.

Wennberg K., Pathak S. et Autio E. (2013), “How culture moulds the effects of self-efficacy and fear of failure on entrepreneurship”, *Entrepreneurship and Regional Development: an international Journal*, Vol.25, N°9-10, pp.756-790.

IASP: International Association of Science Parks: http://www.iasp.ws/fr
GEM : Global Entrepreneurship Monitor : http://www.gemconsortium.org/docs
OCDE : Organisation de coopération et de développement économique (OCDE), Perspectives Economiques de l’OCDE (1998)
Med Technopolis : http://www.medtechnopolis.eu/fr/index-fr.php
Actes du Congrès Mondial de l’IASP, Estoril, juin 2003

Appendix I:



Adapted from Linan et al. (2013, p.29)

Appendix II:

Summary table and results:

	Relation of dependence	Relation of independence
Characteristic data	Year of entrance to the active life Eta = 0,421	
	Number of employment exercised before training Eta = 0.355	
Professional situation	Initial professional situation Cramer= 0,39	
		Professional situation post-training
Professional situation	Employment status at the entrance to the TAC Cramer = 0.343	
	Employment status after TAC Cramer = 0.512	
Level of autonomy	Autonomy before training Cramer = 0, 518	
	Autonomy after training Cramer = 0.851	
Team Responsibility	Responsibility of a team before training Cramer = 0.37	
		Responsibility for post- training team
Business sectors	Sector activities of the last job Cramer = 0.520	
	Business sector of the created company Cramer = 0,588	
Salary		Last salary before the training
		Salary after the training
Businesses created	Date of creation Eta = 0,754	
		State project progress
		Turnover of the created company
	The company workforce at N+1 Eta=0,525	
Balance sheet of TAC	Vision to pilot a company Cramer= 0,585	
	Feeling of evolution of the professional situation Cramer = 0,405	
	Contribution of the TAC to new job Cramer= 0,715	

Appendix III:

Summary table of the striking elements by country:

	France	Italy	Spain	Greece	Portugal
Age		The oldest population	The youngest population	The youngest population	
Statue before TAC	62,2% are already Business managers	58,8% Are in employment	34,8% of job-seekers	26,3%students	
Number of jobs	More than 3 jobs before the training (63,6%)	More than 3 jobs before the training (58,8%)		Low number of jobs before the training	
Year of starting the active life		Entering the oldest active life (66,7% between 1985 and 1989)		Entering the latest active life (55,6% between 2006 and 2013)	
SPC	Socio-Professional Category senior executives (30,8%)			Employees (55,6%)	Intermediate executives (50%)
Business sector	Sectors: - Corporate services (41,7%) -Consumer goods industries (33,3%)	Sectors: - Consumer goods industries (22,2%) -Intermediate goods industries (22,2%)	Sectors: - Education, health, social action (21,7%) - Corporate services (17,4%)	Sectors: - Education, health, social action (38,9%) - Corporate services (33,3%)	Sectors: - Agriculture, forestry, fishing (33,3%)
Diploma	50% have a degree level I	42,2% have a degree level IV	75% have a degree level II	100% have a degree level I	50% have a degree level I
Autonomy		77,8% Declare themselves not autonomous before the training 83,3% after the training		61,1% Declare themselves not autonomous before the training	
Team leader				100% are team leaders after the training	100% are team leaders after the training
Entrepreneurial creation			Strong entrepreneurial creation 17,4% to 59,1%	Country of entrepreneurial creation averages 15,8% to	

			Decrease of the job-seekers (66,7% à 4,5%)	47,4% and reducing the number of employee jobs	
Time establishment		100% of creations before 2010	35,7% of creations in 2013	66,7% of creations in 2012	
State of progress	Country where all the creations have already taken place	Country where 72,7% Creations have already taken place	16,7% still in progress	23,5% Creators will make it "soon"	16,7% still in progress
Sector of the created companies	Corporate service	-Energies - Intermediate goods industries - Construction	- Corporate service - Education, Health, social action	-Trade - Education, Health, social action	Key sector: Agriculture, forestry , fishing
Staff at N+1	Hiring a person à N+1 (44,4%)	Hiring from 2 to 5 persons (50%)	Stable staff at N+1 (63,6%)	Stable staff at N+1 (75%)	Stable staff N+1 (50%)
Gain skills				Countries with the most gained skills (100%)	
The vision of managing a company				Change in vision of driving a mixed company (68,4%)	Change in vision of driving a mixed company (66,7%)
Improvement professional situation				Feeling that the professional situation did not improve (57,9%)	
TAC contribution	100% of employees say that the TAC did not contribute to that new job				