



INTERACTIVE NEEDS ANALYSIS

Report – Entrepreneurship Capacities of Female Students and Recent Graduates

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Introduction

The aim of Activity 2 (Interactive Needs Analysis) of the women@business project is to identify the exact requirements, barriers and intentions of young female graduates and of young women from an ethnic minority or immigrant background who are considering pursuing entrepreneurship as a career option. In parallel, interviews with established female entrepreneurs were conducted, in order to collect qualitative information about: setting up a business; running a business; support for entrepreneurship; combining entrepreneurship with family responsibilities; and gender perceptions of female owner-managers. The results from the research provide information about the lessons learnt both by experienced female entrepreneurs and more recent start-ups, as well as providing an insight into the needs of potential young female entrepreneurs. These experiences and knowledge can provide a useful tool for people who need encouragement and support in setting up a business and becoming self-employed.

The results from this research are reported in two separate parts. Firstly, the results of a quantitative survey carried out among young female undergraduates and graduates (graduating within the last five years) in six European countries (UK, Germany, Italy, Greece, Cyprus and Estonia) have been analysed in this document. Secondly, five interviews with successful female entrepreneurs were carried out in each of the same countries and the qualitative data was analysed around the themes covered in the interviews: previous career and experiences during the start of the business; the present state of the business and plans for the future; lessons learnt and suggestions for people in the start-up stages; support for entrepreneurship; work-life balance; gender perceptions and experiences of being a woman in entrepreneurship. This analysis is presented in the document entitled 'Annex Report Analysis of Qualitative Interviews with Female Entrepreneurs across Europe'.

These reports form the result of Activity 2 – Interactive Needs Analysis for the women@business project and are publicly available for those who are interested in the issues surrounding female entrepreneurship. This research provides valuable knowledge

about the needs of young women thinking about entrepreneurship and combined with the perspectives of established female entrepreneurs, provides a strong basis from which to develop the women@business project.

Research on Entrepreneurship

Research on entrepreneurship is a relatively new area. However, it has been carefully assessed in recent decades. The specific topic of female entrepreneurship is an even more complex research area than entrepreneurship in general.

Busenitz *et al* (2003) evaluated 97 articles on entrepreneurship published in leading management journals from 1985 to 1999. Their conclusion was that entrepreneurship is still poorly studied and has a low level of legitimacy in this emerging academic field. They argued that focusing research about entrepreneurship on the intersection of the constructs of individuals, opportunities, modes of organisation and the environment, will define the field and enhance its legitimacy. De Bruin *et al* (2007) show the limitations of current research on female entrepreneurship and stress the fact that choice of research-topic may be imbalanced because it has been driven by the interaction between researchers and policy makers rather than arising from *theory*-building incorporating feminist concepts. De Bruin *et al* (2007: 334) suggest that entrepreneurship research should be conducted on multiple levels, involving multiple units of analysis, and that there is a need for a greater focus on the “entrepreneur” as distinct from the “company”.

Until now, assessment of the field of entrepreneurship has examined the focus, purpose and methods of entrepreneurs, and one area which has received less attention is the outcome or dependent variable (Brush *et al* 2008). Brush *et al* (2008) reviewed 389 articles published in 2003-2005 in four top entrepreneurship journals¹; two published in the United States and two published in Europe. Brush *et al* (2008) found that European research is less likely to identify a theory and more likely to focus on descriptive statistics than U.S. research. They developed an interesting classification of entrepreneurship scholarship by theory and found that 71 articles were written without any focus on theoretical aspects.

¹ Journal of Business Venturing (JBT), Entrepreneurship Theory and Practice (ETP), International Small Business Journal (ISBJ), and Small Business Economics (SBE).

Gartner (1989) stated that entrepreneurship studies have traditionally focused on the profiles of entrepreneurs and what the entrepreneur does, as well as the performance of individual entrepreneurs and firms. Virtanen (1997, referred by Murray 1998) stresses that an entrepreneur is a person who has an entrepreneurial mind combined with a strong desire for achievement. Jonson Ahl (2002a; 2002b; 2002c) studied what constitutes an entrepreneur, and found that feminine traits are in contradiction with managerial characteristics; therefore female entrepreneurs find themselves in a complex situation. Buttner (1993) described female entrepreneurs from the 1990s:

The female entrepreneur of the 1990s is typically middle- or upper-middle-class, married with children, and 30 to 45 years of age at start-up. She is often the first-born, college-educated daughter of a self-employed father. She usually has worked in a larger organisation, gaining skills and knowledge that her forebears lacked. Typically she capitalises on her training, initiating her business in the same industry.

In the late 1980s, a study of female entrepreneurship was conducted in Sweden (Holmquist and Sundin 1988). 1600 respondents were selected from female business owners. Holmquist and Sundin (2002) stated a decade later that the topic of women in entrepreneurship has been largely neglected both by society in general and in the woman's social background. Authors found that the dominant impetus for women to start a business was a desire to create employment that allows them the flexibility to balance work and family. The factors of independence, self-achievement and "job frustration" were also significant motivators for starting a business. Female business owners frequently noted that they pursued social goals, such as customer satisfaction, alongside economic goals, such as profit and growth, traditionally emphasised by male-owned firms.

In 2000, a survey of female entrepreneurship was carried out by the Danish Agency for Trade and Industry. The authors used a combined quantitative and qualitative method. The authors of this survey, Kjeldsen and Nielsen, analysed the business conditions that influence the establishment of new enterprises, particularly focusing on female entrepreneurs. They stated that international research of entrepreneurship is increasing

rapidly, but *a large number of questions concerning female-owners of enterprises remain unanswered*. Their report calls for the development of theory about entrepreneurship, where, for example, inspiration could be sought in gender research.

After a decade of research, theoretical agreement and success has not yet been reached. De Bruin *et al* (2007: 334) suggest that there are some doubts as to whether current research approaches and methodologies adequately incorporate the "reality" of women's entrepreneurship. They state that "we need to consider women's entrepreneurship both in terms of its scholarly phenomenon and its contribution to society".

Kjeldsen and Nielsen (2000) put forward the theory that there are differences between the deliberations of female and male entrepreneurs and stress the fact that women do not form one large, homogenous group of business owners. They identified six different types of new business owners:

- the self-employed entrepreneur (new enterprise)
- the traditional self-employed business owner (who continues a business)
- the growth-orientated entrepreneur
- the leisure entrepreneur
- the family-owned enterprise
- the network entrepreneur (both an entrepreneur and a business owner)

Interviews with Danish women showed the importance of being fully acquainted with the needs, motives and attitudes of the various target groups when creating public policies designed to promote business (Kjeldsen and Nielsen 2000). The authors saw a need for affordable access to competent guidance. Most of the Danish female entrepreneurs felt that there were no factors in their environment that encouraged them to start and run their own business. The general attitude among most of the women interviewed was that little is known about the various initiatives that have been launched to improve entrepreneurs or self-employed people's chances of success (Kjeldsen and Nielsen 2000). Danish women said that they need short, targeted courses (providing competence and more confidence) which aim to make it easier for entrepreneurs to surmount the obstacles

and problems which laws on self-employment can pose. Besides specific courses, Danish women asked for introductory courses or group meetings to be able to share experiences, and where various aspects of being an entrepreneur are put into focus.

In this survey conducted by Kjeldsen and Nielsen (2000), the majority of women found the idea of having a "one stop" resource, where they could come for information, guidance, specific counselling and discussion, as well as access to relevant, demand-orientated courses aimed at the various stages of developing an enterprise, an excellent concept. The women didn't particularly want to be advised by women, and in many cases they even preferred men to give them professional counselling.

A Danish study by Kjeldsen and Nielsen (2000), shows that women entrepreneurs try to integrate their family with their business, but at same time stated that an entrepreneur works/should work more than the average person. Therefore women encounter a number of conflicts between their perception of criteria for success in relation to business and the family. Sarasvathy (2004) also highlights the importance of understanding barriers to entrepreneurship.

Hisrich *et al* (2007) argued for psychologists to develop theory and undertake empirical research focusing on five key topic areas: the personal characteristics of entrepreneurs; the psychopathology of entrepreneurs; entrepreneurial cognition; entrepreneurship education; and international entrepreneurship. Virtanen (1997) said that studies of different groups of entrepreneurs should presuppose the identification of a phase of entrepreneurial development as well as looking at applicable theories (psychological, sociological or economic theories).

Psychologists have tried to investigate the psychological attributes and motivations of women entrepreneurs, particularly looking at the relevance the motivational aspects of achievement and power, as well as attempting to establish the existence of female entrepreneurial types (managerial entrepreneurs, pragmatic entrepreneurs, achievement-oriented entrepreneurs) and identifying types in relation to entrepreneurial success (Langan-Fox and Roth 2008). They found that pragmatists were the most successful,

managerial types the least successful and achievers were in the middle. Pragmatists were committed to family and business: this type was called 'dualists' by Cromie and Hayes (1988) and 'conventionalists' by Goffee and Scase (1985).

Noruzi *et al*/ (2010) argue today that the wider relevance of the currently popular opportunity-based conceptualisation of entrepreneurship is now increasingly attracting the attention of researchers.

Entrepreneurship Education and Promotion, by Kourilsky and Walstad (1998) studied female and male high school students in the US and looked at their entrepreneurship knowledge and attitudes, as well as whether there were any significant gender differences in these areas. The results of the study suggested that there were many similarities between female and male knowledge of and opinions about entrepreneurship. However, the students also exhibited significant gender differences in several areas. The study's findings led to important curricular implications for entrepreneurship education in the nation's schools, especially for female students. The results of this study provided compelling evidence in support of the need to initiate or improve entrepreneurship education for young people.

To make progress on their agenda for entrepreneurship, the European Commission published the Green Paper "Entrepreneurship in Europe" (COM 2003). As a follow-up to the Green Paper, and based on public consultation, an Entrepreneurship Action Plan was adopted. The Lisbon European Council identified five areas of 'new basic skills' for the knowledge-based economy, one of which was entrepreneurship.

Since 2000, many actions have been initiated by the European Commission targeted at promoting female entrepreneurship. For example, the Directorate General Enterprise and Industry has launched the Women Entrepreneurs' portal². A study of female entrepreneurship was carried out, including an examination and evaluation of good practices in the promotion of female entrepreneurship, and a handbook of good practices

² <http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/women/portal/>

was published (European Commission 2002). The survey results showed that in many cases obstacles tend to be more significant for female entrepreneurs. Listed factors included: a poor business environment; choice of business types and sectors; information gaps; lack of contacts and access to networking; gender discrimination and stereotypes; weak and inflexible supply of childcare facilities; difficulties in reconciling business and family obligations; and differences in the way women and men approach entrepreneurship (European Commission 2002: 3). This publication listed the OECD (2004) report on female entrepreneurship, which states that some governments tried to promote entrepreneurial behaviour throughout the educational system or through different programmes directed at cultivating entrepreneurial capabilities. For example, in Greece in 2000, a project was launched to increase the involvement of women in business activities throughout the country (regional development was also an important issue). In Italy in 1999, women starting their own business were supported by Sportello Fare Impresia (Enterprise creation shop). In the UK in 1999, women's business networking and empowerment was supported through the project Women Into the Network (WIN). In Germany in 1998, the online Course for Female Enterprise Starters (Online Kurs zur Existenzgründung von Frauen) was organised.

Before the most recent EU enlargement, female entrepreneurship education was being targeted, and the "Best Procedure" project on education and training for entrepreneurship tried to identify and compare initiatives that aim to promote the teaching of entrepreneurship in the education systems from across Europe, from primary school to university³ (European Commission 2002). In 2003-2004, the follow-up of the "Best Procedure" project was carried out and culminated in a report on the progress in promoting entrepreneurial attitudes and skills through primary and secondary education⁴ (European Commission 2004). This report states that: "encouraging an enterprising spirit in young people is a pre-condition to achieving progress – at least in the longer term – in employment, growth, competitiveness and innovation." (European Commission 2004: 10).

³ For this purpose, a group of experts was established with members appointed by the national governments (the EU 15 + Norway), and with the Commission taking a coordinating role.

⁴ Into this Expert Group also experts from accession countries (2004) were invited: Estonian expert was Ms. Epp Vodja (Junior Achievement Fund), experts for Germany, Greece, Italy and UK were again Ms. Marion Hüchtermann, Dr. Joseph Hassid, Dr. Franco Sensi and Mr. Alastair Mathews

EU National experts⁵ in these projects were mostly men and words such as “gender”, “women”, “girls” and “female” are missing in these reports. It states that entrepreneurship is now recognised as a basic competence, and could be explicitly included in national curricula, depending on the way in which the education system is structured. The final report includes 21 recommendations addressing different levels and actors, including national, regional and local authorities; educational institutions; the business world and NGOs; and the European Commission. The report stresses the need for support measures (European Commission 2004: 7):

Support measures put in place by national or local authorities in order to encourage schools to get involved in entrepreneurship related activities can take the form of financing pilot projects, promoting links between schools and enterprises, providing teaching material, supporting dedicated networks and NGOs, raising awareness or disseminating good practice. Particular attention needs to be dedicated to teachers, and to making specific training for them available.

Actions taken by countries are listed in the follow-up of the “Best Procedure” final report (European Commission 2004). For example in **Germany** a commission made up of experts from the Ministries of Economy and the Ministries of Education from each federal state has been formed to find ways to connect an intensified economic education programme with the existing curricula. This commission formulated non- compulsory recommendations for the curriculum. Earlier recommendations suggested that students should participate in a student company in the 9th or 10th year of education (European Commission 2004: 30). The commission emphasised entrepreneurship as a viable career option, and mini-companies were recommended as a suitable method to provide key competences and economic understanding (European Commission 2004: 53).

In **Estonia**, the Foundation for the Reform of Vocational Education, an agency of the Ministry of Education, has started a project to bring entrepreneurship into the vocational education and training (VET) system. Five pilot schools were chosen for the programme

⁵ Ms. Marion Hüchtermann from Germany, Dr. Joseph Hassid from Greece, Dr. Franco Sensi from Italy, Mr. Alastair Mathews from UK.

and after the end of the pilot project, the promotion of entrepreneurship education in the VET system as a whole was planned (European Commission 2004: 53-54). Kõiv et al (2005) reported that entrepreneurship education was integrated into the compulsory section in all curricula in vocational education institutions. The authors praised the apprenticeship programme, which helps young people to integrate into the labour market. The apprenticeship training period was 60 weeks.

In **Italy**, linking with the world of employment is the basis of the reform of the education and training system, although entrepreneurship and self-employment are not explicitly mentioned as objectives (European Commission 2004: 54).

In the **UK**, the development and publication of *Enterprising Education* demonstrates that there is already a commitment in Northern Ireland to promote greater integration of entrepreneurship and education. In England, the government has accepted the recommendations of the Davies Review in 2002,⁶ and a plan was put in place to implement five days of enterprise education for all pupils aged 15 in secondary schools by 2006. In Scotland, the authorities were committed to a change in the delivery of enterprise education through their response (March 2003) to the Report *Determined to Succeed*,⁷ published in 2002 (European Commission 2004: 54-55).

The "Best Procedure" project expert group has continued, despite a change in experts⁸, and reported again in 2008 (European Commission 2008). Gender was again not discussed in this final report (the words "gender", "women", "girls" and "female" were not used). This report explored key issues regarding the teaching of entrepreneurship in higher education (**Appendix 1**), identified existing obstacles and proposed a range of solutions, taking into account different levels of responsibility (public policy, institutions, educators and relevant stakeholders). The main obstacles were listed in general terms such as

⁶Howard Davies, A Review of enterprise and the economy in education, 2002.

⁷Determined to Succeed - A Review of Enterprise in Education: Evidence Report, Scottish Executive, 2002 <http://www.scotland.gov.uk/Publications/2002/12/15980/15426>, accessed on 18th August

⁸Skevos Evrpidou from Cyprus, Christine Volkmann from Germany, Rainer Kattel from Estonia, Kostas Katsogiannos from Greece, Massimo Colombo from Italy, Paul Hannon from UK

structural problems; problems of awareness and motivation within institutions; lack of resources including funding, teachers and professors.

In Oslo in 2006, a broad representation of stakeholders (e.g. national, regional and local governments, business associations and entrepreneurs, promoters of programmes, school teachers, academics and students) discussed entrepreneurship education. This discussion resulted in a detailed catalogue of initiatives, based on successful experiences in Europe (European Commission 2006). The overall goal of the Oslo Agenda for Entrepreneurship Education in Europe was to ensure that young people could develop entrepreneurial competences across all stages of the education system.

Entrepreneurship education should be introduced into the mainstream in the education system, and be age-appropriate. The European Commission's network of experts on employment and gender equality issues (EGGE) has analysed entrepreneurship education and recommended that in order to improve student's entrepreneurship qualities, measures should be taken to:

- *Promote the development of personal qualities that are relevant to entrepreneurship, such as creativity, spirit of initiative, risk-taking and responsibility;*
- *Offer early knowledge of and contact with the world of business, and some understanding of the role of entrepreneurs in the community;*
- *Raise students' awareness of self-employment as a career option (the message being that you can become not only an employee, but also an entrepreneur);*
- *Organise activities based on learning by doing — for example by means of students running mini-companies or virtual firms;*
- *Provide specific training on how to start a business (especially in vocational or technical schools and at university level). (EGGE 2004)*

In contrast, the US-National Consortium has developed 403 curriculum content standards, grouped to 15 major standards, again divided into three sections: entrepreneurial skills, ready skills and business function (referred through Noruzi *et al* 2010). NCSEE has grouped major standards of entrepreneurship education (NCSEE 2004):

- I. Entrepreneurial Skills
 - Entrepreneurial Processes: Discovery, Concept development, Resourcing, Actualization, Harvesting
 - Entrepreneurial Traits /Behaviour: Leadership, Personal Assessment and Management
- II. Ready/Hard Skills
 - Business Foundations: Business concepts and business activities
 - Communications and Interpersonal Skills
 - Digital skills
 - Economics: Basic Concepts, Cost-Profit Relationships, Economic Indicators / Trends, Economic Systems, International Concepts
 - Financial Literacy: Money Basics, Financial Services, Personal Money Management
 - Professional Development: Career Planning, Job-Seeking Skills
- III. Business Functions
 - Financial Management
 - Human Resource Management
 - Information Management
 - Marketing Management
 - Operations Management
 - Risk Management – Strategic Management

A Roadmap for Equality in Europe (SEC 2006) between women and men for the period 2006-2010 was adopted on 1st of March 2006. The Roadmap gives an overview of women's and men's position in society and one of the facts considered is that women constitute on average only 30% of entrepreneurs in the EU. The Roadmap also documents that women often face greater difficulties than men in starting up businesses and in accessing finance and training. Studies have shown that female entrepreneurs and managers confront several obstacles such as prejudice, rigid gender norms and feel a work-family conflict (Johnson Ahl 2002a, 2002b, 2002c; Raitviir 2005; Talves & Laas 2004; Talves 2005). Enhancing equal economic independence for women and men was one of six priority areas for the EU action on gender equality for the period 2006-2010 (SEC,2006). The Roadmap challenged gender stereotypes:

Women and men often follow traditional education and training paths, which often place women in occupations that are less valued and remunerated. Policy should focus on combating gender stereotypes from an early age, providing awareness training to teachers and students, and encouraging young women and men to explore non-traditional educational paths.

In order to fulfil this goal state entities are required to pay special attention to flexible working arrangements for both women and men, increase care services, and provide better work and family life reconciliation policies for both women and men.

During 2009-2010, the progress the Roadmap had made against its targets was discussed and the poor success rate in some areas was criticised. In 2009, a mid-term report on the implementation of the Roadmap was published (SEC 2009). This report stated that women account for nearly 60% of all university graduates in the EU, but their representation in science and technology degrees remains low. The report referred to barriers preventing women from using their full potential and gaining access to jobs, and highlights the difficulty of balancing work and family life as one of the main barriers to women's employment and career advancement. The report stressed that persisting gender stereotypes restrict women's and men's study and career choices, leading to a gender-segregated labour market. The mid-term report draws attention to major challenges:

The overall challenge is to find efficient and sustainable responses to the economic slowdown and reduce the multiple short- and long-term consequences, including on the labour market. Women's employment has been a major driving force of the EU labour market since the launch of the Lisbon strategy. Therefore, gender equality concerns need to be integrated into the responses given to these challenges, because women and men might be affected differently.

The third Alternative Report by the European Women's Lobby (EWL 2010a; EWL 2010b: 6)⁹ stated that:

In some areas, such as women and the media, education and the training of young women, and women and health, have been all but neglected at EU level, even though the achievement of full equality between women and men is one of the main goals of the EU and all 27 Member States are signatories to the Beijing Platform for Action.

The EWL(2010a: 24; 2010b: 11) report also highlighted that:

In the field of education, where the perpetuation of gender stereotypes is leading to a lack of uptake in certain subjects by both girls and boys, this is having a hugely limiting impact upon their subsequent life choices. It is crucial we acknowledge and address demographic trends such as these in order to promote lifelong learning and ensure that potential future skills shortages are avoided.

Another programme aiming to support young women thinking about entrepreneurship is the Erasmus exchange programme. The European entrepreneur exchange programme offers new entrepreneurs the possibility to work for up to six months with an experienced entrepreneur in his/her SME in another EU country. The specific objective is to contribute to enhancing entrepreneurship and an international outlook, as well as the competitiveness of potential start-up entrepreneurs and newly established micro and small enterprises across the EU.

⁹ Third Alternative Report that the EWL has produced, following our earlier Beijing+5 and Beijing+10 reports

WOMEN@BUSINESS Project Survey

Aim of the Study

The number of women business owners increased “dramatically” during the 1980s (Brush 1992). The number has increased again in recent decades and policies supporting an entrepreneurial attitude are now evident. However, women are still faced with multiple barriers in terms of professional involvement and reconciling work and family, mainly due to gender stereotypes and rigid gender role perceptions, as well as issues surrounding career breaks. Women from an ethnic minority or immigrant background face multiple discrimination, social stigma and practical barriers in terms of professional development, due to language barriers and general difficulties that are often created through xenophobia and cultural differences.

Women have the potential to be active in business and to develop their career in business, but in practice in many countries this potential is an unused resource. To experience a business career is important for economic and professional development. Entrepreneurship is still poorly studied, but existing research is convincing that present support measures are insufficient and the educational system does not pay enough attention to the variety of career development and entrepreneurship as a career option for their graduates (Gartner 1989; de Bruin et al 2007; Brush et al 2008; Holmquist and Sundin 2002; Jonson Ahl 2002; Talves and Laas 2004).

The aim of this study is to identify the exact needs and requirements of young women in pursuing entrepreneurship as a career option; encompassing students, graduates and young women outside of education. The issues facing young women from an ethnic minority or immigrant background are also considered in this study.

Data and Methodology

The women@business project carried out this study in order to gain a better knowledge about the willingness of young women to pursue an entrepreneurial career. This research consisted of two parts. The first part used quantitative research methods (survey questionnaires, **Appendix 2**) and the second part focused on qualitative research techniques (interviews in every partner country).

For the survey, a questionnaire was developed in English and translated into the languages of the partnership; Estonian, German, Greek and Italian. Questionnaires were available electronically using the web-tool www.eformular.com. This online tool allowed the activity co-ordinators to monitor the numbers of responses and the time-frame that responses took place in.

Data was gathered from female students and recent graduates from Cyprus, Estonia, Germany, Greece, Italy and the United Kingdom (UK). Four responses were excluded (two from Germany and one each from Italy and the UK) because they were given by men. The most active respondents were from the UK and the most modest involvement was in Estonia and Germany. The final sample size consisted of 285 female students or recent graduates (**Table 1**).

Table 1. Number and proportion of respondents by country

	Frequency	Percent
Cyprus	46	16
Estonia	44	15
Germany	35	12
Greece	43	15
Italy	54	19
UK	63	22
Total	285	100

Background to the Sample

As can be seen in table 1, the total sample size consisted of 285 young women from six countries. As the activity also aimed to gather information about the opportunities available to young immigrant women, a question about immigrant status was included in the questionnaire: "Do you consider yourself an immigrant in this country?" 31% of respondents from Cyprus (n=14) and 23% from the UK (n=14) perceived themselves as immigrants in their country (total number of "immigrants" was 31 – 3 of these responses were from other countries so were statistically insignificant). An analysis of entrepreneurial attitudes within immigrant communities could only be undertaken for these two countries, as this data was non-existent in some countries (Germany and Italy) or it was too small a proportion to be statistically relevant (Greece 5%, Estonia 2%).

The largest age group of respondents was 18-22 from Cyprus, Estonia, Germany and the UK, but in Greece and Italy the majority of respondents were aged from 23-26 (**Table 2**).

Table 2. Proportion of respondents by age group and country, %

	Cyprus	Estonia	Germany	Greece	Italy	UK
Under 18	7	-	-	-	-	-
18-22	46	27	40	16	4	55
23-26	17	16	31	30	63	27
27-30	13	18	11	28	20	8
31-35	11	18	9	9	7	6
Over 35	7	20	9	16	6	3

Household Status

All of the respondents from Italy were single, but 48% from Cyprus, 73% from Estonia, 49% from Germany, 35% from Greece and 24% from the UK lived with a partner or had a spouse. A question was also asked about the economic responsibility within households, and none of the Italian respondents were the main providers for their families. Italian respondents had close ties with their parents, with 41% of them stating that there were four members of their family in their household, and 28% had three members.

22% of respondents from Cyprus, 30% from Estonia, 31% from Germany, 19% from Greece and 16% from the UK were the main providers for their family.

Another question focused on children and childcare. 41% of respondents from Estonia had children, 26% from Greece, 15% from Germany, 10% from Cyprus and the UK and 6% from Italy. Any children were under three years old in the majority of cases. In Greece and Estonia the highest percentage of assistance with childcare was reported, 29% and 24% respectively.

Education

One section of the questionnaire was devoted to current academic status. More than two-thirds of respondents studied humanities in Cyprus (77%), while in Estonia the figure was 64%, in Germany 70% and in Greece 63%. Among Italian respondents there were a remarkable proportion of students studying non-humanities (85%). Almost equal numbers of respondents from the UK studied humanities (44%) and non-humanities (56%).

Employment Status

The survey targeted female students in vocational schools, colleges and universities, as well as recent graduates (who had completed their studies within the last five years). Respondents were asked to choose their employment status from a selection (see Table 3). Respondents from Cyprus, Germany and the UK were predominantly students, while in Estonia 20%, in Greece 30% and in Italy 24% of respondents classed themselves as an employee (**Table 3**). Entrepreneurs' voices were highly represented in the Greek sample, where one quarter of respondents classed themselves as self-employed.

Table 3. Proportion of respondents by economic status and country, %

	Cyprus	Estonia	Germany	Greece	Italy	UK
Student, not employed	36	34	46	21	31	48
Student, employee	47	39	40	14	17	44
Employee	7	20	6	30	24	5
Employer	2	2	-	-	-	-
Self-employed, freelancer	7		3	23	4	3
Unemployed	2	5	6	12	24	
Total	100	100	100	100	100	100

Survey Results

Business Experience and Possible Future Business Ideas

Respondents' previous business experience was questioned. The only country where respondents did not have former business experience was Germany. The most experienced respondents were from Cyprus (39% had former business experience). 31% of respondents from the UK, 28% from Greece, 24% from Estonia and 9% from Italy had previous business experience.

Respondents were asked about which business sector they planned to start their future business in. The majority of respondents saw themselves in the service or marketing/retail sector (**Figure 1**). In the case of Estonia, about two-thirds of respondents thought of starting their business in the service sector, and about half of respondents from Cyprus, Germany, Italy and the UK also answered that they were thinking of starting up in this area. Every second respondent from Cyprus and Greece thought that marketing or retail would be their future business area. Every third German respondent saw herself starting a business in the ICT sector, but no respondents from Italy saw themselves starting up in this area.

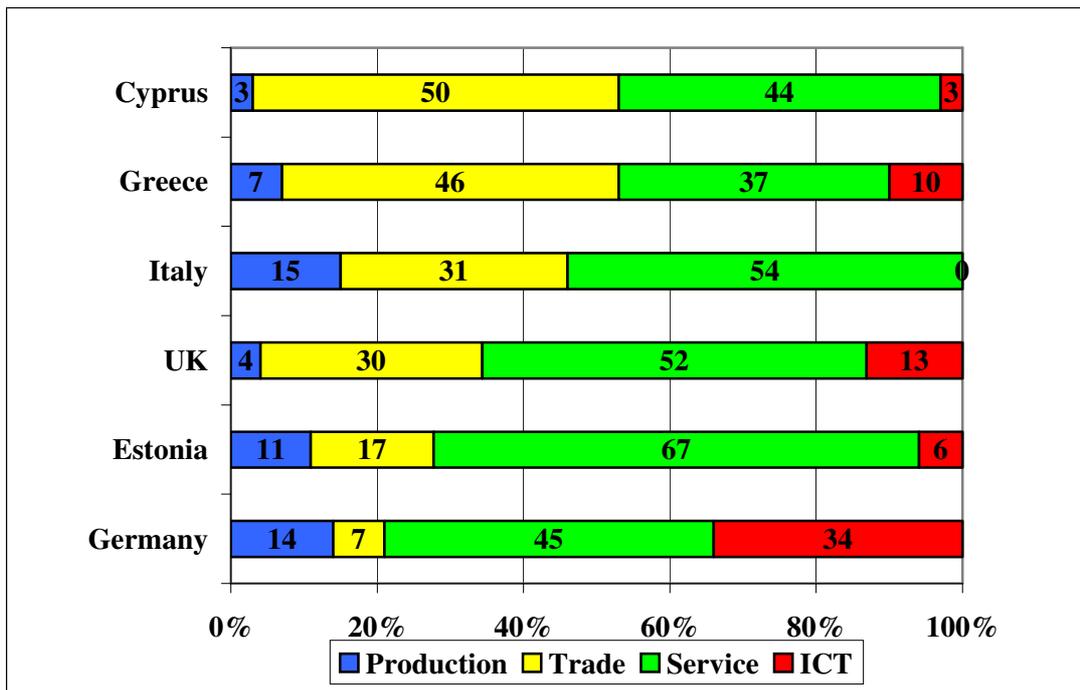


Figure 1. Proportion of respondents by planned business area and country, %

Data sorted by "trade" (marketing, retail, wholesale)

Attitudes to Entrepreneurship

It was assumed on the basis of previous studies, that there would be differences between countries with regard to attitudes about entrepreneurship. Attitudes were studied through responses to six statements about entrepreneurship (Annex 1, Q1).

The highest level of respondents saying that entrepreneurship was their desired career option was found in Italy, Greece and Cyprus (**Figure 2**). By contrast, the most employee career orientated young women lived in Germany and the UK. Despite the fact that young women in Italy saw themselves as entrepreneurs, every one in four didn't think that entrepreneurship would give them a lot of freedom and the possibility to be their own boss. The majority of Estonian respondents thought that entrepreneurship was their desired career option, but one in three also stated that entrepreneurship wasn't for her.

It is often stressed that entrepreneurship provides the opportunity to be your own boss, and this idea was well-supported by respondents in Estonia, Germany, Greece and the UK compared with lower support in Cyprus and Italy. Agreement that entrepreneurship is

linked with risk-taking was overwhelming in Estonia and Italy, but the lowest support for this idea was found in Greece. No particular differences were found in attitudes towards these statements about entrepreneurship among immigrants and non-immigrants.

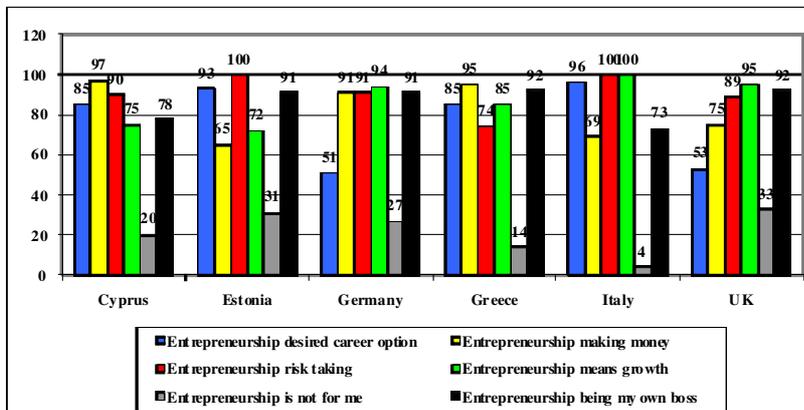


Figure 2. Agreement with statements on entrepreneurship by countries, % („percentage of positive answers)

A third of respondents from Cyprus and Greece thought that an entrepreneurial attitude is innate and something people are born with. Three-quarters of respondents from Estonia, Italy and the UK supported the idea that an entrepreneurial attitude is possible to develop, and can be influenced by social values (**Figure 3**).

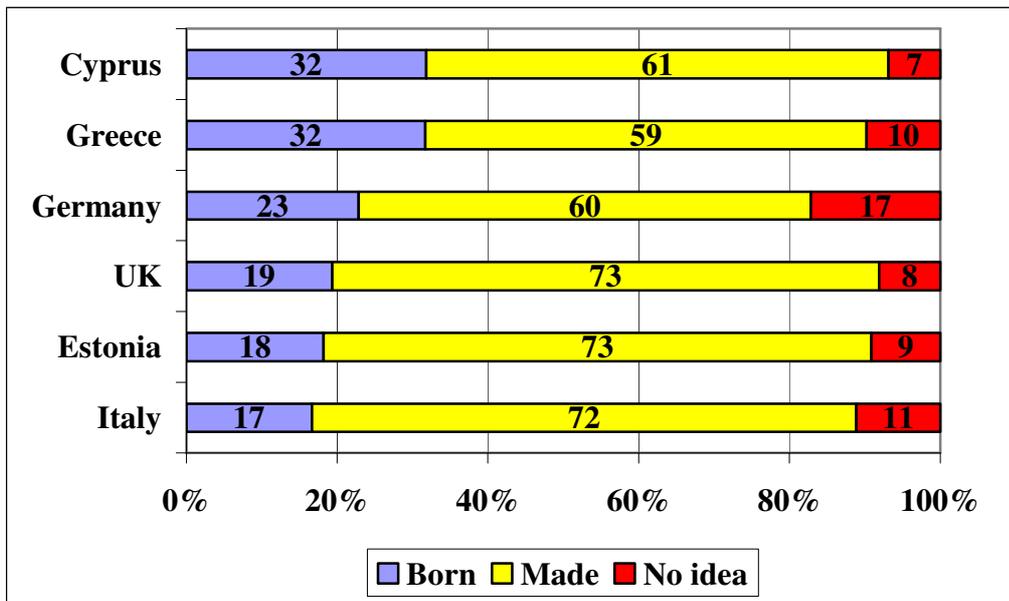


Figure 3. Attitudes about inborn entrepreneurial character, %

Entrepreneurial Encouragement and Business Barriers

It is important for the Women@Business project to know how educational institutions are encouraging an entrepreneurial attitude in their students and whether appropriate measures are in place. Respondents were asked whether during their studies in college/university, they had accessed courses on entrepreneurship, on project management, on how to start own business and on many other aspects of business support (**Figures 4 and 5**). They were also asked about whether such support was available, but they hadn't used it (**Table 4**).

The UK had the lowest share of respondents who said that entrepreneurial encouragement was *not* available during their studies. All countries had respondents who had taken some sort of courses in entrepreneurship, but this facility was most used by students from Estonia and the UK. 66% of German and 59% of Italian respondents said that courses on entrepreneurship were not available during their studies.

Project management courses were widely used by female students in all countries, but these were least used in Greece. Information about how to start your own enterprise was more popular in Estonia and the UK than in other countries and least used in Germany.

Every third female student from Greece and the UK had taken business advice and accessed counselling during their studies. 39% of Greek respondents said that they received some mentoring or coaching during their studies.

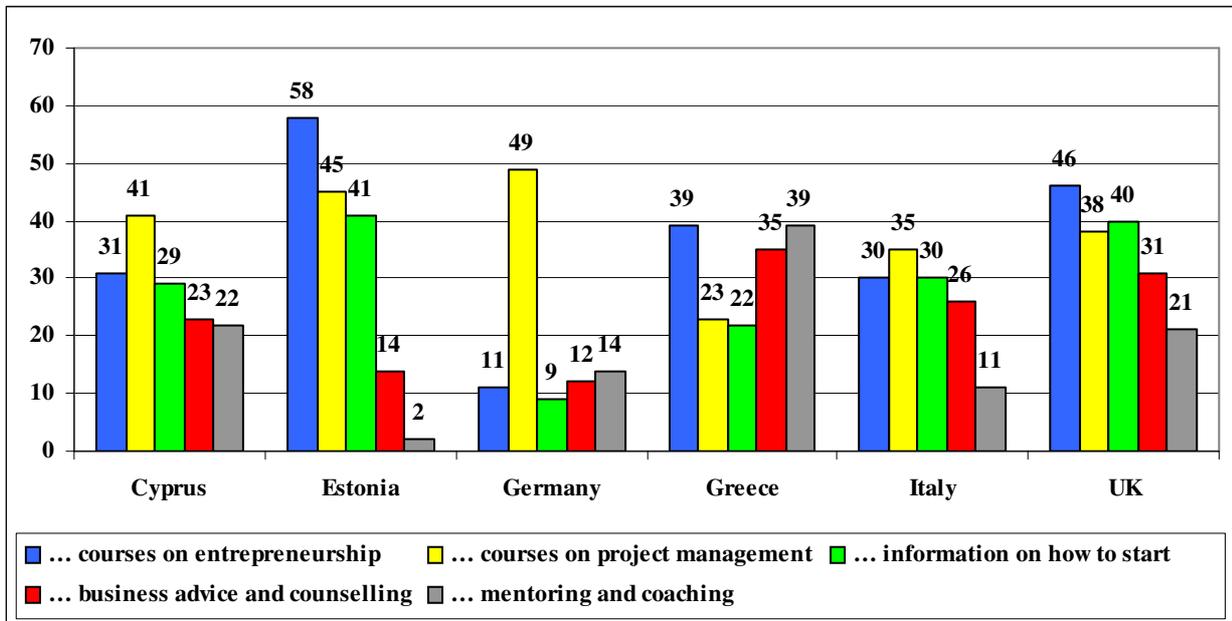


Figure 4. Proportion of respondents who have accessed entrepreneurial education during their studies, % (Number of respondents answering "Yes, I have used")

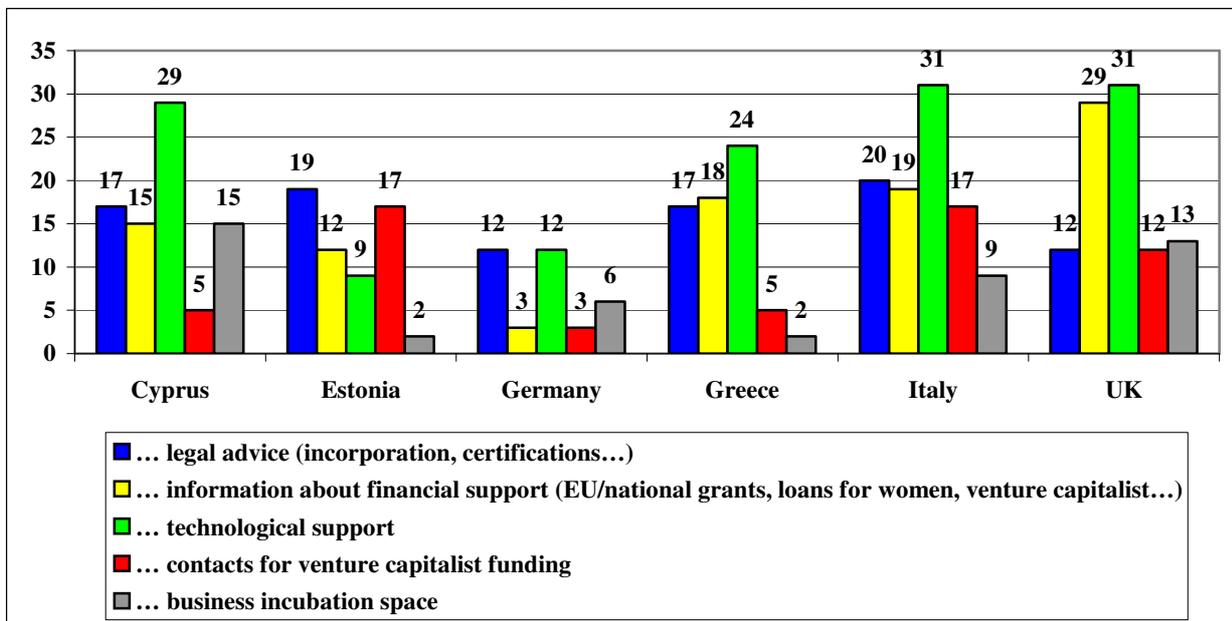


Figure 5. Proportion of respondents who have had business support during their studies, % (Number of respondents answering "Yes, I have used")

When comparing the numbers of respondents taking advantage of opportunities for entrepreneurship education and support by immigration status, it appears that the participation rate is higher among students from an immigrant background (**Figure 6**).

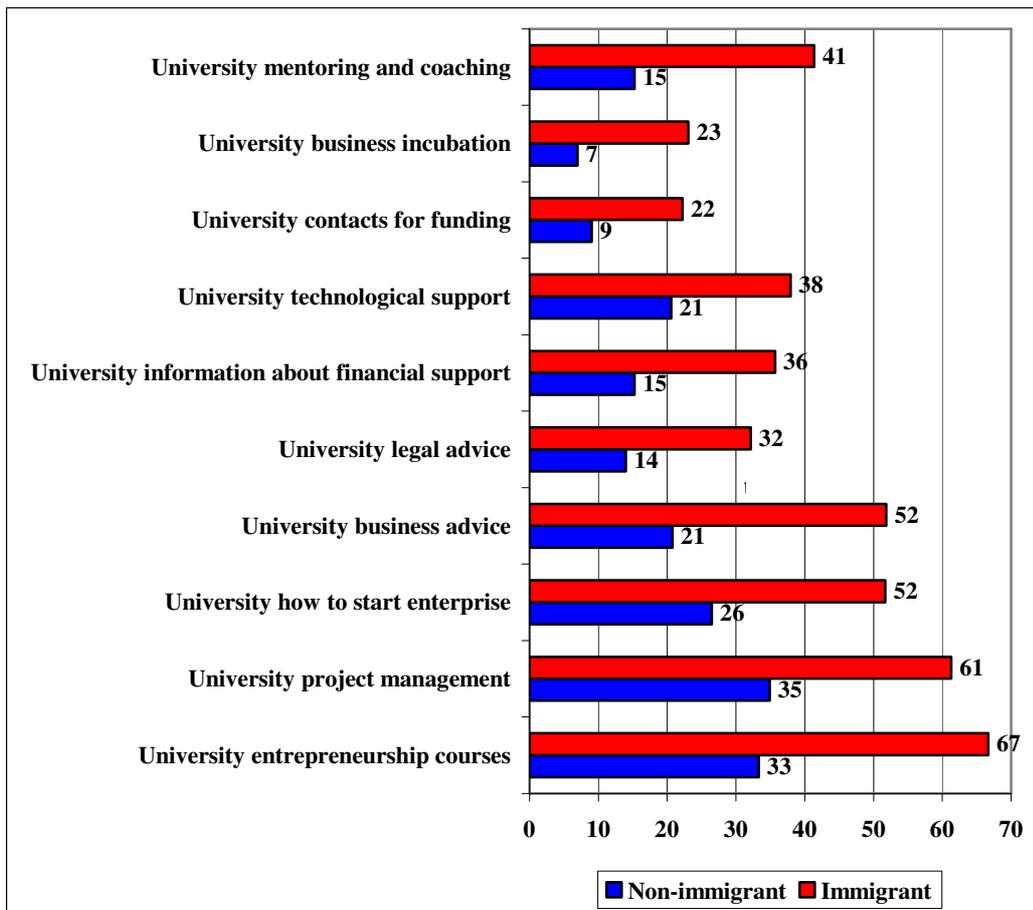


Figure 6. Proportion of respondents who used business support during their studies by immigration status, % (Number of respondents answering "Yes, I have used")

Table 4. Proportion of respondents who did not use offered entrepreneurial encouragement during their studies, % (Number of respondents answering "Yes, but I did not use")

During the studies in the college/university, is it possible to get...	Cyprus	Estonia	Germany	Greece	Italy	UK
... courses on entrepreneurship	29	26	23	17	11	34
... courses on project management	25	26	37	23	11	37
... information on how to start an enterprise	36	18	20	20	13	42
... business advice and counselling	40	19	24	13	9	57
... legal advice (incorporation, certifications...)	34	16	15	24	13	43
... information about financial support (EU/national grants, loans for women, venture capitalist...)	18	21	11	10	11	42
... technological support	38	16	12	14	11	39
... contacts for venture capitalist funding	36	26	14	7	6	41
... business incubation space	25	10	18	2	13	33
... mentoring and coaching	22	5	23	7	2	52

Many respondents reported that their countries lacked business support and encouragement, but the UK had the lowest number of respondents feeling that entrepreneurship education was unavailable in their institutions (**Figure 7**).

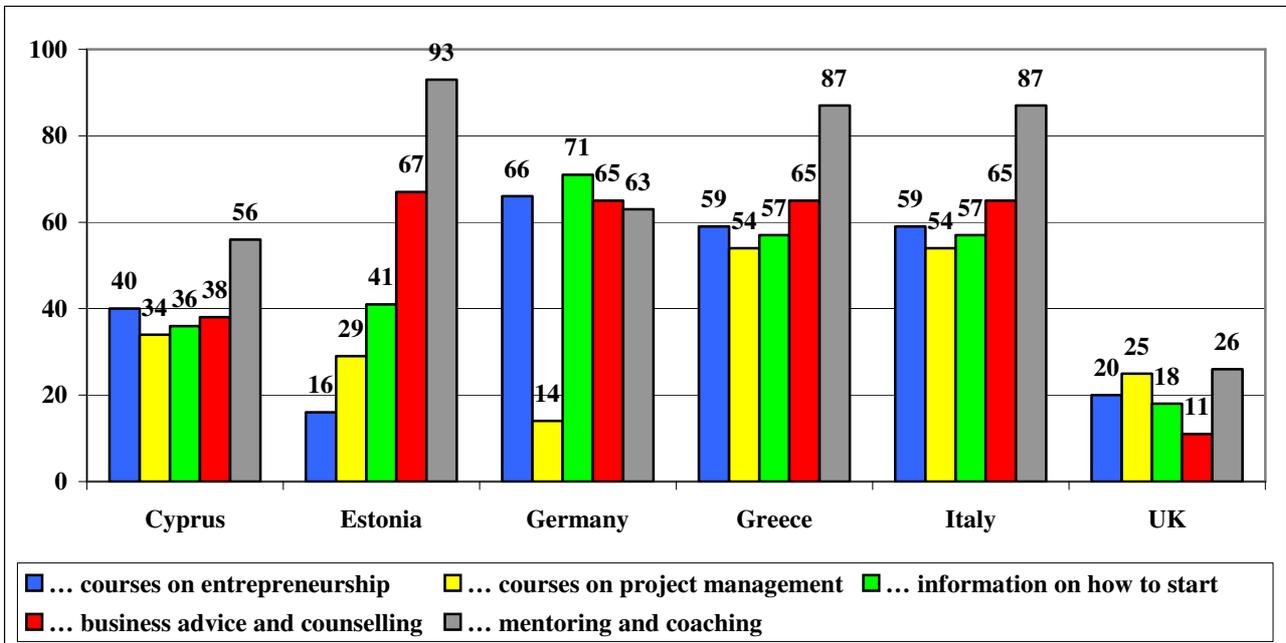


Figure 7. Proportion of respondents who said that entrepreneurship education was not available during their studies, %

The UK again had the lowest proportion of respondents who felt that business support was not available to them during their studies, while Germany and Estonia had some of the highest levels of perceived unavailability (**Figure 8**).

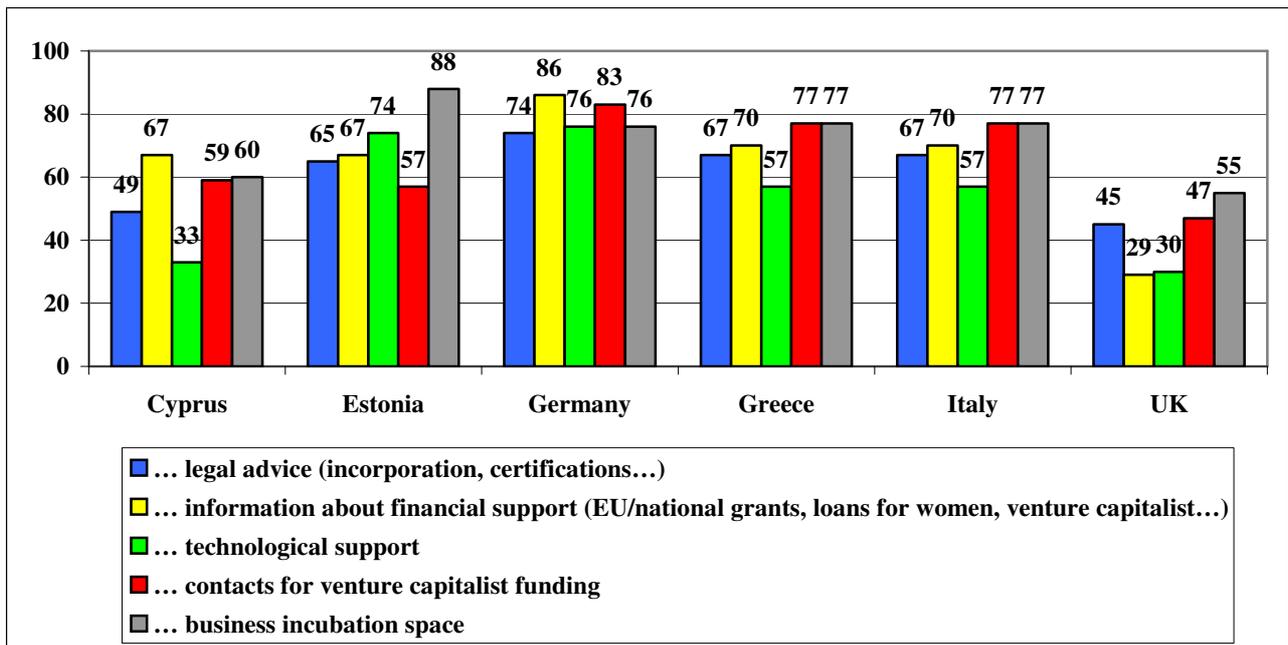


Figure 8. Proportion of respondents who said that business support was not available during their studies, %

When comparing the results from immigrant and non-immigrant respondents in this area, it is clear that a higher level of non-immigrants felt that there was no business support available to them during their studies. This suggests that respondents from an immigrant background were more aware of the options available to them for support in entrepreneurship (**Figure 9**).

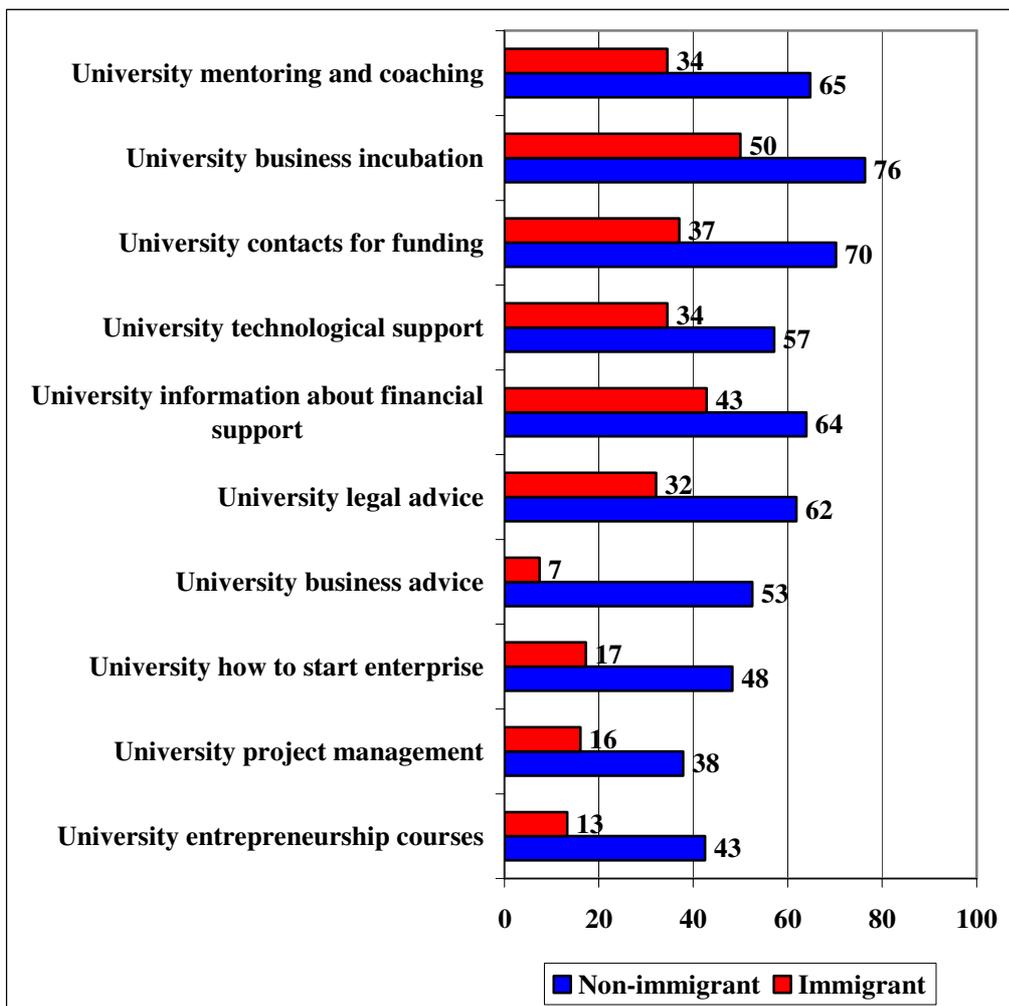


Figure 9. Proportion of respondents who said that business support was not available during their studies by immigrant status, %

Women and Entrepreneurship

Respondents had quite high expectations of entrepreneurship (**Figure 10 and 11**). 29% of German respondents did not expect that entrepreneurship could offer them a good work/family balance. Estonians were also more wary as to whether entrepreneurship could offer them a better balance between work and family life. All the respondents from Italy and the UK believed that entrepreneurship offers good career and personal development opportunities and also the possibility to use your own initiative.

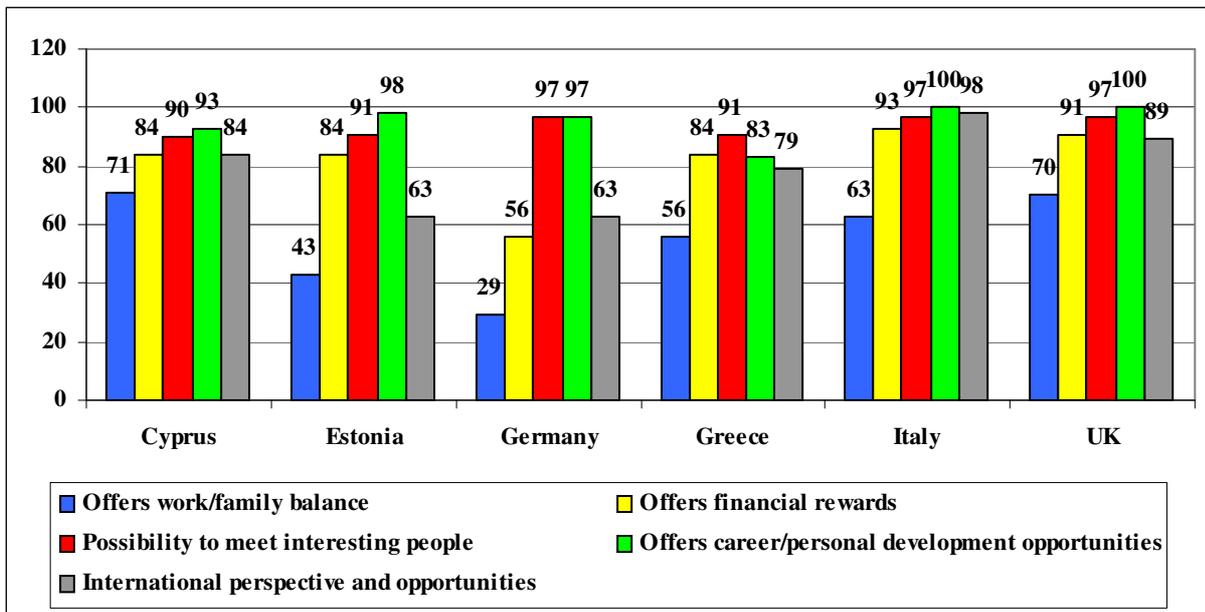


Figure 10. Responses to the question, 'how well could entrepreneurship meet your aspirations and values?' %
("Good" and "Excellent" answers combined)

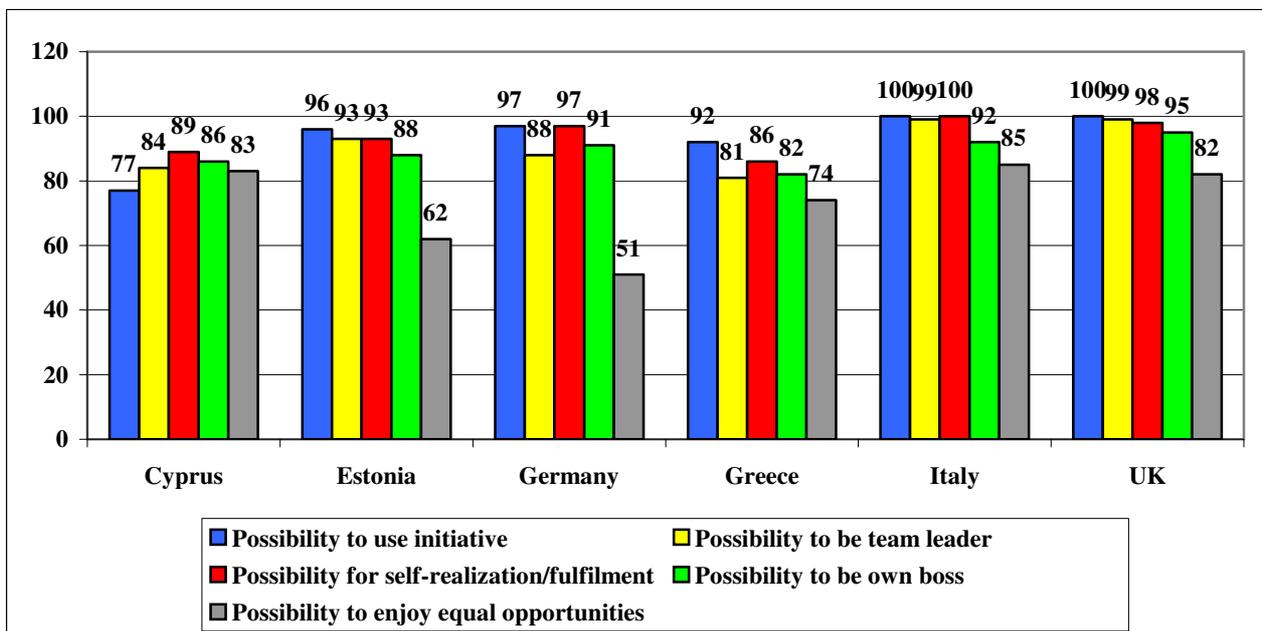


Figure 11. Responses to the question, 'how well could entrepreneurship meet your aspirations and values?', continued from above %
("Good" and "Excellent" answers combined)

Opinions were asked about the obstacles and constraints facing women in starting their own business. Respondents from Greece and Italy perceived different business obstacles as much more serious, while German respondents were the most self-confident, and

Germany had the lowest proportion of respondents who felt that women lacked the time for training (**Table 5**).

Table 5. Proportion of respondents by perceived obstacles and country, %
(„Important“ and “Very important“ answers together)

	Cyprus	Estonia	Germany	Greece	Italy	UK
Combining family and work life	85	<u>61</u>	71	91	92	84
Lack of information / advice on how to start an enterprise	<u>44</u>	49	72	90	86	53
Liquidity and other financial problems (raising capital)	<u>75</u>	81	88	90	94	83
No time for training / upgrading skills	58	52	<u>37</u>	66	74	57
Lack of self confidence (believing in their abilities)	73	65	<u>48</u>	72	72	68
Finding the right contacts, networks for their business venture	75	79	<u>67</u>	95	98	<u>67</u>
Lack of role models	57	37	<u>29</u>	60	46	33
Being a woman (i.e. gender discrimination.)	56	<u>19</u>	35	56	77	27
Low budget for PR and marketing activities	50	62	<u>37</u>	86	71	56
Lack of entrepreneurship education	55	<u>50</u>	60	74	79	53
Lack of management skills	45	68	<u>43</u>	65	78	49
Lack of mentoring	47	<u>45</u>	60	84	77	53

Out of the twelve obstacles listed, combining family and work life was ranked as the most significant obstacle to women setting up their own business in Cyprus and the UK, being the second highest obstacle in Greece and the third in Italy. Liquidity and other financial problems were thought to be the main obstacle in Estonia and Germany (**Table 6 and Table 7**).

Table 6. Hierarchy of perceived obstacles- country comparison

	Cyprus	Estonia	Germany	Greece	Italy	UK
Combining family and work life	1	6	3	2	3	1
Lack of information / advice on how to start an enterprise	12	9	2	3	4	7
Liquidity and other financial problems (raising capital)	2	1	1	4	2	2
No time for training / upgrading skills	5	7	9	9	9	5
Lack of self confidence (believing in their abilities)	4	4	7	8	10	3
Finding the right contacts, networks for their business venture	3	2	4	1	1	4
Lack of role models	6	11	12	11	12	11

Being a woman (i.e. gender discrimination.)	7	12	11	12	8	12
Low budget for PR and marketing activities	9	5	10	5	11	6
Lack of entrepreneurship education	8	8	5	7	5	8
Lack of management skills	11	3	8	10	6	10
Lack of mentoring	10	10	6	6	7	9
Percentage of "yes" answers	44-85	19-81	29-88	56-95	46-98	27-84

Table 7. Hierarchy of perceived obstacles by country

Cyprus (44-85%)		Estonia (19-81%)	
1	Combining family and work life	1	Liquidity and other financial problems (raising capital)
2	Liquidity and other financial problems (raising capital)	2	Finding the right contacts, networks for their business venture
3	Finding the right contacts, networks for their business venture	3	Lack of management skills
4	Lack of self confidence (believing in their abilities)	4	Lack of self confidence (believing in their abilities)
5	No time for training / upgrading skills	5	Low budget for PR and marketing activities
6	Lack of role models	6	Combining family and work life
7	Being a woman (i.e. gender discrimination)	7	No time for training / upgrading skills
8	Lack of entrepreneurship education	8	Lack of entrepreneurship education
9	Low budget for PR and marketing activities	9	Lack of information / advice on how to start an enterprise
10	Lack of mentoring	10	Lack of mentoring
11	Lack of management skills	11	Lack of role models
12	Lack of information / advice on how to start an enterprise	12	Being a woman (i.e. gender discrimination)
Germany (29-88)		Greece (56-95)	
1	Liquidity and other financial problems (raising capital)	1	Finding the right contacts, networks for their business venture
2	Lack of information / advice on how to start an enterprise	2	Combining family and work life
3	Combining family and work life	3	Lack of information / advice on how to start an enterprise
4	Finding the right contacts, networks for their business venture	4	Liquidity and other financial problems (raising capital)
5	Lack of entrepreneurship education	5	Low budget for PR and marketing activities
6	Lack of mentoring	6	Lack of mentoring

7	Lack of self confidence (believing in their abilities)	7	Lack of entrepreneurship education
8	Lack of management skills	8	Lack of self confidence (believing in their abilities)
9	No time for training / upgrading skills	9	No time for training / upgrading skills
10	Low budget for PR and marketing activities	10	Lack of management skills
11	Being a woman (i.e. gender discrimination)	11	Lack of role models
12	Lack of role models	12	Being a woman (i.e gender discrimination)
Italy (49-98)		UK (27-84)	
1	Combining family and work life	1	Combining family and work life
2	Liquidity and other financial problems (raising capital)	2	Liquidity and other financial problems (raising capital)
3	Lack of self confidence (believing in their abilities)	3	Lack of self confidence (believing in their abilities)
4	Finding the right contacts, networks for their business venture	4	Finding the right contacts, networks for their business venture
5	No time for training / upgrading skills	5	No time for training / upgrading skills
6	Low budget for PR and marketing activities	6	Low budget for PR and marketing activities
7	Lack of information / advice on how to start an enterprise	7	Lack of information / advice on how to start an enterprise
8	Lack of entrepreneurship education	8	Lack of entrepreneurship education
9	Lack of mentoring	9	Lack of mentoring
10	Lack of management skills	10	Lack of management skills
11	Lack of role models	11	Lack of role models
12	Being a woman (i.e gender discrimination)	12	Being a woman (i.e gender discrimination)

Knowledge, Influence and Business Support

Starting your own business requires knowledge, skills and resources, and often starts with support and access to affordable training. The questionnaire asked about respondents' major problems facing them when planning to start a business (**Table 8**).

There was a statistically significant difference¹⁰ in interest in entrepreneurship courses by immigrant status i.e. immigrants were more likely to express an interest in entrepreneurial courses than non-immigrants. Respondents from an immigrant background expressed strong interest in entrepreneurship courses; 94% were interested in such courses (**Figure 18**). In comparison two-thirds of respondents with a non-immigrant background were interested in entrepreneurship courses.

Table 8. Proportion of positive responses to the question 'If planning to start your own business, what are the major problems facing you?'
%

	Cyprus	Estonia	Germany	Greece	Italy	UK
Knowledge about how to start own business	51	60	26	35	20	57
Knowledge about how and where to register a business	46	67	24	40	50	52
Plans to create own enterprise	55	49	35	39	46	76
Existing family business, which respondent could/should join	42	33	-	21	17	17
Plans to buy a business	11	2	-	8	19	10
Plans to manage without employees, i.e. to become a sole proprietor	25	21	27	23	38	27
Plans to achieve work/family balance	84	79	97	100	98	95
Main obstacle is finding start-up money	69	65	81	93	89	80
Main problem is getting affordable business advice	44	64	53	74	40	49
Main problem is getting training	14	30	38	43	21	33
Main problem is getting peer support	40	20	33	48	46	29
Main problem is getting mentoring	37	46	68	60	38	44

¹⁰ chi-square=16,143; OR=15,175; p=0,008

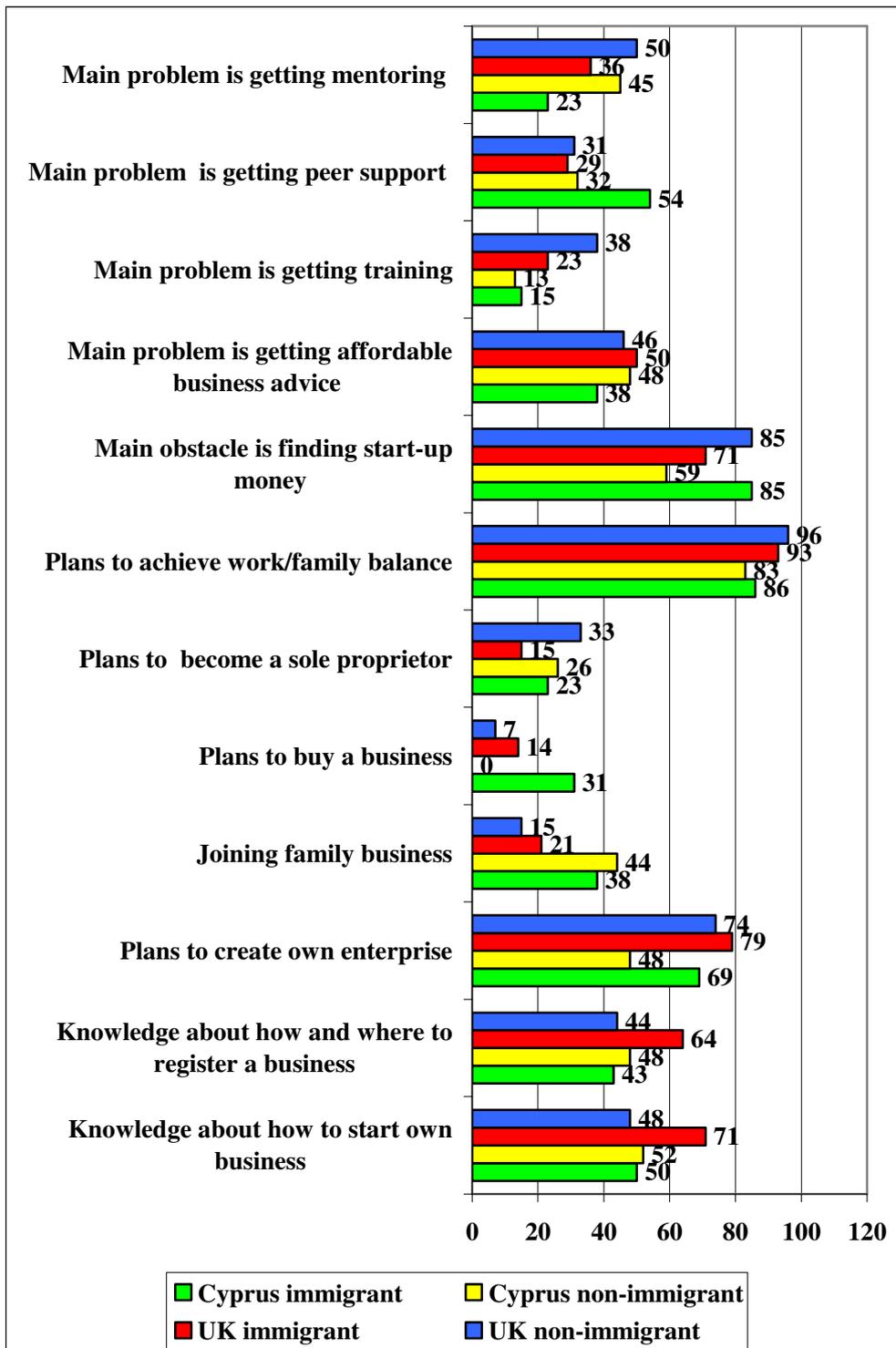


Figure 10. Proportion of positive responses to the question 'If planning to start your own business, what are the major problems facing you?' by immigrant status and country, %

The questionnaire asked about the main supporters and detractors who could encourage, discourage and influence respondents in the case of them starting their own business (Table 9). In all of the countries, the influence of parents and family was perceived to be positive by about 80% out of respondents. Unfortunately, there was too low a number of

respondents commenting about the influence of teachers and lecturers in Estonia, Germany and Italy to be able to make a meaningful comparison. In Cyprus the perceived influence of teachers and lecturers was remarkably high in comparison to other countries. The influence of policy makers was seen as mainly negative by every fourth respondent in Estonia , every fifth in Italy and by every sixth respondent in Greece.

Table 9. Proportion of respondents by opinion of major influence, %

		Essential influence	Mainly positive	No influence	Mainly negative
Cyprus	Influence by parents and family	44	37	16	2
	Influence by teachers and lecturers	28	49	23	-
	Influence by career advisers	19	53	26	2
	Influence by friends	18	48	27	7
	Influence by entrepreneurs	12	47	35	7
	Influence by media	16	35	42	7
	Influence by policy makers	25	16	55	5
	Influence by others	6	31	49	14
Estonia	Influence by parents and family	26	57	14	2
	Influence by teachers and lecturers	-	43	57	-
	Influence by career advisers	5	54	41	-
	Influence by friends	17	74	7	2
	Influence by entrepreneurs	22	49	24	5
	Influence by media	10	49	37	5
	Influence by policy makers	5	10	63	23
	Influence by others	5	24	68	2
Germany	Influence by parents and family	44	35	18	3
	Influence by teachers and lecturers	3	35	53	9
	Influence by career advisers	9	27	64	-
	Influence by friends	32	41	26	-
	Influence by entrepreneurs	13	28	56	3
	Influence by media	3	18	74	6
	Influence by policy makers		9	82	9
	Influence by others	6	9	81	3
Greece	Influence by parents and family	48	33	5	14
	Influence by teachers and lecturers	23	33	44	-
	Influence by career advisers	23	53	23	-
	Influence by friends	23	51	23	2
	Influence by entrepreneurs	21	35	42	2
	Influence by media	14	24	50	12
	Influence by policy makers	12	12	60	17
	Influence by others	5	10	76	10
Italy	Influence by parents and family	24	61	6	9

	Influence by teachers and lecturers	6	33	62	-
	Influence by career advisers	13	45	40	2
	Influence by friends	9	76	13	2
	Influence by entrepreneurs	25	54	15	6
	Influence by media	2	40	42	15
	Influence by policy makers	2	12	65	21
	Influence by others	2	9	83	7
UK	Influence by parents and family	47	35	7	11
	Influence by teachers and lecturers	14	44	40	2
	Influence by career advisers	7	46	41	5
	Influence by friends	32	52	13	4
	Influence by entrepreneurs	21	59	16	4
	Influence by media	9	54	34	4
	Influence by policy makers	4	32	60	5
	Influence by others	4	18	67	11

Figures 11-16 compare the mean influence of different actors by country.

The mean is calculated by assigning numbers from 1 to 4 to each possible response, where 1 is "mainly negative", 2= "no influence", 3= "mainly positive" and 4= "essential influence".

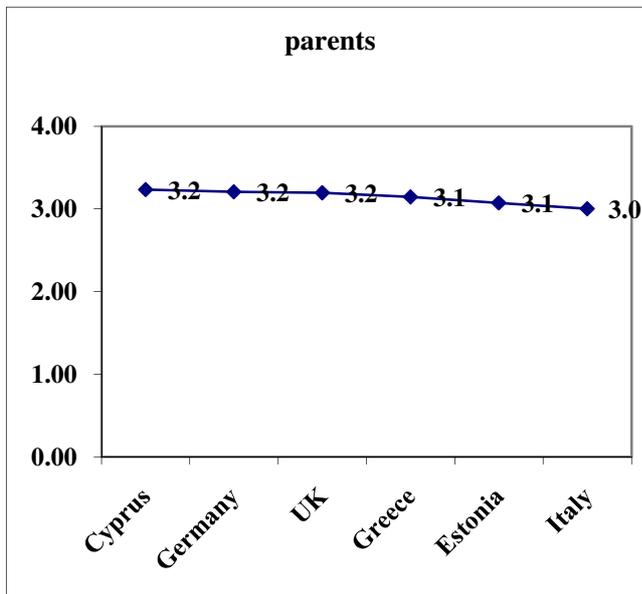


Figure 11. Mean influence by parents

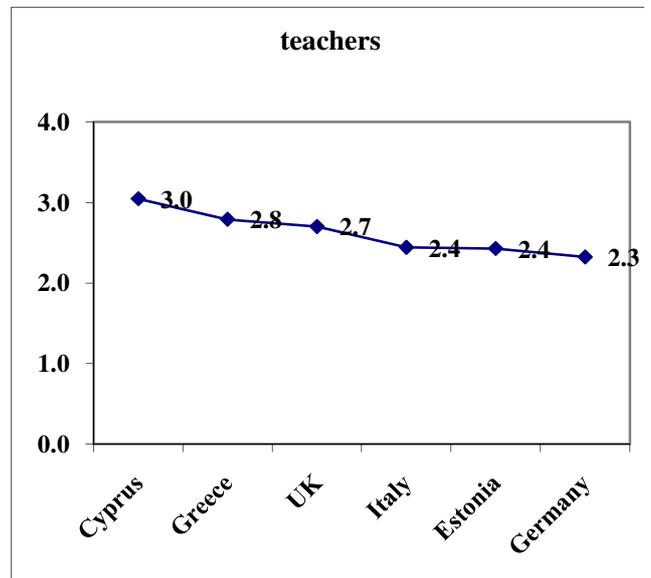


Figure 12. Mean influence by teachers

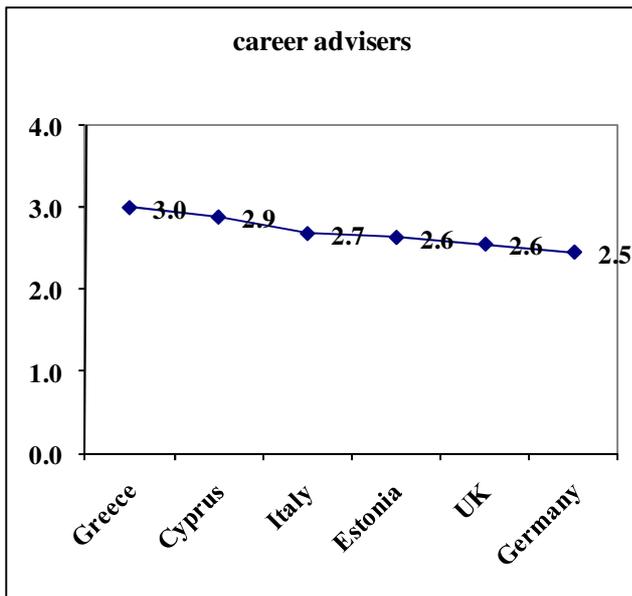


Figure 13. Mean influence by career advisers

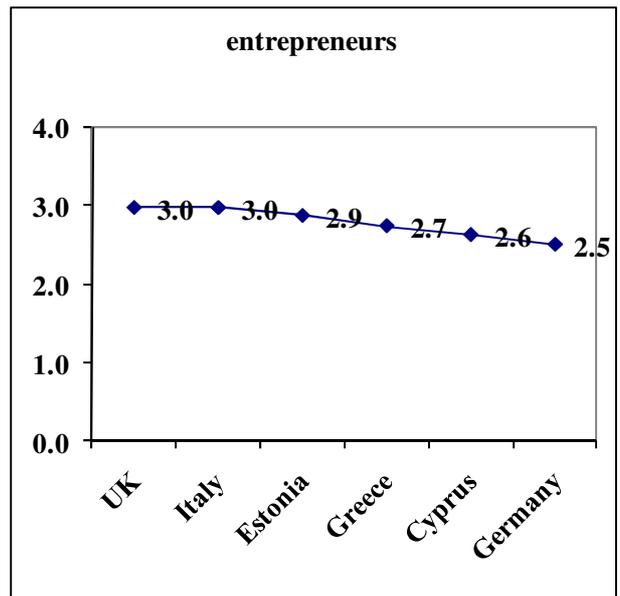


Figure 14. Mean influence by entrepreneurs

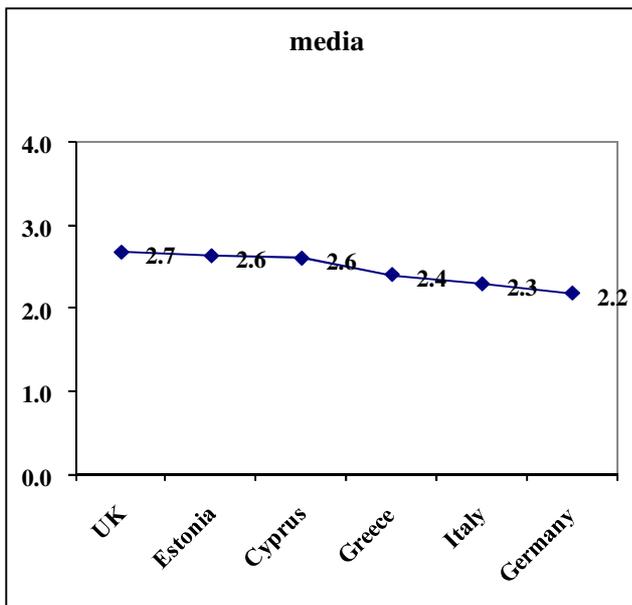


Figure 15. Mean influence by media

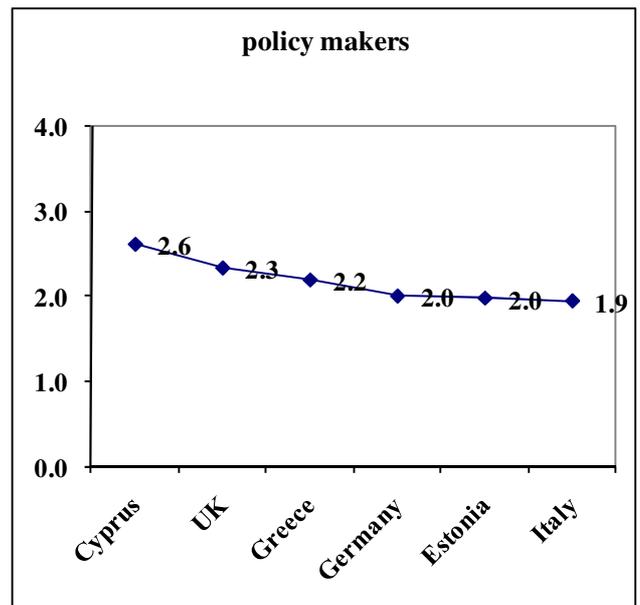


Figure 16. Mean influence by policy makers

One of the major purposes of this study was to gain a better knowledge about the needs of young women who are thinking about setting up their own business. The questionnaire asked respondents about their interest in different tools to encourage entrepreneurship.

Interest in entrepreneurship courses was highest in Italy and lowest in Germany and the UK (**Table 10, Figure 17**). Italian respondents also had high levels of interest in

mentoring programmes and career advice. Compared with other countries, the respondents from Greece expressed a higher interest in accessing online advice. Interest in a helpline about entrepreneurship was most strongly expressed by respondents from Greece. The lowest support for a helpline was expressed by respondents from Germany, Italy and UK.

The highest interest in the women@business project was declared in Italy (93%) and the lowest in the UK (65%), but in all the countries more than two-thirds of people surveyed were interested in getting further information about the project.

Table 10. Proportion of respondents by business interest and country, % (Number of positive responses)

	Cyprus	Estonia	Germany	Greece	Italy	UK
Interested in entrepreneurship courses	77	65	51	71	89	57
Interested in mentoring programme	70	60	66	81	85	58
Interested in career advice	82	76	77	85	87	81
Interested in internship programme	71	65	66	56	80	61
Interested in online advice	65	63	59	88	70	77
Interested in helpline	73	60	51	86	51	53
Interested in W@B project	81	76	71	88	93	65

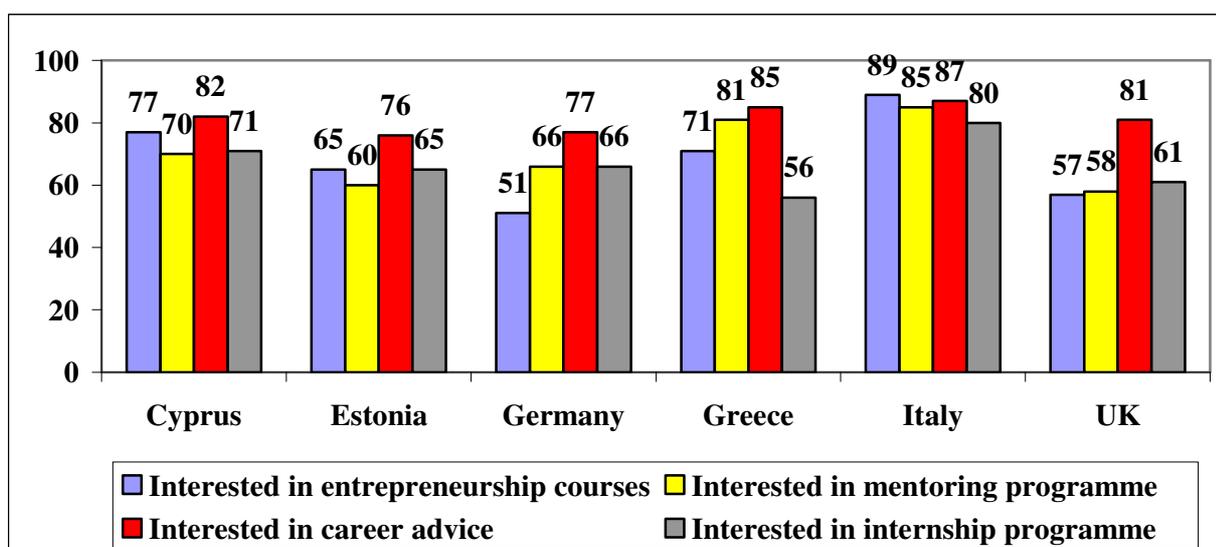


Figure 17. Proportion of respondents by business interest and country, % (Numbers of positive answers)

Interest in entrepreneurial knowledge and support was higher among young women from an immigrant background, and the only area where non-immigrant interest was higher was in the UK, for online advice (**Figure 18**).

An entrepreneurial attitude can be encouraged through different support measures provided by different institutions and sectors. Educational institutions, state agencies, private companies and NGOs have been involved in economic empowerment in many countries in recent years. As educational institutions are often characterised by a more traditional outlook, the questionnaire also asked about business support measures in these institutions.

The majority of respondents from each country believed that accessing courses, information and business advice and support would be most beneficial as entrepreneurship encouragement measures. In Germany respondents felt that entrepreneurship courses were less important in encouraging entrepreneurship than in other countries, but nevertheless two-thirds of German respondents felt that courses were useful encouragement measures (**Table 11**). Compared with other countries, respondents from Italy did not feel that having better media coverage of business issues would encourage more entrepreneurship for young people in society.

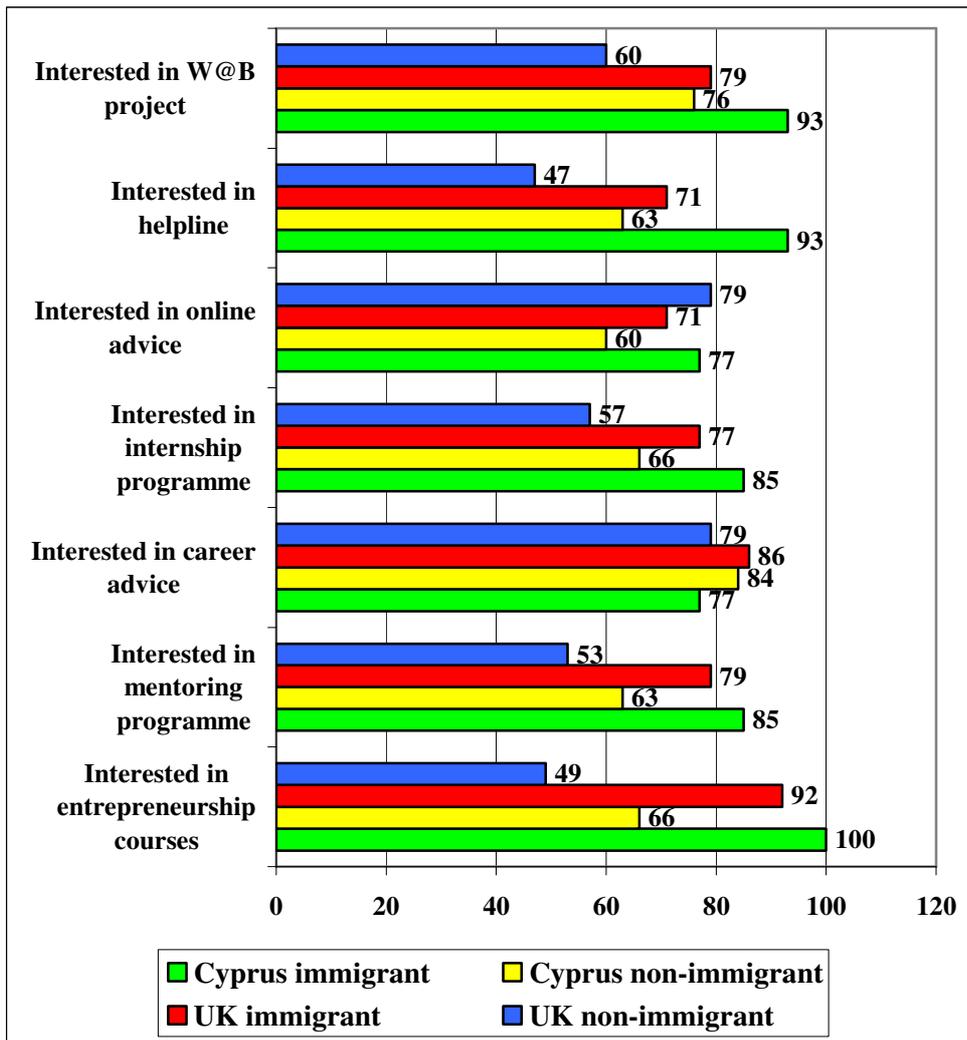


Figure 18. Percentage of respondents by business interest and immigrant status in Cyprus and UK, % (Number of positive answers)

Table 11. Proportion of respondents by opinion on entrepreneurship encouragement measures and country, %

	Cyprus	Estonia	Germany	Greece	Italy	UK
Entrepreneurial education in schools	93	93	69	93	98	94
More information about entrepreneurship	93	91	91	98	80	97
More information about support services	91	98	100	98	96	97
Career advice	95	95	94	93	90	89
Better media coverage	72	77	85	88	46	69
More information about successful businesses	84	84	82	98	78	85

Discussion

The results of this survey show that attitudes towards entrepreneurship are quite similar to previous research results and there weren't any significant differences. A high proportion of respondents stated that entrepreneurship was their desired career option: 85% of respondents from Cyprus, 93% in Estonia, 51% in Germany, 85% in Greece, 96% in Italy and 53% in the UK. This compares favourably with a previous study by Bosma et al (2009: 13), in which 56% of the population aged between 18-64 in Germany, 76% in Greece, 68% in Italy and 52% in the UK, considered starting a business a desirable career choice.

The women@business project survey targeted both immigrant and non-immigrant students and recent graduates, and although the mean age of the sample was younger than in the GEM survey conducted by Bosma, entrepreneurship was stated as the desired career option by 77% of non-immigrants overall and 86% of immigrants.

The majority of respondents from the women@business project considered entrepreneurship as a high risk-taking area. According to Bosma et al (2009: 16), a fear of failure was the highest barrier (48-55%) in Germany, Greece and Italy; it was slightly lower in the UK (38%).

There were only minor differences in responses about business barriers from across the six countries surveyed (**Table 7**). Being a woman was seen as the least significant barrier in all of the countries except Cyprus. The majority of respondents mentioned the need to reconcile work and family and the necessity of start-up finance as significant barriers to setting up a business.

This survey also illustrates the difference in attitudes towards entrepreneurship of immigrants and non-immigrants in the UK and Cyprus. The results show that female students who identify themselves as immigrants were more interested in business courses

and had a high level of entrepreneurial spirit. Catalysts to starting a business can be different for immigrants compared with non-immigrants. Besides offering the opportunity for economic independence, entrepreneurship offers the opportunity to generate an income and make a living. Immigrants can sometimes have fewer or limited alternatives for generating an income. This can lead to “necessity entrepreneurship” as opposed to “opportunity entrepreneurship” (Bosma 2008: 15). However, the women@business project survey results show that economic necessity and immigrant status were not linked for respondents. There were respondents who were the main provider for their family in both groups, but former business experience was slightly higher among immigrant respondents: 29% of immigrants had previous business experience compared with 21% of non-immigrants (from the overall sample). 13% of immigrant respondents were entrepreneurs and 13% of non-immigrants.

During the past decade, the mainstreaming of entrepreneurship courses into various curricula has been seen as an important measure for advancing a business mentality among students. In a policy paper on entrepreneurship education, it is stated that the European Commission wants to provide an important contribution to this process, and will continue to promote entrepreneurship education at all levels (European Commission 2004: 11). The women@business project survey has found that many vocational training schools, colleges and universities have a perceived lack entrepreneurship courses and support (**Figures 7 and 8**). However, twice the number of immigrant students reported the availability of such support than non-immigrants. A possible explanation for this difference in perception could be that respondents who were already interested in entrepreneurship opportunities were more likely to be aware of courses and support in entrepreneurship that those who were maybe not as engaged in this area.

Previous studies have shown that there is not enough entrepreneurial training available which is aimed at immigrants (European Commission 2000). In addition, the GEM 2008 report (Bosma *et al*/2010) pointed out that there was likely to be a higher rate of necessity entrepreneurs among people from an immigrant background. The women@business project survey results do not support the “necessity entrepreneur idea”, because attitudes

on entrepreneurship were quite similar among immigrants and non-immigrants, and particularly when looking at the answers of respondents with 'main breadwinner' status.

The most successful country with regards to awareness of business education and opportunities for training amongst students and recent graduates was in the UK. Former studies have shown that entrepreneurship encouragement and equal opportunity promotion programmes can have a positive impact on entrepreneurial attitudes. This is something which the UK could take on board in order to improve its success rate even further.

Conclusions

The women@business project carried out this study in order to gain a better understanding about the existing knowledge and willingness/interest of young women to choose a career in entrepreneurship. In order to carry out the survey, a questionnaire was developed in English and translated into Estonian, German, Greek and Italian. Questionnaires were available online through the website www.eformular.com. 285 female students and recent graduates from vocational training schools, colleges and universities from six countries (Cyprus, Estonia, German, Greece, Italy and UK) completed the questionnaire in May and June 2010.

Results from the survey show that the best business support system was available in the UK, but the respondents did not use some of these resources. In spite of the fact courses on entrepreneurship were more available in the UK, Estonian respondents had the highest rate of take-up of courses available in their country. According to Country Profile Scorecards for Eurobarometer Entrepreneurship Survey (2008), Estonia has the highest entrepreneurship rate in the EU25. However, this could be a sign of insecurity and lack of unions, not just entrepreneurial spirit in country, because many employers do not take responsibility and force their workers to become self-employed.

Individual interest in entrepreneurship courses was highest in Italy and lowest in Germany and the UK. The preference to be an employee is mainly motivated by considerations of stability (regular income, stable employment relation) and by the generally agreeable employment conditions (working hours, social protection). External constraints or lack of resources (finance, skills, business idea) are relatively minor factors. According to the Eurobarometer Survey on Entrepreneurship (Eurobarometer 2009), Cyprus and Greece show a higher preference for being self-employed than other countries. Interest in mentoring programmes and career advice was higher in Italy than in other countries.

Young women from an immigrant background formed a small part of the sample in Cyprus (14 out of 45) and the UK (14 out of 62) but were too small a proportion of respondents in other countries (only 3 women overall) to allow for a meaningful analysis to be conducted. Therefore attitudes of respondents from an immigrant background were based on answers from only the UK and Cyprus. Respondents with an immigrant background expressed a strong interest in entrepreneurship courses: 94% were interested in such courses. Women from an immigrant background were also more interested in all business encouragement activities compared with non-immigrant women. However, the scope of this study does not allow for an analysis to be made of the factors influencing start-up among young women. Therefore, the results from previous research which shows that immigrants are under more pressure to start their own business cannot be explored or supported through this research.

The need for different business support measures such as: courses on entrepreneurship; more information about entrepreneurship; support services; success stories; and career advice, was clearly expressed and differences between the countries surveyed were quite modest.

The relatively small sample size (n=285), and low number of immigrants (n=31) answering the questionnaire can limit the generalisations which can be drawn from this survey. However, the results from this survey highlight the fact that encouraging entrepreneurship education into mainstream curricula does not appear to be enough in

isolation to encourage entrepreneurial attitudes among young women, but that instead there is a need for more work on an individual level with young women. One possible recommendation would be that support provision needs to move away from the traditional 'one approach fits all' approach and consider the development of bespoke programmes aimed at areas of interest for individuals.

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Appendix 1. Extract from the Best Procedure Project Expert Report (2008).

Cyprus

Cyprus has one university, with two more due to become operational soon, and a number of private colleges. Entrepreneurship education is limited to the few MBA programmes at the University of Cyprus and the four major private colleges. The University of Cyprus organises the Cyprus Entrepreneurship Competition, with a focus on high-tech areas. Most of the participants are non-business majors. Within the Cyprus Entrepreneurship Competition, there are a number of seminars designed to help participants develop their business plans.

Estonia

The overall situation in Estonia — as in many other new European Member States — is generally very weak. Usually non-business and technical studies include macro- and microeconomics courses. Sometimes, in addition, general courses are offered on accounting and innovation. However courses genuinely targeting entrepreneurship and business (start-up, business plan, etc) are lacking in almost all universities and all curricula. Where such courses do exist, they are usually of low quality since most faculty members do not have the requisite experience and qualifications.

Germany

The impact of entrepreneurship education in higher education institutions has been growing in recent years. At the beginning of 2008, fifty-eight working academic chairs in entrepreneurship were recorded, while fourteen further professorships were advertised as open positions or definitely planned. Thus the number of active chairs in entrepreneurship rocketed from one in 1998 to fifty-eight in 2008 (twenty-two in universities, six in technical universities and thirty in universities of applied sciences). In addition, there are some 40 entrepreneurship affiliated chairs which have integrated entrepreneurial aspects into their teaching. Examples are chairs of innovation/innovation management, marketing, financing and management. With the growing impact of entrepreneurship in higher education institutions, some universities in Germany have become increasingly entrepreneurial themselves.

Greece

Since 2000, entrepreneurship-related measures have been incorporated by the government into the new Operational Programme for education under the European Social Fund (EPEAEK II). The policy for entrepreneurship in higher education does not have a mandatory character for the institutions, but almost all of them have submitted proposals for inclusion in their educational programmes. There is also a Pan-Hellenic competition and awards for the best entrepreneurial project from students.

Italy

In Italy there is a lack of courses specifically devoted to entrepreneurship in higher education. Nevertheless there are useful subjects for the potential entrepreneur in fields of study like economics, management, industrial engineering, and obviously in MBAs: e.g.

accountability, industrial organisation, innovation economics and management, strategy. For every scientific degree, students have to attend at least one subject that at a very general level deals with the above topics. During these courses each professor may devote specific lectures to the subject of entrepreneurship.

UK

The introduction of successive rounds of government funding for universities significantly impacted on institutional behaviour, and supported new developments in supporting enterprise and entrepreneurship, including curricula innovation. The UK landscape has changed immensely and there has been huge growth in supply, in engagement and in demand. Now the significant majority of higher education institutions in the UK (estimated around 95%) are engaged in the provision of different forms of entrepreneurship education to their students. A 2007 survey of Enterprise and Entrepreneurship in Higher Education in England shows that in-curricula provision accounts for 36% of entrepreneurship activity, while the remaining 64% takes place as extra-curricular provision. Within the curricula, 61% of all provision is delivered within business studies (compared to 9% in engineering, 8% in art and design and 4% in sciences). 80% of this provision takes place at undergraduate level.

Source: European Commission (2008). Best Procedure Project: Entrepreneurship in Higher Education, Especially in Non-Business Studies. Final Report of the Expert Group. [http://ec.europa.eu/enterprise/newsroom/cf/document.cfm?action=display&doc_id=3581&userservice_id=1&request.id=0, used 29.06.2010]

Appendix 2. Survey Questionnaire (English Version)

Translated into Estonian, German, Greek, Italian

Hello!

This questionnaire has been put together by the project women@business to be completed by students and recent graduates who are considering pursuing entrepreneurship as a career option. Your answers are very important and we look forward to getting them.

I. About entrepreneurship

1. Entrepreneurship is

		Yes	No
A	... desired career option		
B	... about making money		
C	... risk taking		
D	... about growth		
E	... not for me		
F	... being my own boss		

2. Are entrepreneurs born or made?

1. Born
2. Made
3. No idea

3. During your studies in the college/university, is/was it possible to get...

		No	Yes, I didn't use it	Yes, I have used
A	... courses on entrepreneurship			
B	... courses on project management			
C	... information on how to start an enterprise			
D	... business advice and counselling			
E	... legal advice (incorporation, certifications...)			
F	... information about financial support (EU/national grants, loans for women, venture capitalist...)			
G	... technological support			
H	... contacts for venture capitalist funding			
I	... business incubation space			
J	... mentoring and coaching			

II. Starting a business and business barriers

4. How well could entrepreneurship meet your aspirations/values?

		Not relevant	Poor	Good	Excellent
A	Offers work/family balance				

B	Offers financial rewards				
C	Possibility to meet interesting people				
D	Offers career/personal development opportunities				
E	Possibility to use initiative				
F	Possibility to be team leader				
G	Possibility for self-realization/fulfilment				
H	Possibility to be own boss				
I	Possibility to enjoy equal opportunities				
J	International perspective and opportunities				

5. What do you think are the main obstacles/problems facing women in starting their own business?

		Unimportant obstacle	Slightly important	Important obstacle	Very important obstacle
A	Combining family and work life				
B	Lack of information / advice on how to start an enterprise				
C	Liquidity and other financial problems (raising capital)				
D	No time for training / upgrading skills				
E	Lack of self confidence (believing in their abilities)				
F	Finding the right contacts, networks for their business venture				
G	Lack of role models				
H	Being a woman (i.e. gender discrimination)				
I	Low budget for PR and marketing activities				
J	Lack of entrepreneurship education				
K	Lack of management skills				
L	Lack of mentoring				

III. Support measures

6. Do you have previous business experience?

1. Yes
2. No

7. Do you have your own business now?

- 1 Yes
- 2 No, but I have plans to start my own firm
- 3 No

8. What area of business are you hoping to go into?

- 1 Production/manufacturing

- 2 Marketing/Retail sale/wholesale
- 3 Service
- 4 ICT

If planning to start your own business, what are the major problems facing you?

		Yes	No
9	Do you know how to start your own business?		
10	Do you know how and where to register your own business?		
11	Do you plan to create your enterprise yourself?		
12	Do you have a family business, which you could/should join?		
13	Do you plan to buy a business?		
14	Do you plan to manage without employees, i.e. to become a sole proprietor?		
15	Do you plan to achieve work/family balance in your life?		
16	Do you see finding-start-up money as a serious obstacle?		
17	Do you see getting affordable business advice as a problem?		
18	Do you see getting training as a problem?		
19	Do you see getting peer support as a problem?		
20	Do you see getting mentoring as a problem?		

21. Who are your main supporters and detractors; who could encourage, discourage and influence you as you start-up a business?

	Influence groups	essential influence	mainly positive	no influence	mainly negative
A	Parents & family				
B	Teachers or lecturers				
C	Career advisers				
D	Friends				
E	Entrepreneurs				
F	Media (TV, Radio, Internet) coverage of businesses and business people				
G	Policy makers				
H	Other				

22. Are you interested in:

		Yes	No
A	Active participation in entrepreneurship courses		
B	Active participation in a mentoring programme, i.e. being a mentee		
C	Career advice		
D	Active participation in an internship program		
E	Getting e-advice, online advice		
F	Using a help-line for start-up businesses		
G	Being informed about the Women@business project		

23. In your opinion, what measures could improve the acceptance and appreciation of entrepreneurship in society and in particular among young people in your country?

		Yes	No
A	Entrepreneurial education in schools		
B	More information about entrepreneurship		
C	More information about support services		
D	Career advice		
E	Better media coverage		
F	More information about successful businesses		

IV. About yourself

24. Country of residence?

1. Cyprus
2. Estonia
3. Germany
4. Greece
5. Italy
6. UK

25. Do you consider yourself as immigrant in this country?

1. Yes
2. No

26. How old are you?

1. under 18
2. 18-22
3. 23-26
4. 27-30
5. 31-35
6. 35+

27. Education

1. secondary
2. tertiary (college or university)

28. Field of study

1. Humanities
2. Non-humanities (Math, science, engineering etc)

29. Employment status

1. Student, not employed
2. Student and employee
3. Employee
4. Employer
5. Self employed, freelancer
6. Unemployed

30. Do you live with a partner/spouse?

1. Yes
2. No

31. Are you the main provider for your family?

1. Yes
2. No

32. How many people are there in your immediate family (including yourself)?(a number)

33. How many children do you have?(a number)

34. How many children under 3 years old?(a number)

35. Do you get help with childcare?

1. Yes
2. No

Thank you!