



Technical
University
of Crete



UNIVERSITY
OF CRETE



Final Report (Deliverable 6)

of the project entitled

**“SINKING INEQUALITY: BUSINESS STARTUP MOTIVATION AND
BUSINESS GROWTH IN FEMALE ENTREPRENEURSHIP
(FOREMOST PROJECT)”**



<http://foremost.tuc.gr>

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THE FINAL REPORT IS CONDUCTED FOR THE NEEDS OF THE PROJECT WHICH WAS FINANCED BY THE EUROPEAN ECONOMIC AREA (EEA) FINANCIAL MECHANISM AND THE GREEK SECRETARIAT FOR RESEARCH AND TECHNOLOGY (GSRT) ("FOREMOST" PROJECT: 3864).



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Γυναικεία Επιχειρηματικότητα Νέες Επιχειρήσεις: Στόχος Ισότητα. (Πρόγραμμα Γ.Ε.Ν.Ε.Σ.Ι)

Περίληψη

Συγκριτικά με άλλες Ευρωπαϊκές χώρες, στην Ελλάδα καταγράφονται διαφυλικές διαφορές στην επιχειρηματικότητα μεγαλύτερες από τον Ευρωπαϊκό μέσο όρο. Μέχρι σήμερα για το φαινόμενο αυτό δεν έχουν διατυπωθεί μοντέλα ολιστικής προσέγγισης ενώ δεν έχει δοθεί έμφαση σε πολιτισμικά-συγκεκριμένες διαστάσεις της γυναικείας επιχειρηματικότητας. Η παρούσα αναφορά παρουσιάζει τα αποτελέσματα του προγράμματος ΓΕΝΕΣΙ το οποίο εστιάζει στην πολιτισμικά ενημερωμένη κοινωνική ταυτότητα των γυναικών και πώς αυτή επηρεάζει τη γυναικεία επιχειρηματικότητα. Η παρούσα αναφορά περιλαμβάνει: (1) την εμπειρική διερεύνηση παραγόντων κοινωνικής ταυτότητας που μπορούν να εξηγήσουν διαφορές ως προς την επιχειρηματική πρόθεση και τη συμπεριφορά ανδρών και γυναικών, αλλά και υπο-ομάδων γυναικών που επιδεικνύουν ή δεν επιδεικνύουν επιχειρηματική συμπεριφορά, (2) την εμπειρική διαπίστωση πώς η διακύμανση αυτών το παραγόντων μπορεί να εξηγήσει την ανάπτυξη υφιστάμενων γυναικείων επιχειρήσεων στην Ελλάδα και (3) την ανάπτυξη πολιτισμικά-εστιασμένων εργαλείων μέτρησης κατάλληλων για τη μελέτη αλλά και εφαρμογή ζητημάτων επιχειρηματικότητας στην Ελλάδα αλλά και σε άλλες χώρες που έχουν παρόμοια οικονομική και πολιτισμική δομή, όπως οι Βαλκάνιες χώρες. Τα αποτελέσματα του προγράμματος ΓΕΝΕΣΙ στην πρακτική τους διάσταση θα ενσωματωθούν σε εκπαιδευτικά προγράμματα των ιδρυμάτων που συμμετέχουν στην πρόταση αυτή. Η αναφορά αποτελεί το αποτέλεσμα της συνεργασίας μιας διεπιστημονικής ομάδας ειδικών και εργαστηρίων που εξειδικεύονται στη μελέτη της επιχειρηματικότητας (Πολυτεχνείο Κρήτης), στη γυναικεία επιχειρηματικότητα (Πανεπιστήμιο Μακεδονίας) και στη διαπολιτισμική και εφαρμοσμένη ψυχολογία (Πανεπιστήμιο Κρήτης), ενώ μέσω της Εργάνη πραγματοποιήθηκε και η σύνδεση με την αγορά εργασίας. Το πρόγραμμα ΓΕΝΕΣΙ είναι επίκαιρο, καινοτόμο και με υψηλή αναμενόμενη επίδραση. Είναι επίκαιρο, καθώς ζητήματα ισότητας των δύο φύλων είναι πολύ σημαντικά τόσο σε πολιτικό όσο και σε ακαδημαϊκό επίπεδο στην Ευρώπη και στην Ελλάδα με στόχο το ορίζοντα 2020 αλλά και στο υπόβαθρο της συνεχιζόμενης οικονομικής κρίσης. Είναι καινοτόμο καθώς εισάγει σημαντικούς παράγοντες κοινωνικής ταυτότητας ομάδων γυναικών ως προβλεπτικούς της επιχειρηματικής πρόθεσης και συμπεριφοράς.

Sinking inequality: Business startup motivation and business growth in female entrepreneurship (ForEMOsT project).

ABSTRACT

In comparison to other European countries, Greece exhibits a clear larger than average gender gap in entrepreneurship. The main idea of the ForEMOsT project rests on the fact that women's culturally specific social identity is a potent predictor of their entrepreneurial motivation and predisposition for business growth. The purpose of the ForEMOsT project is to empirically test a theoretical model revolving around culture-specific social identity factors that can explain much of that gender gap in females' lower predisposition towards entrepreneurship. The ForEMOsT project: (1) Investigated social identity factors that can explain differences in entrepreneurial motivation (entrepreneurial intentions) between men and women, (2) Investigated how varying those factors can explain predisposition for growth of female enterprises in Greece and, (3) developed culture-specific measurement instruments appropriate for use in researching female entrepreneurship which can also be generalized cultures like Greece. The ForEMOsT project brought together a multidisciplinary research team of experts in entrepreneurship research (Technical University of Crete), Female entrepreneurship in particular (University of Macedonia), and Cultural and Applied Psychology (University of Crete) and organizations that promotes female entrepreneurship (ERGANI Center). The ForEMOsT project is theoretically timely, innovative, and impactful. Timely, as gender equality has a pivotal role in the political and academic debate in Europe and in the objectives set by the EU in the Europe 2020 growth strategy. It is innovative, as it introduces important novel social level factors as causal for gender differences in entrepreneurship.

1. Importance and Objectives of the ForEMOsT Project

Entrepreneurship and entrepreneurial culture are important vehicles for value creation and have a significant impact on economic growth, continuous business renewal, and employment (Tang & Koveos, 2004; Sarri, Zikou, & Varsakelis, 2012; Van Praag & Versloot, 2007). Yet, although half of the working population are women, and women make up a substantial proportion of those choosing to be entrepreneurs (Minniti, Arenius, & Langowitz, 2005), female entrepreneurship significantly lags behind male entrepreneurship (Kelley et al., 2013; Minniti et al., 2005). This is especially true for Greece - and countries like Greece- which are characterized by higher gender inequality (Sarri & Trihopoulou, 2005).

Gender inequality in entrepreneurship is a complex phenomenon, encompassing culture and economic specific barriers that generate differences in business ownership rates and the entrepreneurial “success” of women and men (Sarri, Zikou, & Varsakelis, 2012; Piacentini, 2013). According to findings from the Global Entrepreneurship Monitor (GEM) project, males’ rates of entrepreneurial activity range from over three times that of females in some countries, while in others, the male–female rate of participation is nearly identical (Minniti et al., 2005; Sarri & Trihopoulou 2005). In nearly all of the 67 economies included in the GEM the rate of men’s venture creation is higher than that of women (Kelley et al., 2013). In the same vein, recent findings from the Global University Entrepreneurial Spirit Students' Survey project (GUESSS - Sieger, Fueglistaller, & Zellweger, 2014) conducted in 34 countries and at more than 700 universities suggest that 10.7% of all male students strive for an entrepreneurial career path, compared to only 6.6% of all female students. The differences are even larger, five years after completion of studies: on average 35.1% of all male students aspire to be entrepreneurs, but only 27.5% of all female students. This raises questions as to why the rate of men’s venture creation exceeds that of women and what factors explain these differences (Sarri & Trihopoulou, 2012; Piacentini, 2013).

Greece is not an exception and in fact, there is a larger than average gender gap in entrepreneurship (Ioannidis, 2013; OACD, 2013). During 2011, the percent of the working age population engaged in either the start-up or new firm phase of entrepreneurial activity was 62.3 per cent for males and 37.7 for females. Female entrepreneurship in Greece is an issue that brings to the fore some strong controversial arguments especially in light of the economic recession. It seems that high unemployment rates (around 26% in 2013) push males (rather than females) to both start and operate the business venture as opposed to the pre-crisis years where men initiated the business and passed it over to women to operate it. Thus, women seem to be pushed out of the market both due to unemployment and the fact that now men occupy positions that were thus far held by females.

Greece is going through an unprecedented economic and social crisis that impacts on both the private and the public life of men and women. In this context, gender equality objectives tend to be marginalized in public and policy debates. All gains in the field of gender equality since the 1980s have been put at serious risk by the economic and political developments of the last few years. Under such adverse economic environments where uncertainty, anxiety, confusion, conflicting interests and fear is apparent, Greek policy makers must not only

render entrepreneurship as a desirable and feasible career choice for women, but also promote the development of innovative ventures.

Furthermore, although even in the past few years, there were in Greece some campaigns and capital support programs for female entrepreneurship, the results are not very obvious yet. Supporting women entrepreneurship is not just about increasing the number of women-owned firms, but also about raising their performance and growth potential. Studies comparing the performance of male and female-owned firms consistently show that businesses headed by women tend to be smaller than those headed by men, whether size is measured by gross revenues, number of employees, or profit level (Kelley et al., 2013). Therefore, how female enterprises should be promoted and developed is an important and open question.

In summary, research over the past decade has suggested the existence of the gender gap in entrepreneurial orientation and in the motivation, desire, and intention to become an entrepreneur. Although the particular difficulties associated with female entrepreneurship have been emphasized in the literature, the specific differences associated with women entrepreneurs and how they contrast with their male counterparts have received less attention from the academic community.

Through the project's activities, we aimed at empirically developing a comprehensive framework that predicts whether and how women's culturally-specific social identity influences the entrepreneurial process. Moreover, the ForEMOsT program aimed to develop new culture-appropriate methodological tools and provide strong conceptual foundations for exploring variation in venture creation and growth between male and female entrepreneurs in Greece.

Our research objectives were:

- (1) Revisiting entrepreneurial literature and more specifically the parts highlighting gender differences and inequalities,
- (2) Formulation and verification of a holistic female entrepreneurial model leading to theoretical and managerial contributions,
- (3) Establishment of accelerative factors for female entrepreneurship,
- (4) Identify and displace obstacles that function as barriers for females in adopting an entrepreneurial behavior, and
- (5) Apply findings in educational and business environment in order to bridge the gap between the two genders

In order to accomplish our research objectives **the main axes of the ForEMOsT program** were:

- (1) Investigate individual and social identity factors that can explain differences in entrepreneurial motivation (entrepreneurial intentions) between men and women and among different subgroups of women in Greece
- (2) Investigate how varying those factors explained predisposition for growth of female enterprises in Greece.
- (3) Develop measurement instruments appropriate for use in researching female entrepreneurship generalizable across cultures

The ForEMOsT project is theoretically timely, innovative, and impactful:

Timely, as gender equality has a pivotal role in the political and academic debate in Europe and in the objectives set by the EU in the Europe 2020 growth strategy.

Innovative, because it introduces important novel social level factors as causal for gender differences in entrepreneurship. More specifically, it adapts a holistic approach bounding the female entrepreneurial characteristics with personal, social, cultural, environmental and business factors. This lead to the establishment of a model enriching the entrepreneurship literature while at the same time managerial implications and regulation guidelines will be offered.

The utility of the ForEMOsT program derives from an **impactful** combination of the testing of a theoretically and methodologically compelling and innovative approach to female entrepreneurship with applying the results from this testing to the real world problem of growth in female entrepreneurship in Greece.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Baughn, C. C., Chua, B. L., & Neupert, K. E. (2006). The normative context for women's participation in entrepreneurship: a multicountry study. *Entrepreneurship Theory and Practice*, 30(5), 687-708.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442-453.
- Crane, P. K., Gibbons, L. E., Jolley, L., & van Belle, G. (2006). Differential item functioning analysis with ordinal logistic regression techniques: DIF detect and dif with par. *Medical Care*, S115-S123.
- Cross, S. E., & Madson, L. (1997). Models of the self: self-construals and gender. *Psychological Bulletin*, 122(1), 5-37.
- Easterly, D. M., & Ricard, C. S. (2011). Conscious efforts to end unconscious bias: Why women leave academic research. *Journal of Research Administration*, 42(1), 61-73.
- Fitzsimmons, J. R., & Douglas, E. J. (2011). Interaction between feasibility and desirability in the formation of entrepreneurial intentions. *Journal of Business Venturing*, 26(4), 431-440.
- Hayton, J. C., & Cholakova, M. (2011). The role of affect in the creation and intentional pursuit of entrepreneurial ideas. *Entrepreneurship Theory and Practice*, 36(1), 41-68.
- Holland, P. W., & Wainer, H. (1993). *Differential Item Functioning*. Hillsdale, NJ: Erlbaum.
- Ioannidis, S. (2013). *Entrepreneurship in Greece: The evolution of entrepreneurial indexes during economic recession*. Athens, Greece: Foundation for Economic & Industrial Research.
- Jennings, J. E., & Brush, C. G. (2013). Research on women entrepreneurs: Challenges to (and from) the broader entrepreneurship literature? *Academy of Management Annals*, 7(1), 661-713.
- Kafetsios, K., & Hess, U. (2013). Effects of activated and dispositional self-construal on emotion decoding accuracy. *J Non verbal Behav*, 37, 191-205.
- Kelley, D., Brush, C., Greene, P., & Litovsky, Y. (2013). *Global Entrepreneurship Monitor 2012 Women's Report*: Wellesley, MA: Babson College.
- Krueger, N. F., & Brazeal, D. V. (1994). Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship Theory and Practice*, 18, 91-104.

- Krueger, N. F. J., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intention. *Journal of Business Venturing*, 15, 411-432.
- Markus, H. R., & Kitayama, S. (2010). Cultures and selves A cycle of mutual constitution. *Perspectives on Psychological Science*, 5(4), 420-430.
- Minniti, M., Arenius, P., & Langowitz, N. (2005). *Global Entrepreneurship Monitor 2004 Report on women and entrepreneurship*: Babson Park, MA: The Center for Women's Leadership at Babson College.
- Moustakis, V., & Zampetakis, L. A. (2011). *A framework for enhancing public sector entrepreneurship: lessons learned from literature and empirical investigation in Greece*. Paper presented at the Paper accepted in the 15th International Scientific Conference on Industrial Systems (IS'11), Novi Sad, Serbia.
- Piacentini, M. (2013). Women Entrepreneurs in the OECD: Key Evidence and Policy Challenges: *OECD Social, Employment and Migration Working Papers*, No. 147.
- Roos, P. A., & Gatta, M. L. (2009). Gender (in) equity in the academy: Subtle mechanisms and the production of inequality. *Research in Social Stratification and Mobility*, 27(3), 177-200.
- Sarri, K., & Trihopoulou, A. (2005). Female entrepreneurs' personal characteristics and motivation: A review of the Greek situation. *Women in Management Review*, 20(1), 24-36.
- Sarri, K., & Trihopoulou, A. (2012). *Female entrepreneurship: An approach of the Greek reality*. Athens, Greece: Rosili.
- Sarri, K., Zikou, E., & Varsakelis, N. (2012). Female entrepreneurship and its contribution to economic development. In K. Sarri & A. Trihopoulou (Eds.), *Female entrepreneurship: An approach of the Greek Reality*. Athens, Greece: Rosili.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.
- Shook, C. L., Priem, R. J., & McGee, J. E. (2003). Venture creation and enterprising individual: A review and Synthesis. *Journal of Management*, 29(3), 379-399.
- Sieger, P., Fueglistaller, U., & Zellweger, T. (2014). *Student entrepreneurship across the Globe: A look at intentions and activities. International Report of the GUESSS Project 2013/2014*. St. Gallen: Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen (KMU-HSG).
- Stephens, N. M., Fryberg, S. A., Markus, H. R., Johnson, C. S., & Covarrubias, R. (2012). Unseen disadvantage: How American universities' focus on independence undermines the academic performance of first-generation college students. *Journal of Personality and Social Psychology*, 102(6), 1178-1197.
- Stephens, N. M., & Levine, C. S. (2011). Opting out or denying discrimination? How the framework of free choice in American society influences perceptions of gender inequality. *Psychological Science*, 22(10), 1231-1236.
- Stephens, N. M., Markus, H. R., & Fryberg, S. A. (2012). Social class disparities in health and education: Reducing inequality by applying a sociocultural self-model of behavior. *Psychological review*, 119(4), 723-744.
- Tang, L., & Koveos, P. E. (2004). Venture entrepreneurship, innovation entrepreneurship and economic growth. *Journal of Developmental Entrepreneurship*, 3, 161-171.

- Thornton, P. H., Ribeiro-Soriano, D., & Urbano, D. (2008). Socio-cultural factors and entrepreneurial activity: An overview. *International Small Business Journal*, 26, 259, 29(2), 105-118.
- Van Praag, C. M., & Versloot, P. (2007). What is the value of entrepreneurship? A review of recent research. *Small Business Economics*, 29 (4), 351-382.
- Zampetakis, L. A. (2008). The role of creativity and proactivity on perceived entrepreneurial desirability. *Thinking Skills and Creativity*, 3(3), 154-162.
- Zampetakis, L. A., Andriopoulos, C., Gotsi, M., & Moustakis, V. (2011). Creativity and entrepreneurial intention in young people: Empirical insights from business school students. *International Journal of Entrepreneurship and Innovation*, 12(3), 189-199.
- Zampetakis, L. A., & Kafetsios, K. (2010). Group entrepreneurial behavior in established organizations: The role of manager's emotion regulation and group's diversity. In N. M. Ashkanasy, W. J. Zerbe & C. E. J. Härtel (Eds.), *Research on Emotion in Organizations-Vol. 6 Emotions and Organizational Dynamism* (pp. 33-61): Emerald Group Publishing.
- Zampetakis, L. A., Manios, T., & Moustakis, V. (2006). Greening the entrepreneurship syllabus: An exploratory approach. *Environmental Engineering and Management Journal*, 5(2), 29-38.
- Zampetakis, L. A., & Moustakis, V. (2006). Linking creativity with entrepreneurial intention: A structural approach. *International Entrepreneurship and Management Journal*, 2(3), 413-428.
- Zampetakis, L. A., & Moustakis, V. (2007a). Entrepreneurial behavior in the Greek public sector. *International Journal of Entrepreneurial Behaviour & Research*, 13(1), 19-38.
- Zampetakis, L. A., & Moustakis, V. (2007b). Fostering corporate entrepreneurship through internal marketing: implications for change in the public sector. *European Journal of Innovation Management*, 10(4), 413-433.
- Zampetakis, L. A., & Moustakis, V. (2008). Entrepreneurship in the public sector. In M. Terziovski (Ed.), *Energizing management through global innovation and entrepreneurship* (pp. 40-54). New York: Routledge.
- Zampetakis, L. , Kafetsios, K., Lerakis, M., & Moustakis, V. (2015). Investigating the role of self-construal in the formation of entrepreneurial intentions. *Front Psychol.*, 6: 1085. doi: 10.3389/fpsyg.2015.01085

2. ForEMOsT Project Partners

ForEMOsT (Female Entrepreneurship Motivation growTh) brought together a multidisciplinary research team that has the capacity to make significant contribution to our knowledge on the processes responsible for the gendered gap in entrepreneurial motivation and predisposition for business growth. It is research team is constituted by three R&D actors and an agency cast in the promotion and facilitation of female entrepreneurship.

The three R&D actors are:

- (1) **The Management Systems Laboratory (ManLab) of the Technical University of Crete (TUC)**, Chania, Greece (www.logistics.tuc.gr). ManLab is ForEMOsT project promoter (PP) and is directed by Prof. Vassilis Moustakis. ManLab is one of the few laboratories in Greece that systematically studies the cognitive, behavioral and emotional

processes underlying the entrepreneurial phenomena using data from students and employees in organizations. Up to date our research focuses basically on the trait, cognitive and emotional perspective of entrepreneurship (e.g., Zampetakis & Moustakis, 2007a; 2007b; 2008; 2010; Moustakis & Zampetakis, 2011; Zampetakis & Moustakis, 2006; Zampetakis et al., 2006; Zampetakis, 2008; Zampetakis et al., 2011; Zampetakis & Kafetsios, 2010), without emphasis on the context of entrepreneurship and the role of gender, thus presenting an incomplete picture of the entrepreneurial process.

Research Team: [Vassilis Moustakis](#) (Project Coordinator), [Leonidas Zampetakis](#), Maria Bakatsaki, [Lefteris Koumakis](#)

- (2) **The Applied Psychology Laboratory (APL) at the Department of Psychology, University of Crete (UOC)** (<http://www.keme.uoc.gr/index.php/2014-05-02-13-52-03>) is directed by Dr. Konstantinos Kafetsios, Professor in Social and Organizational Psychology. The laboratory utilizes state of the art experimental (priming, reaction time, emotional stroop, facial emotion perception) and naturalistic methods (event sampling methodologies) to study cross-cultural differences in emotion, interpersonal relationships and well-being, social support processes, and emotion in organizations. The laboratory has an international reputation and collaborations for one active research line on cultural differences in emotion and cognition (e.g., Kafetsios & Nezlek, 2012; Kafetsios & Hess, 2013; Kafetsios & Hess, 2014)

Research Team: [Konstantinos Kafetsios](#) (sub-project coordinator), Marcela Seredjova, Sotirios Karaolanis, Aspasia Papachiou.

- (3) **University of Macedonia (UOM) - Department of Balkan Slavic and Oriental Studies** is represented by Prof. Aikaterini Sarri (<http://katerinasarri.wordpress.com/>) who is an expert in the field of female entrepreneurship and management. The infrastructure, the number of projects successfully executed and the capabilities of the Department guarantee the capacity to handle the scale and complexity of the proposed project. Furthermore Prof. Aikaterini 's Sarri experience in numerous relevant projects (National & International projects on gender and inequalities, see cv) as well as her research activity (for example books and papers on Entrepreneurship, Gender Differences, Mentoring, see cv) and the focus in interdisciplinary and technological studies (ex. Electronic Mentoring) along with the assistance and expertise (ex. Gender and Equality, Mentoring, e.t.c) of the UOM team members are adding value factors in the implementation and management of ForEMOsT.

Research Team: [Aikaterini Sarri](#) (sub-project coordinator), [Anastasios Panopoulos](#), [Foteini Tsimpiridou](#), Stavroula Laspita, Revecca Pedi, Zafeiria Tourtoglou,

The agency is:

- (4) **Ergani Center (ERGANI)-Center for the support of employment and entrepreneurship of women** (<http://ergani.gr/mainen.aspx>), is a non-profit making and a registered non-governmental organization. Ergani has rich experience in management issues (personnel management, resources and financial management) and especially in

the field of management of European projects. The Ergani Center participates in national and transnational networks and creates or/and cooperates with other recourse centers. It provides counseling services on employment and business issues to unemployed women, and to members from vulnerable social groups, in the framework of special funding programmes. Furthermore, the center creates educational packages and conduct researches on issues related to women's employment and entrepreneurship, the results of which are diffused in local, regional, national and European level. Ergani had the responsibility of evaluation of ARTEMIS Network. It has also implemented 4 projects, between 1991-1999, under NOW, NOWi, NOWii and Employment Initiative focused on services provided to women in order to enter or reenter to the labor market of creates their own business. From 2000-2002 coordinated AWAKE/ ECOS OUVERTURE project (18 partners from 5 countries) with main objective to create Women Entrepreneurs Supporting Centers. From 2002 participates and coordinates some special components of W.IN.NET. Project, which is a European network of Resource Centers for Women financed by the Interreg IIIC (North) initiative (duration from 2002 to 2005). Ergani Centre achievements: Over than 3800 women have visited the Centre, out of whom: 90% of them have completed either the Personal or Group Counseling procedure and/or other programs of training – professional instruction – networking for which they expressed their interest (beneficiaries), 240 new women businesses have been created with the support of ERGANI Centre, New female enterprises network counted more than 80 entrepreneurs, its Mentors Register consists of 120 persons (experienced entrepreneurs).

Research Team: Parthenopi Sourmaidou (sub-project coordinator), Chryssoula Karakitsaki, Athanasia Lazaridou, Cornelia Lianou, Kyriaki Kostika

3. Project's Work packages

No	WORK PACKAGE TITLE	BRIEF DESCRIPTION OF THE PROCEEDINGS OF THE WORK PACKAGE	ACTUAL START DATE	ACTUAL END DATE
WP1	Testing for equivalence of survey items with DIF	Application of the Differential Item Functional Analysis (DIF) as the main analytical tool of the empirical data which were collected with surveys, for the examination of the measurement instruments at the item level. This method provides insight into whether women (in comparison to men) may be responding to items differently than their male counterparts.	01/12/2015	31/03/2017
WP2	Entrepreneurial intention models	Testing for gender differences in entrepreneurial motivation, using entrepreneurial intention models. Empirical data will be collected with surveys using the instruments finalized from the literature review, from male and female university students, entrepreneurs, and workers.	01/12/2015	28/02/2017

WP3	Entrepreneurial growth models	Testing for gender differences in business growth models. Empirical data will be collected with surveys, using the instruments finalized from the literature review, from male and female entrepreneurs.	01/12/2015	28/02/2017
WP4	Publicity and dissemination of research results	The goal is through the exploitation of theoretical conclusions a managerial learning protocol - instrument to be created and then applied to the stakeholder publics. Target audiences could be university students and/also potential entrepreneurs and social agents.	01/12/2015	31/03/2017
WP5	Project management of ForEMOsT	Project management of the financial and natural objective. ForEMOsT will be managed by a Project Joint Monitoring Committee (PMC) in which all partners will be represented by one representative. The first PMC meeting will coincide with project start.	01/12/2015	31/03/2017

At the following table are presenting more detailed the work packages of the project FOREMOST:

Work Packages		Partners	Duration
WP1 - TESTING FOR EQUIVALENCE OF SURVEY ITEMS WITH DIF		Coordinator: UOC, Participant: TUC, UOM, ERGANI	1/12/2015-31/3/2017
WP1.1	Literature review related to the DIF method	UOC	1/12/2015-29/2/2016
WP1.2	Literature review related to the measurement of the self-construal	UOC	1/12/2015-31/7/2016
WP1.3	Literature Review related to the social gender and entrepreneurship	TUC	1/12/2015-31/3/2016
WP1.4	Development of the theoretical models investigating the correlation between self-construal and entrepreneurship	UOC	1/2/2016-31/7/2016
WP1.5	Definition of the measurement instruments of men's and women's self-construal, principles of entrepreneurship and pretesting of the controlled variables	UOC	1/2/2016-31/7/2016
WP1.6 Data collection and data entry from 1400 men and women (students, employed, unemployed)		UOC, TUC, UOM, ERGANI	1/4/2016-31/8/2016
WP1.6.1	Data collection and data entry from 530 men and women (students, employed, unemployed)	UOC	1/4/2016-31/8/2016
WP1.6.2	Data collection and data entry from 400 men and women (students, employed, unemployed)	TUC	1/4/2016-31/8/2016
WP1.6.3	Data collection and data entry from 350 men and women (students, employed, unemployed)	UOM	1/4/2016-31/8/2016
WP1.6.2	Data collection and data entry from	ERGANI	1/4/2016-31/8/2016

120 men and women (students, employed, unemployed)		
WP1.7 Unification of the data base and statistical analysis of all (1400) questionnaires	UOC	1/6/2016-30/9/2016
WP1.8 Report or/and Publication with title "Testing for equivalence of survey items with Differential Item Functioning"	UOC, TUC	1/12/2015-31/3/2017
WP2 - ENTREPRENEURIAL INTENTION MODELS	Coordinator: UOM Participants: TUC, UOC, ERGANI	1/12/2015-28/2/2017
WP2.1 Literature review of the entrepreneurial intention models	UOM	1/12/2015-29/2/2016
WP2.2 Development of theoretical models which investigate the relation between entrepreneurial intention models and female entrepreneurship	UOM	1/12/2015-29/2/2016
WP2.3 Mapping of the implemented support model to the candidate female entrepreneurs	ERGANI	1/1/2016-29/2/2016
WP2.4 Definition of the instruments (scales and questionnaires) for the measurement of women's and men's entrepreneurial intention models	UOM	1/12/2015-29/2/2016
WP2.5 Data collection and data entry from 670 men and women (student, employed, unemployed)	TUC, UOC, UOM, ERGANI	1/3/2016-31/7/2016
WP2.5.1 Data collection and data entry from 310 men and women (student, employed, unemployed)	UOM	1/3/2016-31/7/2016
WP2.5.2 Data collection and data entry from 150 men and women (student, employed, unemployed)	TUC	1/3/2016-31/7/2016
WP2.5.3 Data collection and data entry from 140 men and women (student, employed, unemployed)	UOC	1/3/2016-31/7/2016
WP2.5.4 Data collection and data entry from 70 men and women (student, employed, unemployed)	ERGANI	1/3/2016-31/7/2016
WP2.6 Unification of the data base and statistical analysis of all (670) questionnaires.	UOM	1/5/2016-31/7/2016
WP2.7 Report or/and Publication to open source Journal or Conference Proceedings with title "Entrepreneurial intention models"	UOM	1/4/2016-28/2/2017
WP3 - ENTREPRENEURIAL GROWTH MODELS	Coordinator: TUC Participants: UOC, UOM, ERGANI	1/12/2015-28/2/2017
WP3.1 Literature review related to the entrepreneurial growth models	TUC	1/12/2015-29/2/2016
WP3.2 Development of the theoretical male and female entrepreneurial growth model	TUC	1/12/2015-29/2/2016
WP3.3 Mapping of the implemented model from ERGANI CENTER for supporting the female entrepreneurs	ERGANI	1/1/2016-29/2/2016
WP3.4 Definition of the entrepreneurial growth models' measurement instruments	TUC	1/12/2015-29/2/2016

WP3.5 Data collection and data entry from 430 male and female entrepreneurs	TUC, UOC, UOM, ERGANI	1/3/2016-31/8/2016
WP3.5.1 Data collection and data entry from 200 male and female entrepreneurs	TUC	1/3/2016-31/8/2016
WP3.5.2 Data collection and data entry from 80 male and female	UOC	1/3/2016-31/8/2016
WP3.5.3 Data collection and data entry from 80 male and female entrepreneurs	UOM	1/3/2016-31/8/2016
WP3.5.4 Data collection and data entry from 70 male and female entrepreneurs	ERGANI	1/3/2016-31/8/2016
WP3.6 Unification of the data base and statistical analysis of all (430) questionnaires	TUC	1/5/2016-31/8/2016
WP3.7 Report or/and Publication to open source Journal or Conference Proceedings with title "Entrepreneurial growth models in female entrepreneurship"	TUC, UOC	1/12/2015-28/2/2017
WP4 - PUBLICITY AND DISSEMINATION OF THE RESEARCH RESULTS	<i>Coordinator: ERGANI Participants: TUC, UOC, UOM</i>	1/12/2015-31/3/2017
WP4.1- Design, construction and update of the project's website	TUC, UOC, UOM, ERGANI	1/12/2015-31/3/2017
WP4.1.1 Design and construction of the project website structure and continuous content update	TUC	1/12/2015-31/3/2017
WP4.1.2 Constant update of the project's website and linkage to other websites.	ERGANI	1/1/2016-31/3/2017
WP4.1.3 Updating website with the relevant research results of the WP1	UOC	1/6/2016-31/3/2017
WP4.1.4 Updating website with the relevant research results of the WP2	UOM	1/6/2016-31/3/2017
WP4.1.5 Updating website with the relevant research results of the WP3	TUC	1/6/2016-31/3/2017
WP4.2 Organization of a two-day international conference	TUC, UOC, UOM, ERGANI	1/2/2016-31/3/2017
WP4.2.1 Definition of the topics & the program of the conference. Promotion of the international conference	ERGANI	1/2/2016-31/8/2016
WP4.2.2 Coordination of the international conference activities. Design and construction of the conference website. Presentation of the project results to national or/and international conferences-lectures-workshops-events	TUC, UOC, UOM, ERGANI	1/2/2016-31/3/2017
WP4.2.3 Publication of the electronic version of the Conference Book of Abstracts	UOC	1/2/2016-31/3/2017
WP4.2.4 Conference secretariat and publication of the electronic version of the conference proceedings	UOM	1/2/2016-31/2/2017
II E4.3 – Organization and assessment of the Intervention (application of the learning protocol)	TUC, UOC, UOM, ERGANI	1/5/2016-31/3/2017
WP4.3.1 Application of the learning protocol to male and female students	TUC, UOM	1/5/2016-31/3/2017
WP4.3.2 Application of the learning protocol to	ERGANI, PAMAK	1/5/2016-31/3/2017

men and women (entrepreneurs, employed, unemployed)		
WP4.3.3 Statistical analysis and assessment of the applied learning protocol	UOC	1/5/2016-31/3/2017
WP5-PROJECT MANAGEMENT OF ForEMOsT	Coordinator: TUC Participants: UOC, UOM, ERGANI	1/12/2015-31/3/2017
WP5.1 Project's kick off meeting in Thessaloniki	TUC, UOC, UOM, ERGANI	1/12/2015-29/2/2016
WP5.2 Establishment and participation in the project Joint Monitoring Committee	TUC, UOC, UOM, ERGANI	1/12/2015-31/3/2017
WP5.3 Management of the financial and natural objective of the project	TUC, UOC, UOM, ERGANI	1/12/2015-31/3/2017
WP5.3.1 Management of the financial and natural objective of TUC sub-project and coordination of the project activities	TUC	1/12/2015-31/3/2017
WP5.3.2 Management of the financial and natural objective of UOC sub-project	UOC	1/12/2015-31/3/2017
WP5.3.3 Management of the financial and natural objective of UOM sub-project	UOM	1/12/2015-31/3/2017
WP5.3.4 Management of the financial and natural objective of ERGANI sub-project	ERGANI	1/1/2016-31/3/2017
WP5.4 Final project report	TUC, UOC, UOM, ERGANI	1/9/2016-31/3/2017

4. Project Management

The project ForEMOsT was coordinated by a Project Management Committee (PMC), which it was consisted of one representative from each project partner. Specifically, the members of PMC were:

- ✓ Professor Vassilis Moustakis (Technical University of Crete., PMC Chair and ForEMOsT Project Manager)
- ✓ Professor Konstantinos Kafetsios (University of Crete/sub-project coordinator)
- ✓ Professor Aikaterini Sarri (University of Macedonia/sub-project coordinator)
- ✓ Parthenopi Sourmaidou (ERGANI Center/sub-project coordinator)

The first PMC meeting took place the same day that was held the project's kick off meeting (WP5.2) in Thessaloniki on Monday 15th February 2016 at the Teleconference Room of University of Macedonia. The agenda of the kick off meeting, as well as the PMC's first meeting was prepared two weeks earlier, in Chania at the premises of TUC, on Friday 29th January 2016, by TUC and UOC research team (Moustakis, Kafetsios, Zampetakis, Bakatsaki). The agenda and participant list of the Kick of Meeting, as well as, the minutes of the preparatory meeting are included in the CD of Deliverables (Deliverable 6).

An interim PMC meeting took place in Chania, after the closing of the FOREMOST conference on Tuesday 30 August 2016 at the Chania Chamber Commerce and Industries, as all the PMC members were participating at the conference works and were present in Chania.

The final project meeting and PMC meeting took place in Thessaloniki on Saturday 11th February 2017, taking advantage of the presence of almost whole project research team at the workshop with title “Female Entrepreneurship and Social Economy: Trends, Opportunities and Perspectives”, that was held the previous day- that is Friday 10th February 2017 in Thessaloniki at the premises of University of Macedonia. The project coordinator Prof. V. Moustakis, presented the so far deliverables of the project and noted that the overall objectives of the project were achieved very successfully. It was discussed the structure of the final project report and the closing managerial activities of the financial and natural objective. The activity report of the project meeting is included in the CD of Deliverables (Deliverable 6).

5. Project’s Deliverables

In general, **the project overall aims** – to investigate social identity factors that can explain differences in entrepreneurial motivation between men and women in Greece and to examine if gender-related differences found in entrepreneurial motivation could also depend on the properties of the instruments being used in research- **are achieved**.

All objectives are completed successfully and project’s goals were achieved beyond any expectation. Our project research publications were successfully published to reputable scientific journals with **high impact factor**, proving the high level of the produced research work through the project activities.

The planned outputs that were delivered resulting from the main activities of the project were:

5.1 DELIVERABLE 1 of the WP1 - Report or/and Publication with title "Testing for equivalence of survey items with DIF"

The planned Deliverable1 of WP1 was a Report or Publication with title "Testing for equivalence of survey items with DIF". The actual deliverables is a Report (ANNEX I) **and** a Publication to open access journal with references:

Zampetakis L.A., Bakatsaki M., Litos C., Kafetsios K.G. and Moustakis V. (2017) Gender-based Differential Item Functioning in the Application of the Theory of Planned Behavior for the Study of Entrepreneurial Intentions. *Frontiers Psychology*. 8:451. DOI: 10.3389/fpsyg.2017.00451 (**impact factor 2.46**)

(<http://journal.frontiersin.org/article/10.3389/fpsyg.2017.00451/full>)

Main objective of the Deliverable1 was to examine whether measurement instruments used to assess entrepreneurial motivation are culture-specific and thus appropriate for use in researching female entrepreneurship in cultures like Greece. Survey data were collected from **1800 individuals from various parts of Greece**. The majority of participants (34.1%) were students from various disciplines (e.g., psychology, education, engineering, business and science students). Unemployed participants were 32.5% while 33.4% were employed in the private (17.5%) and the public sector (15.9%). We used modern statistical techniques, namely “**differential item functioning**”. Results suggested that actually women tend to demonstrate

lower entrepreneurial intentions compared to men and this gender-related difference **is not dependent on the properties of the instrument being used.**

An extensive report of the Deliverable1 is provided in **Annex I.**

5.2 DELIVERABLE 2 of the WP2 - Report or/and Publication with title "Entrepreneurial intention models and female entrepreneurship"

The planned Deliverable2 of the WP2 was a Report or Publication with title "Entrepreneurial intention models and female entrepreneurship". The actual deliverable is a Report entitled "Entrepreneurial intention models and female entrepreneurship".

Incorporated gender identity (or related gender roles) in theoretical models of entrepreneurial behavior. We proposed that entrepreneurs' gender identity or the extent to which entrepreneurs possess traits associated with traditional gender stereotypes (masculinity & femininity) is an important cognitive mechanism that relates entrepreneurs' sex to business growth intentions. We collected data from entrepreneurs using a structured questionnaire. **The sample included 572 entrepreneurs** (50% female) aged between 21-61 years ($M = 44.83$ years, $SD = 8.37$ years). Average number of years of business operation was 13.67 years ($SD = 9.09$), 44.8% of the respondents had a college/university degree (12.8% had Msc/PhD degrees) and 32.2% had a parent that owned a business. On average entrepreneurs reported having 9 employees ($SD=47.73$) for each firm. Within our sample, entrepreneurs' activities represent different domains. The most frequently indicated domains were tourism (39.1%), food production (21%), property and business services (13), finance and insurance (12%), health and community services (9%), construction (4%), and smaller percentage in other activities. from conditional process analysis, suggested that masculinity and femininity fully mediated the effects of entrepreneurs' biological sex on his/her business growth intentions. Moreover, results provided evidence that the indirect effect of sex on business growth intentions (via femininity) was contingent on entrepreneurs' independent self-construal.

The full report of Deliverable2 is provided in **Annex II.**

5.3 DELIVERABLE 3 - Report or/and Publication with title "Entrepreneurial growth models in female entrepreneurship".

The planned Deliverable 3 of the WP3 was a Report or/and Publication with title "Entrepreneurial growth models in female entrepreneurship". The actual deliverable is a Report (Annex III) **and** a Publication to open access journal with references:

Zampetakis, L.A., Bakatsaki, M., Kafetsios, K., and Moustakis, V. (2016). Sex differences in entrepreneurs' business growth intentions: An identity approach. *Journal of Innovation and Entrepreneurship*, Vol. 5:29 DOI: 10.1186/s13731-016-0057-5 (<https://innovation-entrepreneurship.springeropen.com/articles/10.1186/s13731-016-0057-5>)

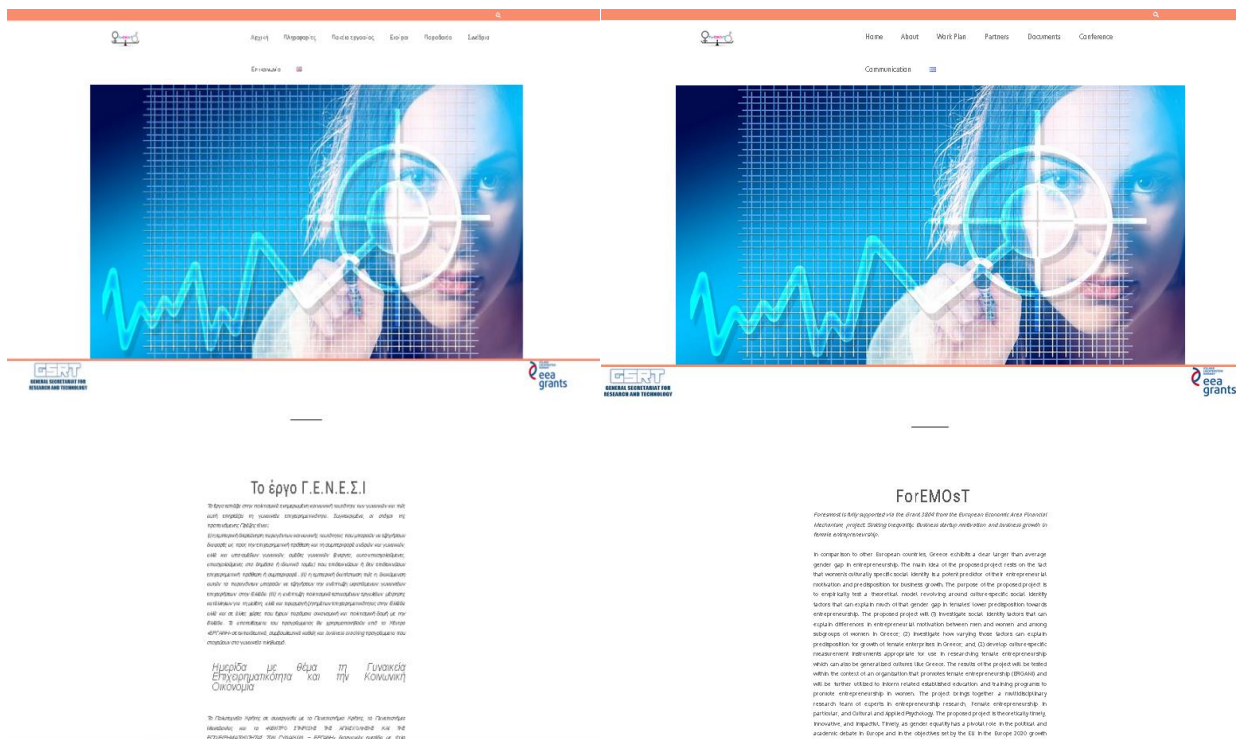
Built an **integrated model of entrepreneurial intentions** using several antecedents of entrepreneurial intentions that could be taken into consideration and that are related with the person (e.g. demographics, personality, personal factors, etc.), the micro-social environment

(e.g. family, education, etc.) and the macro-social environment (e.g. economic climate, etc.). This model depicted provides a holistic view of entrepreneurial intentions and its antecedents. The variables used in theory of planned behavior, were used, as this model is the most frequently used in entrepreneurship research and it has proven to entail a strong predictive value. Survey data were collected from **419 individuals from various parts of Greece**, from whom 38.4 percent were male and 61.6 percent were female. The mean age of the respondents is 27.6 and 63.7 percent were students, 7.2 percent were unemployed, 10.8 percent worked for the public sector and 18.2 percent worked for the private sector. 48.5 of the respondents were singles, 31.2 were in a relationship and 20.3 percent were married. 72.4 percent of the respondents had no family background in entrepreneurship and 81.9 percent knew someone that had already started a business. We tested for gender differences in the above-mentioned variables but there were no statistical differences (except from perceived behavioral control). The entrepreneurial intention for male respondents ($M=3.93$, $SD=1.746$) is higher than that for female respondents ($M=3.67$, $SD= 1.647$), however the difference was not significant. We also tested for gender differences in the perceived barriers. Differences were found in the perception of personal barriers that include self-confidence and ambition, the perception of operations barriers that include finding business opportunities and marketing methods, the perception of networking barriers that include business contacts and the perception of stress barriers that include work stress. Men regard these barriers as less problematic than women.

An extensive report is also provided in **Annex III**.

5.4 DELIVERABLE 4 of the WP4 - “Publicity of project- Website”

The planned Deliverable4 of the WP4 was entitled “Publicity of project- Website”. The actual deliverable is a WP4.1-Website of the project in Greek and English language (www.foremost.tuc.gr/el/ , <http://foremost.tuc.gr/en/>)



Print Screen of the website (greek version)

Print Screen of the website (english version)

5.5 DELIVERABLE 5 of WP4.2 - “Publicity and dissemination of research results-International conference”

The planned Deliverable5 of the WP4 was entitled “Publicity and dissemination of research results-International conference”. The actual deliverables are the following:

5.5.1 WP4.2-International Conference with title "Entrepreneurship in Turbulent Times" held in Chania, 29-30 August 2016 and took place at Chania Chamber of Commerce and Industry, Chania, Greece (4th floor).

The conference was international, had 2 days duration and it was broadcast by a web-based platform. The entrance was free and no registration fees were charging. The speakers and the participants had the possibility to participate in the conference by distance (there were from India, USA, Thessaloniki, Heraklion, and generally from all over Greece). The web-platform was keeping the logs of attendance (time of entrance and exit and chats).

The first day of the International Conference on Entrepreneurship was for academic researchers, educators and practitioners seeking to promote knowledge, stimulate dialogue and set trends, in the field of entrepreneurship, education and management in entrepreneurship and gender issues in entrepreneurship. The second day the presentations were addressing to male and female entrepreneurs and the subjects were relating to their interests. The presentations were organized in 5 sessions:

Day 1: Monday, August 29th 2016

- Session 1 - Gender and Entrepreneurship

- Session2 - Social Entrepreneurship, Business Development and Growth
- Session 3 - Education and Entrepreneurship
- Session 4 – Innovation and Entrepreneurship

Day 2: Tuesday, August 30th 2016

- Session 5- Best practices of Entrepreneurship



Photo from the Conference works



<http://foremost.tuc.gr/conference>

CONFERENCE PROGRAM

Conference Venue

Chania Chamber of Commerce and Industry

4th Floor, Eleftheriou Venizelou 4, 73104 Chania, Crete.

Monday, August 29th 2016

09:00 Registration (Conference Site)
09:30 Welcome address by Prof. Vassilis Moustakis, Conference Chair, Technical University of Crete
Welcome address by Kyriakos G. Kotsoglou, Management & Production Engineer, MSc. PhD / Regional Counselor of Crete Region, Regional Authorized Counselor of E-Government and Member at Crete Regional Financial Commission
Welcome address by Ioannis Margaritis, President of Chania Chamber of Commerce and Industry
Welcome address by Prof. Vassilis Digalakis, Rector of Technical University of Crete

Session 1 - Gender and Entrepreneurship 10:00 - 11:30 **Chair: Anastasios Panopoulos**

10:00 Business startup and growth of women owned business. New evidence
Leonidas Zampetakis, Maria Bakatsaki, Lefteris Koumakis, Vassilis Moustakis/ Technical University of Crete
10:30 Cultural identity, emotion, and achievement motivations: A cross-gender comparison
Konstantinos Kafetsios, Aspasia Papachou, Sotiris Karaolanis & Marcela Serediova/ University of Crete
10:50 Innovation of Women Entrepreneurship In India
Krishna Kumar Yadlapalli and Kiran Kumar Bunga, India
11:10 Regional Development through Creative Economy: The Paradigm of Chania
Mayia Spanoudaki/ Technical University of Crete

11:30 Coffee Break

Session2 - Social Entrepreneurship, Business Development and Growth 12:00 – 13:40 **Chair: Konstantinos Kafetsios**

12:00 Entrepreneurial intentions in Greece: drivers and barriers in times of an economic crisis
Aikaterini Sarri, Stavroula Laspita, Anastasios Panopoulos/ University of Macedonia
12:20 The External Trade of Greece during the Economic Crisis (2008). The case of Export Businesses of Central Macedonia
George Magoulas, Elissavet Domoktsi, Anna Trichopoulou/ TEI of Central Macedonia, PhD sociologist
12:40 Entrepreneurship beyond business: exploring the use of entrepreneurship insights to understand International Relations Phenomena
Rebecca Pedi, Aikaterini Sarri/ University of Macedonia
13:00 TQM: the key role for a successful entrepreneurial development and growth in turbulent times
Maria Bakatsaki, Leonidas Zampetakis/ Technical University of Crete
13:20 Sharing Economy Growth in Europe
Athanasios Paraschos/ Youth Entrepreneurship Club

Session 3 - Education and Entrepreneurship 13:40 – 14:20 **Chair: Aikaterini Sarri**

13:40 Entrepreneurship in Secondary Education in Greece- impact on pupils
Sonia Tilaveridou, Anastasia Constantelou/ Teacher in Secondary Education, University of the Aegean
14:00 Dispersing entrepreneurial mindset and values: A novice training intervention for European Youth
Maria Giokarini, Andreas Tzekas, Rebecca Pedi, Aikaterini Sarri/ University of Macedonia, Entrepreneurship Lab (Department of Balkan Slavic and Oriental Studies)

14:20 Lunch Break

Session 4 – Innovation and Entrepreneurship 15:00 - 16:10 **Chair: Vassilis Moustakis**

15:00 Model Development in Entrepreneurial Ecosystems
Sul Kassicieha, Elias G. Carayannis, Evangelos Grigoroudis/ University of New Mexico, George Washington University, Technical University of Crete
15:30 Entrepreneurship and Innovation in the new environment of crisis. The case of Western Macedonia
Elpida Samara, Ioannis Bakouras, Dimitris Skalkos/ University of Western Macedonia, University of Aegean
15:50 Research and innovation as tools for the development of the European and the Greek insular regions
Despina Dimelli/ Technical University of Crete

Tuesday, August 30 th 2016	
Session 5- Best practices of Entrepreneurship	9:00 - 11:00
Chair: Leonidas Zampetakis	
9:00	Supporting the Female Entrepreneurship: The Case of ERGANI Center Popi Sourmaidou/ ERGANI Center
9:20	Supporting the Social Entrepreneurship in Greece today, our experience from the project "So New" Popi Sourmaidou/ ERGANI Center
9:40	Women who dare to dream a better world: Social Entrepreneurship Maria Efstratiou/ "Hliakida"-Pancreton Association Social Media and Women
10:00	Entrepreneurship: From word of mouth to world of mouth. Reach your audience, Build your brand, Grow your business. Maria Chatzina/ Marketing executive/ e-marketing strategist, Marketing Manager Dermamed Medical Group
10:20	Female Entrepreneur in turbulence times in Crete Maria Pitsikaki/ Development Association of Female Entrepreneurs in Crete
10:40	Carving new paths, the only solution! Valentinios Tzeles/ Founder, CEO, Near
11:00 Coffee Break	
Session 5- Best practices of Entrepreneurship (continues)	
Chair: Popi Sourmaidou	
11:30	Helping ambitious female SMEs innovate and grow internationally in turbulent markets Panagiotis Ignatiadis/ Praxi Network
11:50	Supporting the Female Entrepreneurship through ESPA financial projects while handling the financial crisis in Greece Anna Chatzaki/ Development Association of Crete
12:10	Women Resource Centers in Sweden and in Europe Britt-Marie Söderberg Torstensson/ Chairwoman of Winnet Europe Association and Winnet Sweden
12:30	GOING ABROAD Bodil Nilsson/ Member of the board of Winnet Sweden
12:50	Office for the entrepreneurial support of SMEs Konstantina Mataliotaki/ Business Consultant of Chania Chamber of Commerce
Workshop with title "Entrepreneurship in turbulent times : Exchanging Knowledge, ideas and experience. The gender issue"	
Discussion Coordinators: Vassilis Moustakis and Aikaterini Sarri	
13:10 - 14:30	
14:00 Conclusions - Conference closing	
14:30 Lunch Buffet	



The participants received a **Certificate of Attendance**, as well as the Presenters received a **Certificate of Presenter**.



CERTIFICATE

This is to certify that

participated in the International web-based Conference with title
"Entrepreneurship in Turbulent Times"
 organized by Technical University of Crete, University of Crete,
 University of Macedonia and Ergani Center
 29-30 August 2016, Chania, Greece.

The Chairman of the Conference

Professor Vassilis Moustakis
 Technical University of Crete, Greece



Certificate of Attendance



CERTIFICATE

This is to certify that

Maria Bakatzaki

participated as a presenter of the paper entitled
"TQM: the key role for a successful entrepreneurial development and growth in turbulent times"
 in the International web-based Conference
"Entrepreneurship in Turbulent Times"

organized by Technical University of Crete, University of Crete,
 University of Macedonia and Ergani Center
 29-30 August 2016, Chania, Greece.

The Chairman of the Conference

Professor Vassilis Moustakis
 Technical University of Crete, Greece

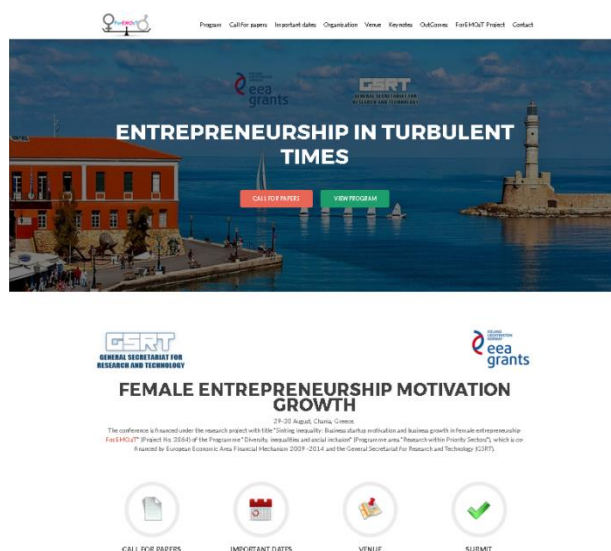


Certificate of Presenter

From the conference activities were produced the following outputs:

- **WP4.2.2 Website of the conference** www.foremost.tuc.gr/conference

The official language of the conference was English. Consequently, the web site of the conference is only in English version.



- **WP4.2.3 Conference Book of Abstracts** (published only in electronic version), with ISBN 978-960-8475-26-7 http://foremost.tuc.gr/wp-content/uploads/2017/08/FOREMOST2016_BookofAbstracts.pdf



- **WP4.2.4 Conference Proceedings** (published only in electronic version) with ISBN 987-960-8475-27-4 http://foremost.tuc.gr/wp-content/uploads/2017/08/FOREMOST2016_ConferenceProceedings.pdf

- Further outputs beyond our planned actions, without adding to the project any extra cost, were the **videos from the 2 days conference works**, which are accessible openly through the conference website www.foremost.tuc.gr/conference/outcomes/.

5.5.2 Presentations of the research results to international conferences and publication to conference proceedings

Under the **Result and Impact Index “Participation into international Conferences and workshops”** was planned 0 (because in the proposal it was included into a common index number with the scientific publications) and finally were achieved **4 participations/presentations** to international conferences:

- Kafetsios, K. & Karaolanis, S. (2016). *On social status, cultural orientation and well-being: A comparison between urban and rural areas in Greece*. In Proceedings of the 1st International Conference in the Social Sciences, University of Crete, Rethymno, June 8-10, 2016 icconss.soc.uoc.gr/en/papers/download/254/127/102.html

The aim of the research was to explore relationships between subjective social status (SSS), cultural identity, and wellbeing in a sample of employed and unemployed persons from different regions in Greece. We collected data from a total of 1800 participants from urban (N = 1267), rural (N = 205), and semi-urban (N = 328) areas in Greece. One third of the sample were unemployed. The three groups did not differ in gender or age composition. Participants from the rural areas were less well-educated and were more likely to be unemployed than participants from the other two regions, but those differences were not large. Cultural orientation (independent and interdependent self-construal) did not differ, on average, by area or by employment status. However, relationships between SSS and individual-level cultural orientations as measured by Singelis' (1994) self construal scale, were starkly different in the three regions. In the urban areas SSS was associated with higher independent self construal; SSS was not a predictor of interdependent self-construal in the urban areas. In the rural areas the relationship was reversed, with higher SSS being associated with higher interdependence but not with independence. Well-being (Diener, 1995) was predicted by SSS almost in similar levels in two regions, yet, this relationship was partially mediated by an independent cultural orientation in urban areas and by an interdependent cultural orientation in rural areas. Finally, the extent to which relationships between SSS and wellbeing were partially mediated by participants' trait positive affect also differed in the two regions. In the urban area, trait positive affect accounted for half of the variation between SSS and well-being, whereas in the rural areas, positive trait affect fully mediated relationships between SSS and well-being. This research depicts relationships between social status and well-being, highlighting the significance of interactions between regional and individual-level cultural orientations.

- Zampetakis, L.A., Bakatsaki, M., Kafetsios, K., and Moustakis, V. (2016) *Examining the relationship among gender role orientation, future oriented emotions and subjective entrepreneurial success*. Paper presented in 10th International Conference on Emotions and Work life (EMONET), Rome, July 4-5, 2016.

The purpose of this study was to extend current work on the factors influencing entrepreneurs' subjective entrepreneurial success (SES), a construct reflecting more than financial and economic indicators. Specifically, we proposed and tested a theoretical model that examined the relationships among gender role orientation (i.e., masculinity and femininity), one type of future

oriented emotions (i.e., anticipated affect) and SES. Data were based on Greek entrepreneurs. Results using Bayesian path analysis indicated that the effect of femininity on SES was stronger than that of masculinity. Additionally, both masculinity and femininity were positively related to an individual's positive anticipated emotions towards business growth. Positive anticipated affect mediated the effects of masculinity and femininity on subjective entrepreneurial success. We interpreted this as evidence in support of the idea that social construction of sex and future emotional thinking are influential factors within the entrepreneurial ecosystem that have previously been researched separately.

- Zampetakis, L.A., Bakatsaki, M., Kafetsios, K., and Moustakis, V. (2016). *Growth in female owned firms: The role of emotional support seeking*. Paper presented in the Diana International Research Conference 2016, Bodø, Norway, June 12-14, 2016

It was presented paper it was proposed and tested a theoretical model that examined the moderating role of sex on the relationship between emotional support seeking (ESS), an emotional self-regulatory coping strategy that involves the assistance of significant others for business growth. Data were based on 272 Greek entrepreneurs (112 females). Results from multi-group path analysis suggested that the effect of ESS on business growth was significant only for women entrepreneurs. We interpreted this as evidence in support of the idea that men and women might utilize different coping behaviors when responding to stress related to the growth of their business

- Pedi, R., Sarri, K. (2017) *Towards a Framework for Understanding Opportunity and Change in International Relations*. Paper Presented at ISA 2017 Annual Convention, Understanding Change in World Politics, Baltimore, USA, 22-25 February, 2017

Change in international politics is intertwined with opportunity. On the one hand, many of the changes in the international system are outcomes of creation, discovery and exploitation of opportunities by states, leaders, international institutions; and on the other, change itself can provide actors in international politics with new opportunities to improve their position in the system. The post WWII order in the West and the US leadership, the creation of the European Communities and the EU integration, the improvement of the Small States position in this context are all developments occurred due to a series of opportunities that have been effectively harnessed. To unpack change then, it is imperative to understand opportunity in international politics, first. Yet, opportunity has been hardly studied by International Relations theories. Thus we use insights from our recent research on entrepreneurship and gender and on entrepreneurial models in order to enhance our understanding of the nature of opportunity in international politics and of the ways opportunities are created, discovered, exploited and finally provoke changes. We suggest that recent research on entrepreneurship can provide valuable insights concerning the nature of opportunities and the factors that influence their recognition and exploitation.

5.5.3 WP4.3 Application of the learning protocol to male and female students

5.5.4 Dissemination of the project research results to workshops/lectures/events. It was planned for 2 activities of dissemination and finally during the program activities were achieved the following **5 activities of dissemination and promotion** of the project:

1. The project's website (Deliverable4)

2. The international conference of project ForEMOsT (Deliverable5)
3. Organization of a Workshop with title “Female Entrepreneurship and Social Economy: Trends, Opportunities and Perspectives”, held in Thessaloniki, 10 February 2017. The poster, program of the event is included in the CD of Deliverables (Dissemination and Publicity\Workshop_Paremvasi_9-11_2_2017)



**«Γυναίκεια Επιχειρηματικότητα και
Κοινωνική Οικονομία:
Τάσεις, Ευκαιρίες, Προοπτικές»**
Παρασκευή 10 Φεβρουαρίου 2017

Αίθουσα Συνεδρίων Πανεπιστημίου Μακεδονίας
1^{ος} Όροφος, Εγνατίας 156, Θεσσαλονίκη, Ελλάδα

**ΓΥΝΑΙΚΕΙΑ
ΕΠΙΧΕΙΡΗΜΑΤΙΚΟΤΗΤΑ &
ΚΟΙΝΩΝΙΚΗ ΟΙΚΟΝΟΜΙΑ:
ΤΑΣΕΙΣ, ΕΥΚΑΙΡΙΕΣ,
ΠΡΟΟΠΤΙΚΕΣ**
Παρασκευή 10 Φεβρουαρίου
Πανεπιστήμιο Μακεδονίας
Αίθουσα Συνεδρίων
9.00 π.μ. - 15.00π.μ.
*Θα δοθούν πιστοποιητικά παρακολούθησης

Πολυτεχνείο Κρήτης
Εργάνη
eea grants
ΠΑΝΕΠΙΣΤΗΜΙΟ ΜΑΚΕΔΟΝΙΑΣ
ΕΥΡΩΠΑΪΚΗ ΓΡΑΜΜΑΤΕΙΑ ΕΡΕΥΝΑΣ ΚΑΙ ΤΕΧΝΟΛΟΓΙΑΣ

**ΠΡΟΓΡΑΜΜΑ ΗΜΕΡΙΔΑΣ
ΠΑΡΟΥΣΙΑΣΗΣ ΕΡΕΥΝΗΤΙΚΩΝ ΑΠΟΤΕΛΕΣΜΑΤΩΝ**

09:00	Εγγραφή Συμμετεχόντων	
1 ^η Ενότητα -	Παρουσίαση Προγράμματος και Ερευνητικών Αποτελεσμάτων	9:30 - 11:30
Συντονισμός:	Κατερίνα Σαρρή, Καθηγήτρια, Πανεπιστήμιο Μακεδονίας	
09:30	Παρουσίαση των δραστηριοτήτων του προγράμματος FOREMOST	
	Βασίλειος Μονσάκης, Καθηγητής, Πολυτεχνείο Κρήτης και Επιστημονικός Υπεύθυνος του έργου FOREMOST	
09:50	Επιχειρηματικότητα και Φύλο	
	Φωτεινή Τσιμπρίδου, Καθηγήτρια Πανεπιστήμιο Μακεδονίας & Γεωργία Ρήνα, Ερευνήτρια, Πανεπιστήμιο Μακεδονίας	
10:20	Πολιτισμική ταυτότητα, συναισθήματα και κίνητρα επίτευξης: Συγκριση ανάμεσα στα δύο φύλα	
	Κωνσταντίνος Κωφέτσος, Καθηγητής, Πανεπιστήμιο Κρήτης	
10:40	Εναρξη και ανάπτυξη γυναικείων επιχειρήσεων: Νέα δεδομένα	
	Μαρία Μπακατσάκη, ΕΤΕΠ, Πολυτεχνείο Κρήτης	
11:10	Επιχειρηματικές Προβλέψεις στην Ελλάδα της κρίσης	
	Αικατερίνη Σαρρή, Καθηγήτρια Πανεπιστήμιο Μακεδονίας	
11:30	Διάλειμμα - Καφές	
2 ^η Ενότητα -	Στήριξη στη Γυναίκα Επιχειρηματία: Η Βιωματική Προσέγγιση	12:00 - 14:15
Συντονισμός:	Αναστάσιος Πανόπουλος, Επίκ. Καθηγητής, Πανεπιστήμιο Μακεδονίας	
12:00	Υποστήριξη για τις γυναίκες στην επιχειρηματικότητα	
	Πόπη Σουρμελίδου, Διευθύντρια Κέντρου ΕΡΓΑΝΗ	
12:30	Χρηματοδοτικά εργαλεία στήριξης της γυναικείας επιχειρηματικότητας	
	Γιάννης Τσιτσόπουλος, Εκπρόσωπος ΚΕΠΑ-ANEM	
13:00	Καλές πρακτικές γυναικείων επιχειρηματιών	
	- Ελένη Παπαθεοδοσίου, Πρόεδρος, Δίκτυο ΚοινΣΕπ Κεντρικής Μακεδονίας, ΚοινΣΕπ Δημουριάς	
	- Βασιλική Καρυστιακή & Μαρία Τρουντοπούλου, επιχειρηματίες, ΚοινΣΕπ Do2Do	
	- Σοφία Φύτουλη, επιχειρηματίας, αρωματοποιείο Pas de Coq	
14:00	Ερωτήσεις - Συζήτηση	
14:15	Ελαφρύ Γεύμα	



4. Participation as an invited lecturer to present the project's results to an event held at University of Piraeus, Athens, 16th March 2017
5. Participation as an invited speaker to present the project's results with a speech entitled “The research results and practical implications of the project FOREMOST” at the event “Female Entrepreneurship: Challenges and Perspectives”, which was organized

by the Cretan Association of Female Entrepreneurship and held at Chamber of Commerce in Heraklion, in 31 July 2017.



5.5.5 Various publicity activities to Social Media (newspapers, web news portals, television, facebook)

- Dissemination activities for the Conference FOREMOST held in Chania 29-30/8/2016.
 - ✓ <http://flashnews.gr/post/282255/sta-xania-diethnes-synedrio-gia-thn-epixeirhmatikothta-se-kairo-krishs>
 - ✓ <http://news.in.gr/economy/article/?aid=1500097256>
 - ✓ <http://flashnews.gr/post/282255/sta-xania-diethnes-synedrio-gia-thn-epixeirhmatikothta-se-kairo-krishs>
 - ✓ <http://www.zarpanews.gr/%cf%87%ce%b1%ce%bd%ce%b9%ce%ac-%ce%b4%ce%b9%ce%b5%ce%b8%ce%bd%ce%ad%cf%82-web-based-%cf%83%cf%85%ce%bd%ce%ad%ce%b4%cf%81%ce%b9%ce%bf-%ce%b5%cf%80%ce%b9%cf%87%ce%b5%ce%b9%cf%81%ce%b7%ce%bc/>
 - ✓ <http://www.newsedu.gr/%CE%BD%CE%AD%CE%B1-%CE%B1%CE%BD%CE%B1%CE%BA%CE%BF%CE%B9%CE%BD%CF%8E%CF%83%CE%B5%CE%B9%CF%82-%CF%80%CE%B1%CE%BD%CE%B5%CF%80%CE%B9%CF%83%CF%84%CE%B7%CE%BC%CE%AF%CF%89%CE%BD/%CE%B4%CE%B9%CE%B5%CE%B8%CE%BD%CE%AD%CF%82-%CF%83%CF%85%CE%BD%CE%AD%CE%B4%CF%81%CE%B9%CE%BF-%E2%80%9CCE%B5%CF%80%CE%B9%CF%87%CE%B5%CE%B9%CF%81%CE%B7%CE%BC%CE%B1%CF%84%CE%B9%CE%BA%CF%8C%CF%84%CE%B7%CF%84%CE%B1-%CE%B5%CE%BD-%CE%BA%CE%B1%CE%B9%CF%81%CF%8E-%CE%BA%CF%81%CE%AF%CF%83%CE%B7%CF%82-entrepreneurship>
 - ✓ <http://www.haniotika-nea.gr/sinedrio-gia-ti-ginekia-epichirimatikotita/>

The Call for papers was uploaded to the website of the School of Production Engineering & Management of TUC:

- ✓ http://www.pem.tuc.gr/index.php?id=5016&&cHash=d05729c3edeece196cf82a4adca79432&tx_ttnews%5Btt_news%5D=13897
- ✓ and TUC website Announcements:
- ✓ https://www.tuc.gr/index.php?id=2786&&cHash=35954665eeaf4fe9fb203fda320d1668&tx_ttnews%5Btt_news%5D=13903

It was also announced to all greek universities' websites. Some links are:

- ✓ <http://epixeireite.duth.gr/?q=node/22815#.WNto16L-u70>
- ✓ https://www.aegean.gr/aegean2/exnews/2015_16/Call_for_papers.pdf

During the conference works were given interviews to cretan TV channels (TV CRETA, NEA TV).

- Dissemination activities for the Workshop with title “Female Entrepreneurship and Social Economy: Trends, Opportunities and Perspectives”, held in Thessaloniki, 10 February 2017.

The workshop was richly promoted (before and after the event) by national (ERT) and local TV channels (TV100), online news-portals, newspapers and radio stations (ERA-2nd Program, FM100), universities’ websites. Some indicative links are given below:

- <http://www.voria.gr/index.php/article/imerida-gia-ti-ginekia-epichirimatikotita-sto-pamak>
- <http://www.praktoreio-macedonia.gr/article/6969/Sunedrio-gia-tin-gunaikeia-epicheirimatikotita-simera-sto-PAMAK>
- <https://www.businesswoman.gr/index.php/enimerwsi/sunedria-seminaria/item/5440-imerida-yia-ti-yinekia-epixirimatikotita-kai-tin-kinoniki-ikonomia>
- <http://www.uom.gr/modules.php?op=modload&name=News&file=article&sid=8170&tmima=1&categorymenu=7>
- <http://www.voria.gr/index.php/article/erevna-i-fitites-theloun-na-ginoun-epichirimaties-alla-fovounte>
- <http://www.praktoreio-business.gr/articleview.php?id=1725>

At the CD of Deliverables (Dissemination and Publicity\Workshop_Paremvasi_9-11_2_2017) has been included the video from the national TV channel ERT with the more than 3 minutes special dedicated video to the project research results and interviews from the speakers of the workshop, that was broadcasted the same day during the evening news zone.

- Publicity actions from the presentation of the project’s research results as invited speaker to the event with title “Female Entrepreneurship-Challenges and Perspectives“ which was organized by the Cretan Association of the Female Entrepreneurs held in Heraklion 31 July, 2017 at the Chamber of Commerce of Heraklion.

- ✓ <http://flashnews.gr/post/320047/hmerida-toy-anaptyksiakoy-syllogoy-gynaikwn-epixeirhmatiwn-krhths>
- ✓ <http://www.cretewoman.gr/el/5996/%CE%BF%CE%BA%CF%84%CF%89-%CF%83%CE%B7%CE%BC%CE%B1%CE%BD%CF%84%CE%B9%CE%BA%CE%B5%CF%82-%CE%BA%CE%B1%CE%B9-%CE%BA%CE%B1%CF%84%CE%B1%CE%BE%CE%B9%CF%89%CE%BC%CE%B5%CE%BD%CE%B5%CF%82-%CE%B3%CF%85%CE%BD%CE%B1%CE%B9%CE%BA%CE%B5%CF%82-%CF%83%CF%84%CE%B7%CE%BD-%CE%BA%CF%81%CE%B7%CF%84%CE%B7-%CE%B8%CE%B1-%CE%BC%CE%B1%CF%82-%CE%BC%CE%B1%CE%B8%CE%BF%CF%85%CE%BD-%CF%84%CE%B1-%CE%BC%CF%85%CF%83%CF%84%CE%B9%CE%BA%CE%B1-%CF%84%CF%89%CE%BD-%CE%B5%CF%80%CE%B9%CF%87%CE%B5%CE%B9%CF%81%CE%B7%CF%83%CE%B5%CF%89%CE%BD.php>
- ✓ <http://www.cretewoman.gr/el/6297/%CE%BF%CE%B3%CE%B4%CE%BF%CE%BD%CF%84%CE%B1-%CE%BA%CF%81%CE%B7%CF%84%CE%B9%CE%BA%CE%B5%CF%82-%CF%83%CE%B5-%CE%BC%CE%B9%CE%B1-%CE%B5%CE%BA%CE%B8%CE%B5%CF%83%CE%B7-%CE%B7-%>

- <http://www.1069.gr/crete/gyneikia-epichirimatikotita-proklisis-ke-prooptikes/>
- ✓ <http://www.aftodioikisi.gr/ota/perifereies/perifereia-kritis-erxetai-11i-ekthesi-cretan-womens-week-2017/>
- ✓ Promotion of the event with a live interview at the TV CRETA in 13th July 2017, <https://www.facebook.com/cretanbusinesswomen/photos/gm.291338081330459/151294922109386/?type=3&theater>

5.6 DELIVERABLE 6 of the WP5 - Final Project Report

6.1 The planned and actual Deliverable6 of the WP5 is the Final project report.

Under the WP5- “PROJECT MANAGEMENT OF ForEMOsT” was included the following activities:

➤ **WP5.1 Project’s kick off meeting in Thessaloniki**

and

➤ **WP5.2 Establishment and participation in the project Joint Monitoring Committee**

These workpackages have been described at the previous chapter 4. Project Management.

Beyond our planned objectives we achieved further the following Result and Impact Indexes of Scientific Publications:

Under **the Results and Impact Indexes of Scientific Publications** of the project was planned to be submitted 4 scientific publications to journals or conference proceedings. We achieved finally to make 5 scientific publications. The 5th publication is a Book Chapter (protected work due to intellectual property rights) and it derived from the full paper that was submitted to the international conference EMONET 10, which was qualified after blind review to become Book Chapter. Specifically, the reference details are the following:

- Book Chapter 7: Leonidas A. Zampetakis, Maria Bakatsaki, Konstantinos Kafetsios and Vassilis S. Moustakis (2017) “Examining The Relationship Among Gender-Role Orientation, Future Oriented Emotions And Subjective Entrepreneurial Success” of the Book with title “Emotions and Identity”, Research on Emotion in Organizations, Volume 13, 157-173 (ISSN: 1746-9791/DOI:10.1108/S1746-979120170000013009).

In this chapter, we proposed and empirically tested a theoretical model on the relationships among gender-role orientation, anticipated emotions and entrepreneurs’ subjective entrepreneurial success (SES). Results using Bayesian path analysis and a sample of Greek entrepreneurs indicated that the effect of femininity on SES was stronger than that of

masculinity. Positive anticipated affect mediated the effects of masculinity and femininity on subjective entrepreneurial success. We interpreted this as evidence in support of the idea that social construction of sex and future emotional thinking are influential factors within the entrepreneurial ecosystem that have previously been researched separately.

As supplemental material of the final work is attached a CD with the produced Deliverables of the projects. The directories are named according to the Number of Deliverables as follows:

- ✓ Deliverable1
- ✓ Deliverable2
- ✓ Deliverable3
- ✓ Deliverable4
- ✓ Deliverable5
- ✓ Deliverable6
- ✓ Dissemination and Publicity

5. *Conclusions/Practical Implications*

One important finding deriving from the project research, is that business growth intention is a complex phenomenon that may be influenced by gender. Broadly speaking, being a member of two traditionally unrelated groups (i.e. being a woman and an entrepreneur) is not an easy task for women. The image of the entrepreneur has traditionally been masculinized and rooted in masculine discourse. This suggests that cues or symbols in the entrepreneurial environment should make independent self-construal more accessible. In our case, dual identifiers, such as female entrepreneurs, are required very often to adopt opposing sets of cultural proscriptions where the masculine is prioritized over the feminine provided empirical insights into how the mother role is taken for granted while the business role is approached as problematic in portrayals of women in family business. Our results indicate that gender identity mediates the influence of sex on business growth intentions and the mediation effects are contingent on entrepreneurs' independent self-construal. Thus, women make decisions related to the growth of their businesses using a different process than men do. Our results reinforce the claims that it is valuable to incorporate a feminine perspective when studying the factors influencing entrepreneurs' growth intentions in established business.

Second important finding deriving from the project research, deals with the women's emotional support seeking. Men and women might utilize different coping behavior when responding to stress related to the growth of their business. In order for women to gain legitimacy as entrepreneurs they are encouraged to adopt and reproduce attitudes and behaviors which are in fact reproductions of what men do and what men are. That is, men are more likely to be socialized to construct an independent self-construal (i.e., as separate from others, aiming to maintain a sense of autonomy and uniqueness, while women are more likely to be socialized to develop a social self that is marked by the motivation to be connected to others). Thus our results provide evidence to support the proposition that when women emulate the behavior of the idealized male, there is evidence of misfit (i.e., lower growth intentions). Emotional support seeking is positively related to business growth for women entrepreneurs (after controlling for the effects of entrepreneurs' dispositional positive affect, internal locus of control, need for achievement and age), but not for male entrepreneurs. **This is the 1st time such a result is reported in the literature.**

Our studies have some practical implications for business policy formulation and the teaching of entrepreneurship, that can contribute to the firms' sustainability, as well as growth, with subsequently contribution to the sustainability and development of the national economy:

1. Educators should craft strategies and learning environments that validate and stimulate women's identity in a way that does not emulate the behavior of the idealized male entrepreneur.
2. Women wanting to grow their business may be disadvantaged when they do not fit the prevalent stereotype (i.e. high levels of independent self-construal). They should trust their unique ability of socialization and exploit it by establishing Social Enterprises or Women

Rural Cooperatives. After all, we should not forget that the strength of Greek society is the maintenance of family bonds and the Greek mother-businesswoman was always trying to reinforce the family financial budget without neglecting her family obligations (e.g. children, the elderly people).

3. From the other side, men can take lessons from women's ability of networking and emotional support seeking, which may offer a way to take direct action to alleviate problems associated with business growth and to build up and maintaining close relationships, as an action step that directly helps the development of tight network of relationships and interconnected groups that protect and offer security. Furthermore, men must leave their ego-autonomous world and realize their limits in knowledge and capabilities and seek for consulting and support from experts, in order to make their enterprises sustainable and growth.

ERGANI Center will adopt the research results and embody into the learning protocol that is applied to the candidate female entrepreneurs and to female entrepreneurs. In Annexes IV and V is presenting the European model that is applied to ERGANI Center and other European Women Resources Centers to candidate female entrepreneurs (ANNEX IV - WP2.3 Mapping the implemented support model for candidate female entrepreneurs of ERGANI Center (in Greek)) and to female entrepreneurs (ANNEX V - WP3.3 Mapping the implemented support model for female entrepreneurs of ERGANI Center (in Greek)).

ANNEXES

- ANNEX I – Deliverable 1 of the WP1-Report
- ANNEX II – Deliverable 2 of the WP2-Report
- ANNEX III – Deliverable 3 of the WP3-Report
- ANNEX IV – WP2.3 Mapping the implemented support model for candidate female entrepreneurs of ERGANI Center (in Greek)
- ANNEX V- WP3.3 Mapping the implemented support model for female entrepreneurs of ERGANI Center (in Greek)

ANNEX I

Deliverable 1 of WP1-Report entitled

“Testing for equivalence of survey items used in entrepreneurship research with DIF”¹

1. Introduction

Entrepreneurial activity is an important vehicle for value creation and has a significant impact on economic growth, continuous business renewal, and employment (Van Praag and Versloot, 2007). However, although half of the working population are women, and women make up a substantial proportion of those choosing to be entrepreneurs (Minniti et al., 2005), female entrepreneurship significantly lags behind male entrepreneurship (Kelley et al., 2013; Minniti et al., 2005).

According to findings from the Global Entrepreneurship Monitor (GEM) project, males' rates of entrepreneurial activity range from over three times that of females in some countries, while in others, the male–female ratio of participation is nearly identical (Minniti et al., 2005; Sarri and Trihopoulou 2005). In nearly all of the 67 economies included in the GEM the rate of men's venture creation is higher than that of women (Kelley et al., 2013). This is especially true of Greece, which is characterized by higher gender inequality (Sarri and Trihopoulou, 2005).

In the same vein, recent findings from the Global University Entrepreneurial Spirit Students' Survey project (GUESSS - Sieger, et al. 2014; Tognazzo, Gubitta and Gianecchini, 2016) conducted in 34 countries and in more than 700 universities suggest that 10.7% of all male students strive for an entrepreneurial career path, compared to only 6.6% of all female students. The differences are even larger, five years after completion of studies: on average 35.1% of all male students aspire to be entrepreneurs, but only 27.5% of all female students. The aforementioned studies raises questions as to why the rate of men's venture creation exceeds that of women and what factors explain these differences (Sarri and Trihopoulou, 2005; Piachentini, 2013).

Research has suggested the existence of the gender gap in entrepreneurial orientation and in the motivation, and intention to become an entrepreneur (Mueller and Dato-on, 2013; Schlaegel and Koenig, 2014). The image of the entrepreneur has traditionally been masculinized and rooted in masculine discourse (Ahl, 2006). Moreover, it has been found that

¹ Part of this chapter was published as: Zampetakis, L.A., Bakatsaki, M. Litos, Ch., Kafetsios, K., and Moustakis, V. (2017). Gender-based Differential Item Functioning in the Application of the Theory of Planned Behavior for the Study of Entrepreneurial Intentions. *Frontiers in Psychology–Organizational Psychology*, Vol. 8, article 451, doi: 10.3389/fpsyg.2017.00451

for women who work in gender incongruent occupations dominated by men, the experience of discrimination has a negative association with their well-being (Di Marco et al., 2016; Maddox, 2013). Being a member of two traditionally unrelated groups (i.e., being a woman and an entrepreneur) is not an easy task for women (Zampetakis et al., 2016).

Research has drawn on several theoretical perspectives when considering business startup motivation, including innovation theory (Stewart et al., 1999) or social and human capital theory (Langowitz and Minniti, 2007). In recent years Ajzen's (1991) theory of planned behavior (TPB) is often used as a framework for predicting entrepreneurial motivation (Maes, Leroy and Sels, 2014; Schlaegel and Koenig, 2014). According to the TPB, there are three key factors that influence an individual's intention (INT) to start a business, these being: (i) attitudes towards entrepreneurship (ATT), that is a person's overall assessment of the advantages and disadvantages of entrepreneurship, (ii) subjective norms (SN), that is a person's perception of the social pressure from significant others to perform the behavior (i.e., start a business), and (iii) perceived behavioral control (PBC) that is the perceived ease or difficulty of starting a business. The TPB suggests that INT results from positive ATT, positive SN and feelings of control over the creation process.

On average men compared to women have higher INT (Haus et al., 2013). The gender-related differences found in entrepreneurial motivation may be attributable to real and valid differences in constructs used, such as ATT and PBC. According to Maes et al. (2014) women are driven toward entrepreneurship by motives that facilitate a balance in business and personal life, that are less dominant in predicting personal attitude. Moreover, women seem to display lower internal feelings of control than men that are more dominant in predicting perceived behavioral control.

However, the gender-related differences found in entrepreneurial motivation could also depend on the properties of the instruments being used in research raising issues of construct validity (Bird and Brush, 2002; Jennings and Brush, 2013). What is common in contemporary entrepreneurship research studies is that the often adoption of self-report techniques and structured questionnaires for the assessment of entrepreneurship related variables, such as the ones used in the TPB (Henry, Foss and Ahl, 2016). Although scales observe differences in scores between groups, differences may also be due to a characteristic of test items other than the scale attribute. Research on female entrepreneurship has often been criticized for using instruments developed for male entrepreneurs, making it impossible to capture anything differentially feminine while women are more likely to appear inadequate in comparison to men (Ahl, 2006; Stevenson, 1986). These instruments are superimposed on women, and not tested with appropriate methods for measurement equivalence (or Differential item functioning-DIF; Holland and Wainer, 1993), thus missing any potential important differences between the male/female entrepreneurial endeavors.

DIF occurs when a test or a survey item (i.e., a question) functions differently for a reference group (e.g., males) of respondents compared to focal group (e.g., females) respondents, after controlling for the level of the attribute being measured (Millsap, 2012). For example, an item exhibits DIF if the probability of males responding to a specific category differs from females when they both are operating at the same overall level on the construct (Crane et al., 2006; Holland and Wainer, 1993). Awareness of this bias is of particular importance where scale scores are used to investigate gender differences and ensure that derived scores are comparable across groups.

A lack of measurement equivalence at the item level, may lead to spurious mean differences in the observed scores between male and female participants, because one cannot be certain there is a meaningful difference, thereby making mean score differences uninterpretable (Millsap, 2012). Furthermore, the existence of DIF across genders for entrepreneurship-related variables, could lead to scores of questionable meaning and interpretation depending on the gender of the respondent, because DIF suggests that the items do not relate to the construct of interest in the same way. In that situation, scores would not be comparable between males and females; a particular score may have a different meaning for men than it does for women. Taken together, detection of DIF is important as it can influence the psychometric properties of an instrument and mean score comparisons (e.g., Church et al., 2011).

There are several ways in which gender stereotypes, and/or social constructions regarding entrepreneurship and family roles could differentially affect men and women's responses to entrepreneurship-related constructs. According to gender role theory traditional gender roles prescribe that women's role should be based around family, while men's role should be more focused on work (e.g. Gutek et al., 1991). Moreover, entrepreneurship is considered to be a gendered phenomenon (Jennings and Brush, 2013). Because women feel more pressure to have a family centered identity, items such as "A career as entrepreneur is attractive for me", or "Among various options, I would rather be an entrepreneur" may be interpreted by men and women to indicate differing levels of ATT. Thus, a male respondent and a female respondent with the same moderate level of ATT might answer this item differently. A male respondent might consider his moderate level of ATT as warranting high agreement with these items, since he and the people around him tend to perceive entrepreneurship as a stereotypically masculine endeavor (Jennings and Brush, 2013). A female respondent with the same moderate level of ATT might disagree with this item, since her moderate level might be construed by her and those around her as being too low, as society generally expects women's identity to reside in the family sphere (i.e., social desirable responding). Socially desirable responding, could influence responses and lead to DIF, as men and women may be uncomfortable providing answers that fall outside of societal expectations.

Similarly, an item on the INT scale such as "Spend time learning about starting a firm" may indicate a different level of INT for men than it would to female respondents. For

example, a male respondent and a female respondent with the same high level of INT might respond to such an item differently. The male respondent may endorse strong agreement with the item, since men are generally expected to be more involved in business startup, compared to women.

Nevertheless, the presence of DIF at the item level does not necessarily imply DIF at the scale level (differential test functioning-DTF). Conversely, having no or little DIF at the item level does not imply that the scale as a whole is measurement-invariant (Penfield and Algina, 2006). Research provides evidence that DIF can influence the psychometric properties of test scores (e.g., coefficient alphas, score variances) and depending on its direction, DIF can increase or decrease sum scores (Li and Zumbo, 2009). DIF favoring women might increase women's scores relative to men's scores, while DIF favoring men might do the opposite. DTF analyses allow assessing the overall impact of DIF effects with all items being taken into account simultaneously.

Although testing for DIF is a quite common practice in other social science research domains (such as psychology) applications to entrepreneurship related constructs are rare. One notable exception is a study that analyzed the essential dimensions of enterprising personality (Suárez-Álvarez et al., 2014) regarding gender-related DIF. The researchers found that nine out of the 127 items showed DIF as a function of students' gender, in constructs such as optimism, innovativeness, self-efficacy, risk taking and stress tolerance. In another study, Maes et al. (2014) used Ajzen's (1991) TPB as a theoretical framework and analyzed the measurement part of the model, at the indicator level, testing the hypothesis that students' gender moderates the strength of the relationship between certain indicators and their respective factors. Their analyses indicated important gender differences in the factors that shape entrepreneurial intentions. Finally, entrepreneurial intention is not restricted to students or unemployed people. For example it is plausible that people may have the intention to launch a business while retaining their "day job" for some time (i.e., hybrid entrepreneurs; Raffiee and Feng, 2014).

In summary, although reports of gender-specific differences in constructs used in entrepreneurship research may reflect true distinctions in entrepreneurial intentions between men and women, these same effects may simply be an artifact of gender differences in the linguistics used to describe entrepreneurial phenomena. Given the various mechanisms by which the interpretation of the TPB scales could vary between men and women, the objectives of this study were (1) to test the main antecedents of entrepreneurial behavior (Kautonen, Van Gelderen, and Fink, 2015) that is, ATT, SN, PBC and INT, using indicators used in previous research for DIF regarding gender and (2) to examine the implications of DIF at the scale level using analyses of DTF.

2. Differential item functioning

Researchers are often interested in making profound comparisons between individuals and groups in order to provide significant and narrow focused results. Taking into account that scores of various psychometric measures do not always reflect authentic differences in accordance to the construct measured, the development and implementation of more accurate and efficient statistical detection procedures are required. Test bias implies originally a deficiency in the validity of the statistics made from test scores, resulting in biased conclusions against individuals with certain characteristics or for some demographic groups of individuals. The explicit difference between groups is usually blended with the actual group difference and the item difference. However, classical test theory techniques fail to separate possible “bias” from true mean differences, as analyses are performed on the test as a whole rather than on particular items. According to a more contemporary view of validity, validity is a property both of the measurement tool and the inferences made from that tool (Zumbo, 1999). In such a way, the use of more sophisticated assessment techniques may provide substantial outcomes regarding the investigation of inter-group differences and the interpretation of them as a result of particular statistical decisions.

A modern scheme of evaluating test or item bias is the Differential Item Functioning (DIF) (Crane, van Belle, & Larson, 2004; Holland & Wainer, 1993). DIF analyses involve a number of statistical methods that are used to identify differences between subgroups (e.g., different age groups, men and women, or different types of employees) in the way they respond to particular items within a scale, after having controlled for possible group differences (Camilli & Shepard, 1994; Dorans & Holland, 1993; Swaminathan & Rogers, 1990; Zumbo, 1999). The presence of DIF indicates that an undeliberate value affects the item answers of the participants' responses, resulting in different mean responses between the two groups: the reference and the focal group. Thus, the contravention of two important assumptions may take place: i) unidimensionality, and ii) parameter variance. Nevertheless, the presence of item DIF does not necessarily imply the presence of DIF at the scale level (differential test functioning-DTF). Accordingly, having no or little item-DIF does not imply that the scale as a whole exhibits measurement variance (Penfield & Algina, 2006). DTF analyses allow evaluating the overall impact of item-DIF effects considering all items simultaneously.

Differential Item Functioning (DIF) should be distinct from the constructs of *test bias*, *item analysis*, *item bias*, *item impact*, and *measurement invariance* (Camilli & Shepard, 1994; Zumbo, 1999, 2003). Notably,

- *Test bias* (Cole, 1981; Osterlind, 1983) refers to the standardized errors concerning the content of test scores associated to group membership. It constitutes a statistical quality of the entire test and is analyzed through the total test scores. This means that the characteristics of each item can be quite different from the characteristics of the sum of the items. For example, if the number of items against one group is

approximately equal to the number of items that give advantage to the other group, then the biases may eclipse in the total score (Hong & Roznowski, 2011).

- *Item analysis* consist a series of statistical methods to examine the performance of individual items, and it is important when developing or adapting a measure.
- *Item impact* refers to group differences in performance on a test or specific items and it is present when examines from different groups have unequal probabilities of responding correctly to an item because there are true group differences regarding the latent ability being measured by the item.
- Conversely, DIF refers to differences in the operation of an item among groups that are matched on the variable/construct measured by the test (Dorans & Holland, 2003). DIF compares the relative distribution of the item conditioned on the sum score or some estimate of the latent attribute, contrary to the item impact.
- *Item bias* is present when examinees of one group have less probabilities to answer an item correctly than the examinees of the other group due to characteristics of the item or irrelevant testing conditions. DIF is required, but not sufficient, for item bias.
- *Measurement invariance* concerns the question of whether the factors and model parameters (i.e., intercepts, errors) are equivalent across multiple groups (Vandenberg & Lance, 2000). Measurement invariance is usually referred to multi-group confirmatory factor analysis and covariance structure analysis.

Although *test bias*, *DIF* and *measurement invariance* exhibit differences in specific parts, the common aspect among them is that an underlying variable is not distributed equally to the observed level.

DIF analyses were first employed in educational settings to investigate whether particular items in a test were arbitrary to particular groups (e.g., female gender, a specific ethnic group), yet having modified the group's overall test ability. DIF has been widely studied, also, in psychometric measurement (e.g., assessment of cross-cultural response differences or translations of questionnaire items; e.g., see Johnson, Spinath, Krueger, Angleitner, and Riemann, 2008; Church, Alvarez, Mai, French, Katigbak, & Ortiz, 2011). Although testing for DIF is a quite common practice in social science research (such as in psychology) applications to entrepreneurship related constructs are limited. One exceptional study is that of Suárez-Álvarez and colleagues (2014) who analyzed the enterprising personality regarding gender-related DIF. The researchers found that nine out of the 127 items showed DIF as a function of students' gender, in constructs such as optimism, innovativeness, self-efficacy, risk taking and stress tolerance. In another study, Krinstensen, Bjorner, Christensen & Borg (2004) analyzed job demand scales with regard to DIF. They demonstrated that the items used in the original demand scale functioned very differently for different jobs. Specifically, they found that if many items on 'fast work pace' are included in a scale, a number of blue-collar jobs will be identified as high-demand jobs.

Research has shown that DIF can influence the psychometric characteristics of test scores (e.g., coefficient alphas, score variances) and can increase, or decrease, sum scores (Li & Zumbo, 2009). DIF is assessed by comparing the ICCs of different groups on an item, focusing on how the psychometric properties of the test may fluctuate as function of variation within the sample. If the ICCs are equal or almost equal for each group compared, then the item does not exhibit DIF. The presence of DIF might degrade the validity of a test (Li & Zumbo, 2009). Not excluding DIF items of the test may also have a significant effect on other psychometrical procedures. Consequently, the decision of when the DIF analysis should be practiced seems fundamental and it usually depends on the general goals of each study. For example, in the case of a study where an established test is used, DIF analyses should be conducted before the final scoring is done, whereas in the case of the developing a new scale, DIF analyses should be conducted both at the pilot study and before cut-off scores are set (Zumbo, 1999). However, there is little empirical evidence regarding the impact of DIF on the subsequent statistical hypothesis tests (i.e, Type I error rate and effect size of hypothesis tests).

DIF may be present in a test because either: i) DIF analyses have not been used as a part of item analyses, ii) it is out of knowledge of the researcher and iii) items left marked out as DIF in a test. It is possible that item- DIF not be detected during item analysis because DIF is a statistical characteristic of the sample (Li & Zumbo, 2009). The primary question addressed through these analyses is whether the group membership: (g) is associated with differential responses, (xi) to an item (x) for respondents at the same level of a matching criterion (θ). In particular, the grouping variable (g) may be dichotomous involving only two categories such as male/female, or polytomous. The item response (xi) may be dichotomous (e.g., yes/no) or ordered categorized (e.g., poor/fair/good; Likert type scales). The matching criterion variable (θ) is used to explain the different levels of functioning or ability of each group. For some DIF methods, the sum of the items is used as a matching variable whereas in other methods a latent variable is used. The type of score has emerged as an important issue in the literature as most of the DIF methods target on binary items. More recent statistical techniques have introduced new approaches to measuring DIF for ordinal variables.

2.1 Types & Detection Methods of DIF

Two different types of DIF are the uniform DIF and the non-uniform DIF (Mellenbergh, 1982). The uniform DIF occurs when in respect of the ability level, the test item is easier for one group than it is for another. When the non-uniform DIF occurs there is an interaction between group membership and ability level (Swaminathan & Rogers, 1990). Non-uniform DIF can be split into two types (crossing and non-crossing). In crossing non-uniform DIF, for one end of the ability level spectrum the item is easier for members of one group, whereas at the other end of the ability level the item is easier for members of the other group. Detection procedures should attempt to assess both uniform and non-uniform DIF. Although, in general, uniform DIF is the most common type of DIF, previous applied research has found

non-uniform DIF in operational tests as well (e.g. Hambleton & Rogers, 1989). Therefore, just testing for uniform DIF is insufficient. Nevertheless, not all methods can detect non-uniform DIF.

DIF assessment can be conducted through a variety of statistical methods, both in test of dichotomous (Millsap & Everson, 1993) and polytomous (Penfield & Lam, 2000) items. Potenza & Dorans (1995) suggest a two-dimensional classification structure of the diverse DIF methods. One dimension is observed score vs latent score approach; the other dimension is parametric vs non-parametric approach. The dimension of observed vs latent score approach determines the type of matching variable or the variable measured.

In the early development of DIF, researchers employed more conventional statistical techniques, such as the analysis of variance, the delta-plot or transformed item difficulty, and the Golden rule procedure (Camilli & Shepard, 1987; Faggen, 1987; Linn & Drasgow, 1987). The literature of DIF is vast presenting a wide range of methodologies, including contingency table, item response theory (IRT), structural equation modelling and logistic regression methods. More recent methods include the Mantel-Haenszel chi-square and Mantel-Haenszel common odds ratio procedures (Holland & Thayer, 1988), the standardization method (Dorans & Kulick, 1986), the logistic regression procedure (Swaminathan & Rogers, 1990) and the item response theory (IRT; Tissen, Steinberg, & Wainer, 1988).

2.2 Item Response Theory (IRT) model

Many DIF detection studies have used statistical techniques based on item response theory (IRT; Thissen, Steinberg, Wainer, 1993). IRT involves a set of latent trait models used to form the psychometric qualities of items and tests, and is composed by three basic factors: i) the Item Response Function (IRF), which constitutes a mathematical function that associates the latent trait with the probability of answering correctly to an item; ii) the Item Information Function, indicating the item's ability to differentiate among examinees, and iii) the Invariance, displaying that the position of the latent trait can be evaluated by any item when the IRF is known.

The main advantage of the IRT DIF model is the use of an underlying (rather than an observed) construct (θ), for the matching criterion. Psychological measurement involves deciding how much of such a latent trait a person possesses (Hambleton & Slater, 1997). A correct response is the result of the interaction between the qualities of item and the respondent's ability, which can be converted into the item characteristic curve (ICC). Each item has its own ICC. The ability level of respondents (θ) is mapped along the X-axis while the odds of answering correctly on the Y-axis.

An item's location (parameter b) is defined as the amount of the latent trait which is necessary in order to have a 0.5 probability of answering correctly to the item. The highest the b parameter is, the highest a respondent needs to be regarding the trait level in order to respond correctly to the item. The Item Parameters Discrimination (α) parameter (slope)

measures the strength of the relationship between the item and θ ; higher slopes indicate that the item can discriminate more sharply between respondents above and below of the level of θ . The more extreme in direction the slope of the curve, the greater the discrimination will be. Another significant parameter is the Item Parameter Guessing (c) which indicates that respondents very low on the latent variable may still have a probability of endorsing the item (i.e., at multiple choice tests). Furthermore, Item Parameters Upper Asymptote (d) shows the probability of respondents high on the latent variable not to endorse the item (De Beer, 2004).

The 4-parameter logistic model:

$$P(x=1|\theta, a, b, c, d) = c + (d-c) * e^{a(\theta-b)} / 1 + e^{a(\theta-b)} \quad (1)$$

If the upper asymptote parameter is set to 1.0 then the model is termed a 3PL.

$$P(x=1|\theta, a, b, c) = c + (1-c) * e^{a(\theta-b)} / 1 + e^{a(\theta-b)} \quad (2)$$

If the lower asymptote parameter is constrained to zero then the model is termed a 2PL, indicating that IRFs vary both in their discrimination and difficulty (location parameter).

$$P(x=1|\theta, a, b) = e^{a(\theta-b)} / 1 + e^{a(\theta-b)} \quad (3)$$

Finally, if the item discrimination parameter is set to 1.0 then the model is termed a 1PL, and it is assumed that all the items of the scale relate to the latent variable equally and differentiate only in difficulty.

$$P(x=1|\theta, b) = e^{(\theta-b)} / 1 + e^{(\theta-b)} \quad (4)$$

Through the item characteristic curve (ICC), the non-uniform type of DIF is observable as the ICCs do not cross, contrary to the uniform DIF where the ICCs cross over one another (Zumbo, 1999). When considered in an IRT framework this means that the item characteristic curve for one group is more to the left than for the other group. In IRT terms this means that the b-parameter is the same (or very similar), whereas the a-discrimination parameter is different, which causes the ICCs to cross in the middle. In non-crossing non-uniform DIF, the item is of similar difficulty for both groups at one end of the ability spectrum, but different difficulties for the groups at the other end of the ability spectrum.

An emerged problem in the IRT DIF could be the groups' divergence regarding their ability distributions (Zumbo, 2003) which leads weakness in interpretation of results. Other disadvantages of IRT model are linked to issues of increased sample size demands and the need of more specialized computer software.

The most common IRT methods for DIF include signed area tests (for uniform DIF), unsigned are tests (non-uniform DIF), and nested model testing. Another IRT based technique for detecting DIF is the Likelihood-ratio test, through the comparison of the ratio of two models.

2.3 Logistic regression

Logistic regression is the most widely used method for detecting DIF due to its simple, robust and flexible implementation (Millsap & Everson, 1993; Crane, Gibbons, Jolley, van Belle, 2006). Logistic regression is a generalized linear model which is applied for the calculation of the probability of giving a correct answer to a dichotomous/binary item considering a score (as a criterion variable) and group membership $P(Y = 1 | X, G)$. Group membership usually refers to a focal group ($G = 1$) and a reference group ($G = 0$). X represents the ability score of this person (meaning the total test score), β_0 is the intercept parameter and β_1 is the slope parameter. Thus, the logistic regression procedure will use the item response (0 or 1) as the dependent variable.

The logistic equation for predicting the probability of a correct answer to a binary scored item is:

$$P(Y = 1|X,G) = \exp(\beta_0 + \beta_1 X + \beta_2 G + \beta_3 X*G) / 1 + \exp(\beta_0 + \beta_1 X + \beta_2 G + \beta_3 X*G)$$

In order to determine the presence of DIF, we want to know whether the regression coefficient of group membership (β_2) and interaction coefficient (β_3) are significantly different from 0. β_2 will be different when respondents in one group succeed higher on the item than respondents in the other group, matched with the ability level (uniform DIF). β_3 will be different when there is an interaction effect between group membership and total test score (non-uniform DIF).

An advantage of logistic regression methods is that it analyses both uniform and non-uniform DIF (Swaminathan, 1994). Another advantage of the logistic regression method is that if more than two groups are to be compared, extra variables may be included in the regression model to indicate the effect of each group with respect to a reference category. DIF detection methods with logistic regression for polytomous items are extensions of the logistic regression model for dichotomous items (French & Miller, 1996; Zumbo, 1999).

Moreover, the binary logistic regression model can, also, be used with ordinal item scores (Zumbo, 1999). Zumbo (1999) proposed a DIF detection method that combines the Ordinal Logistic regression (OLR) method, which works with cumulative logits model, and an R^2 measure of effect size in order to detect DIF and determine its magnitude in polytomous items. Ordinal logistic regression is extensively used for examining DIF for items included in personality and social psychological measures. In ordinal LR, a score is evaluated as a linear function of the independent variables and a set of cut points.

Logistic regression has been found to be more powerful than an IRT based analysis of variance method at detecting (non-uniform) DIF (Whitmore and Schumacker, 1999).

2.4 Mantel-Haensel method

Furthermore, DIF methods may be divided into parametric methods and non-parametric methods. Parametric tests may be more powerful and stable. Contingency table methods, and particularly Mantel-Haensel (MH), are non-parametric methods. These methods are straightforward to perform and do not require any model assumptions to be satisfied, but are

unable to detect non-uniform DIF. The MH procedure is simple to compute and implement, and allows for significance testing (Swaminathan & Rogers, 1990; Rogers and Swaminathan, 1993). However, the MH-procedure is designed to detect uniform DIF and may not be so powerful at detecting non-uniform DIF. The MH-test statistic is computed by comparing the observed frequency of correct and incorrect answers (split out by group membership and ability level), to the expected frequency if there were no DIF. If the difference is significant, the conclusion is that there is DIF.

Another procedure that has got some attention in the past is the Breslow-Day procedure for DIF detection. It was proposed by Breslow and Day in 1980. It compares the odds ratio of a correct response per group membership given an ability level. A larger difference is an indicator of non-uniform DIF. The BD-procedure can be combined with the MH-procedure in what is called the Combined Decision Rule (CDR), because the MH-procedure is good at detecting uniform DIF and the BD-procedure is good at detecting non-uniform DIF (Penfield, 2003). Both procedures are carried out with a correction for multiple testing, and if either is significant DIF is said to be present.

2.5 Methodological considerations of DIF Analyses

Sample size. One major consideration for DIF analyses is the sample size and more specifically, the number of people included into each subgroup- the reference and focal group. The basic question is whether the sample is large enough in order to succeed adequate statistical power for detecting DIF.

According to existing literature, there are no demonstrated directions regarding the amount of people included-it is underlined that this is dependent on the type of method used, the distribution of item responses in the two groups, and the number of respondents in each group (Scott et al., 2010). For example, when binary logistic regression is used, Zumbo (1999) has found that 200 respondents per group is a sufficient number. However, other researchers (Scott et al., 2009) suggested that more participants needed for two-item scales.

Determining the considering variable/matching criterion. In the case that the matching criterion is the sum of the test score, the item examined should be included in the summary (Teresi, 2006).

Purification. Purification refers to the exclusion of items showing the most intense DIF and not including them to the matching criterion. In such a case, it is crucial to consider the length of the instrument and the influence of our statistical decisions on the matching criterion. Scott et al. (2010) argue that for scales with a small number of items, these items should not be removed.

3. Method

3.1 Sample and procedures

Survey data were collected from 1800 individuals from various parts of Greece. The majority of participants (34.1%) were students from various disciplines (e.g., psychology, education, engineering, business and science students). Unemployed participants were 32.5% while 33.4% were employed in the private (17.5%) and the public sector (15.9%).

The study was carried in accordance to the principles expressed in the Declaration of Helsinki and was approved by the authors' institutional ethics committees. Surveys were administrated to participants through personal contact by the study authors with written informed consent from all participants. A variety of recruitment methods were used, including word of mouth, advertising through social network sites, and course credit. The study was described as examining "Factors affecting career choice and development". Participants were informed that anonymity was guaranteed and that they had the option to withdraw from the study at any moment. Data collection took place at the beginning of 2016 and lasted approximately six months.

In sum, the sample consisted of 1800 participants (50.4% female), the mean sample age was 32.05 years ($SD = 12.46$), range was 18 to 59 years. The majority of respondents (61.8%) had a university/college degree; four hundred and thirty three participants (24.1%) reported that one of their parents owned a full time business most of the time, while they were growing up, eighty seven percent reported that they know an entrepreneur in their close environment, and twenty seven percent of participants reported that they had some experience from business start-up procedures. The survey instrument contained items representing the theoretical constructs along with demographic data. Items referring to the same construct were positioned in different locations throughout the questionnaire.

3.2 Measurement of theoretical constructs

The specific measures used in the analysis, along with sample items of the relevant constructs, are outlined. All the main constructs included in the analysis were assessed with self-report measures based on multi-item scales. The back-translation procedure recommended by Brislin (1980) was followed for the translation of the items into the Greek language.

Entrepreneurial Intention (INT). We assessed participants' entrepreneurial intent using a scale originally developed by Thompson (2009). This is a reliable and internationally applicable individual entrepreneurial intent scale. It includes ten items, four of which are distracter items that act as red herrings and were not included in scale analyses. Sample items are: "Intend to set up a company in the future", "I have no plans to launch my own business" (reverse scored). Responses to the six items were made on 7-point Likert-type scales (1 = strongly disagree, 7 = strongly agree). Coefficient alpha for this scale was 0.89.

Attitudes towards entrepreneurship (ATT). We assessed ATT using the five item scale from Liñán and Chen (2009). Sample items are: "A career as entrepreneur is attractive for me", "Among various options, I would rather be an entrepreneur". Responses to the five

items were made on 7-point Likert-type scales (1 = strongly disagree, 7 = strongly agree). Cronbach's reliability for this scale was 0.88.

Subjective Norm (SN). We assessed SN using the three item scale from Liñán and Chen (2009). Students were asked: "If you decided to create a firm, would people in your close environment approve of that decision?" Items were (a) Your close family, (b) Your friends and (c) your fellow students. Responses to the three items were made on 5-point Likert-type scales (1 = total disapproval, 5 = total approval). Cronbach's reliability for this scale was 0.80.

Perceived Behavioral Control (PBC). We assessed PBC using five items from the scale of Liñán and Chen (2009). Sample items are: "To start a firm and keep it working would be easy for me", "I can control the creation process of a new firm". Responses to the five items were made on 7-point Likert-type scales (1 = strongly disagree, 7 = strongly agree). Cronbach's reliability for this scale was 0.84.

3.3 Methods of analyses

First, the fit of the measurement model was examined (that is, the four constructs of the TPB) for the whole sample and separately for men and women. Analysis of Moment Structures (AMOS software, version 7.0) (Arbuckle, 2006) was used. Because the χ^2 statistic for model fit is highly sensitive to sample size, we employed several statistics to assess model fitness (Shook, et al. 2004): (a) Root Mean Square Error Approximation (RMSEA): 0 = an exact fit, < 0.05 = a close fit, 0.05 – 0.08 = a fair fit, 0.08 – 0.10 = a mediocre fit, and > 0.10 = a poor fit (AMOS also computes a 90% confidence interval around RMSEA); (b) Comparative Fit Index (CFI): best if above 0.90; (c) Akaike Information Criterion (AIC). For model comparisons, smaller values in AIC represent a better fit of the model.

Second, DIF analyses were performed. Females served as the focal group with males as the reference group in the gender DIF analyses. The Mantel–Haenszel (MH) χ^2 procedure, as implemented in the DIFAS (Differential Item Functioning Analysis System - version 5.0) software (Penfield, 2005), was used. The MH statistical procedure consists of comparing the item performance of two groups (reference and focal), whose members were previously matched on the total score of the scale (the matching is done using the observed total test score as a criterion or matching variable). The MH statistic is based on a contingency table analysis. The critical values for this statistic are 3.84 ($\alpha = 0.05$) and 6.63 ($\alpha = 0.01$) (Penfield, 2013). The results offered by the DIFAS software are displayed in two tables: The first of these shows the DIF statistics, while the second presents the conditional differences in the mean item scores between the reference and focal groups at ten intervals across the matching variable continuum. In the DIF analysis for polytomous items DIFAS software includes several statistics including the MH χ^2 , the Liu-Agresti cumulative common log-odds ratio (L-A LOR), the estimated standard error (SE) of the L-A LOR and the Cox's Noncentrality Parameter Estimator (COX'S B), with its corresponding SE. The L-A LOR is based on the

Haenszel common-odds ratio generalized to polytomous data and represents the log odds ratio of one group selecting a response option compared with the other group when the level of the overall measured construct is the same (Penfield, 2013). Positive values indicate DIF in favor of the reference group, and negative values indicate DIF in favor of the focal group. The standardized Liu-Agresti Cumulative Common Log-Odds Ratios (LOR Z) was also used. A value greater than 2.0 or less than -2.0 may be considered evidence of the presence of DIF (Penfield and Algina, 2003). Finally, Cox's B is similar to the MH statistic except that it uses the hypergeometric mean. It is distributed similarly to L-A LOR that is, positive values indicate DIF in favor of the reference group, and negative values indicate DIF in favor of the focal groups. The size of the DIF was interpreted using a widely accepted classifying system whereby DIF in polytomous items is considered negligible if L-A LOR < 0.43, moderate if between 0.43 and 0.64, and large if > 0.64 (Penfield, 2007).

Third, DTF analysis was conducted to examine measurement invariance directly at the scale level and was analyzed using the ν^2 statistic in DIFAS (version 5.0) (Penfield, 2005, 2013). The ν^2 statistic allows quantifying the overall DIF effect across the items of a scale (Penfield and Algina, 2006). A scale with a DIF effect variance of ν^2 below 0.07 can be classified as having small DTF, whereas DTF would be considered medium for $0.07 \leq \nu^2 \leq 0.14$ and large for $\nu^2 > 0.14$ (Penfield, 2013; Penfield and Algina, 2006). To examine whether differential functioning of the items influenced gender differences on the TPB scales, we computed Cohen's d for gender differences (Cohen, 1988) for each scale. First, Cohen's d was computed using all items, next items with large level of DIF were removed and lastly items with moderate a large levels of DIF were removed.

4. Results

4.1 Descriptive summary and correlations

We present means, standard deviations and correlations across the four variables of the TPB, for the entire sample and separately for men and women participating in the study, in Tables 1 to 3.

Table 1. Descriptive statistics and inter-correlations for the total sample ($N=1800$)

	M	SD	1	2	3	4	5	6
1. Gender ^a	1.50	0.50	-					
2. Age	32.05	12.46	0.05	-				
3. ATT	4.29	1.44	-0.13**	-0.01	(0.88)			
4. PBC	2.81	1.24	-0.17**	0.07**	0.45**	(0.83)		
5. SN	4.66	1.42	-0.05*	-0.18**	0.34**	0.29**	(0.80)	
6. INT	2.63	1.40	-0.18*	-0.03	0.54**	0.68**	0.26**	(0.89)

NOTE: ^a Gender is coded: 1= male 2 = female; Cronbach's alpha reliabilities are in parenthesis

* $p < 0.05$ (two tailed)

** $p < 0.01$ (two tailed)

Table 2. Descriptive statistics and inter-correlations for men in the sample ($N=892$)

	M	SD	1	2	3	4	5
1. Age	31.98	12.66	-				
2. ATT	4.49	1.41	0.07	(0.87)			
3. PBC	3.03	1.27	0.09**	0.45**	(0.84)		
4. SN	4.73	1.43	-0.18**	0.33**	0.26**	(0.80)	
5. INT	2.89	1.46	0.02	0.54**	0.67**	0.26**	(0.88)

NOTE: Cronbach's alpha reliabilities are in parenthesis

* $p < 0.05$ (two tailed)

** $p < 0.01$ (two tailed)

Table 3. Descriptive statistics and inter-correlations for women in the sample ($N=908$)

	M	SD	1	2	3	4	5
1. Age	32.11	12.27	-				
2. ATT	4.11	1.45	0.03	(0.89)			
3. PBC	2.60	1.17	0.06	0.43**	(0.86)		
4. SN	4.60	1.40	-0.17**	0.35**	0.31**	(0.81)	
5. INT	2.38	1.28	-0.06	0.53**	0.67**	0.25**	(0.88)

NOTE: Cronbach's alpha reliabilities are in parenthesis

** $p < 0.01$ (two tailed)

Results of independent t -tests, suggested that men scored higher compared to women in ATT [Men: $M_{ATT} = 4.49$; Women: $M_{ATT} = 4.11$; $t(1798) = 5.572$, $p < 0.001$], PBC [Men: $M_{ATT} = 3.03$; Women: $M_{ATT} = 2.60$; $t(1780) = 7.432$, $p < 0.001$], SN [Men: $M_{ATT} = 4.73$; Women: $M_{ATT} = 4.60$; $t(1798) = 2.117$, $p = 0.034$] and INT [Men: $M_{ATT} = 2.89$; Women: $M_{ATT} = 2.38$; $t(1762.19) = 7.953$, $p < 0.001$] (see Tables 2 and 3). These results are in line with previous research suggesting significant gender differences in terms of perceived feasibility (expressed as PBC), perceived desirability (expressed as ATT) and INT (Dabic, et al., 2014; Kolvereid, 1996; Sieger, et al., 2014). Moreover, results from one way ANOVA

analyses suggested that employees working in the private sector and unemployed had higher INT compared to the other two groups of participants. We have found no statistically significant differences between students and participants working in the public sector in terms of ATT, PBC and INT; students scored higher to SN [$t(475.77) = -5.897, p < 0.001$].

4.2 Confirmatory factor analyses

Results from the confirmatory factor analysis (CFA) of the measurement model for the whole sample, suggested an adequate fit to the data: $\chi^2(146, N = 1800) = 1796.39, p = 0.000$; RMSEA = 0.079 (90% CI: 0.075-0.081); CFI = 0.916; AIC = 1922.39. All factor loadings are significant at the 0.001 level. To further assess discriminant validity of the constructs, we compared the measurement model with a model that constrained the correlations among the constructs to be equal and examined the change in chi-square (χ^2). A model comparison between the unconstrained measurement model and a model that constrained the correlations among the constructs to be equal produces a significant difference in χ^2 , suggesting the presence of discriminant validity among the selected constructs ($\Delta\chi^2 = 634.97, \Delta df = 5, p < 0.001$). The fit indices indicated also an adequate model fit for women [$\chi^2(146, N = 908) = 1048.13, p = 0.000$; RMSEA = 0.083 (90% CI: 0.076-0.087); CFI = 0.911; AIC = 1174.13] and men participants [$\chi^2(151, N = 892) = 999.03, p = 0.000$; RMSEA = 0.081 (90% CI: 0.076-0.085); CFI = 0.908; AIC = 1125.03].

4.3 Differential Item Functioning (DIF)

In Table 4 we present the Mantel χ^2 , L-A LOR, LOR Z and COX'S B values for all the items in the four constructs. One item in the ATT scale: Item 4 - "Being an entrepreneur would entail great satisfactions for me", exhibited a statistically significant but negligible DIF based on the L-A LOR criteria outlined above (Mantel $\chi^2 = 2.871, p < 0.10$) (Penfield, 2007). No DIF was found for the PBC and SN scale. Finally one item in the INT scale: Item 6- "Spend time learning about starting a firm" exhibited a statistically significant but negligible DIF (Mantel $\chi^2 = 4.566, p < 0.05$). The negative L-ALOR of the item (4) in the ATT scale indicates DIF favoring the focal group (women), i.e., for the same level of construct easier to endorse for women. The positive L-ALOR of the item (6) in the INT scale indicates DIF favoring men.

Table 4. Results of the differential item functioning (DIF) analyses

Constructs	Item Content	Mantel χ^2	L-A LOR (SE)	LOR (Z)	COX'S B (SE)
1. ATT	1. Being an entrepreneur implies more advantages than disadvantages to me	0.806	0.082 (0.092)	0.891	0.042 (0.046)
	2. A career as entrepreneur is attractive for me	0.433	-0.064 (0.097)	-0.660	-0.035 (0.053)
	3. If I had the opportunity and resources, I'd like to start a firm	1.447	0.116 (0.097)	1.196	0.062 (0.052)
	4. Being an entrepreneur would entail great satisfactions for me	2.871*	-0.167 (0.099)	-1.687	-0.1 (0.059)
	5. Among various options, I would rather be an entrepreneur	0.007	-0.008 (0.097)	0.082	-0.005 (0.055)
2. PBC	1. To start a firm and keep it working would be easy for me	2.198	0.146 (0.098)	1.49	0.073 (0.0494)
	2. I am prepared to start a viable firm	0.075	0.029 (0.11)	0.264	0.017 (0.0605)
	3. I can control the creation process of a new firm	2.342	-0.15 (0.098)	-1.531	-0.082 (0.0536)
	4. I know the necessary practical details to start a firm	0.306	0.058 (0.103)	0.563	0.025 (0.046)
	5. If I tried to start a firm, I would have a high probability of succeeding	0.709	-0.079 (0.095)	-0.832	-0.039 (0.0468)
3. SN	1. Your close family	0.032	0.018 (0.099)	0.182	0.009 (0.049)
	2. Your friends	1.896	0.144 (0.104)	1.385	0.09 (0.0655)
	3. Your colleagues	1.568	-0.124 (0.1)	-1.24	-0.064 (0.051)
4. INT	1. Intend to set up a company in the future	0.439	0.064 (0.096)	0.667	0.025 (0.038)
	2. Never search for business start-up opportunities	0.053	-0.024 (0.105)	-0.229	-0.011 (0.047)
	3. Are saving money to start a business	2.144	-0.162 (0.109)	-1.486	-0.073 (0.051)
	4. Do not read books on how to set up a firm	0.013	-0.014 (0.118)	-0.119	-0.006 (0.053)
	5. Have no plans to launch your own business	1.19	-0.116 (0.107)	-1.084	-0.058 (0.054)
	6. Spend time learning about starting a firm	4.566 **	0.232 (0.111)	2.09	0.115 (0.054)

NOTE: * $p < 0.10$; ** $p < 0.05$; Negative L-A LOR values indicate DIF favoring the focal group (women), i.e., for the same level of construct easier to endorse for the focal group. Conversely, positive L-A LOR values indicate DIF favoring men. Classification for L-A LOR: DIF is considered negligible if L-A LOR < 0.43, moderate if between 0.43 and 0.64, and large if > 0.64. Results meeting important criteria for DIF are marked in bold

4.4 Differential Test functioning (DTF)

We present the ν^2 coefficients for the four TPB constructs in Table 5. Based on criteria for assessing the size of DTF (Penfield and Algina, 2006), the DTFs were deemed not to warrant concern (all ν^2 coefficients, were below 0.07).

Table 5. Results of the differential test functioning (DTF) analyses

Scale	ν^2 (SE)
1. ATT	0.001 (0.007)
2. PBC	0.002 (0.006)
3. SN	0.003 (0.01)
4. INT	0.005 (0.009)

5. Discussion

The primary goal of this study was to investigate the validity and meaningfulness of the main antecedents of entrepreneurial behavior (Kautonen et al., 2015) that is, attitudes towards entrepreneurship, subjective norms, perceived behavioral control and entrepreneurial intentions across gender. Such comparisons have potential theoretical importance in increasing researchers' understanding of the interplay between gender and entrepreneurial motivation and improve the participation rate of women in entrepreneurial activities. We focused on one important prerequisite for such comparisons, measurement invariance. To our knowledge, this is the first examination of gender-based DIF in entrepreneurship-related constructs.

Specifically, this study addressed DIF in the constructs that constitute the Theory of Planned Behavior-TPB, a widely used theoretical framework for the study of entrepreneurial motivation. Our results suggest that there are overall differences in mean scores for men and women in the TPB dimensions, yet the DIF analysis indicated that differences at the item-level are almost nonexistent. Men outperformed women in ATT, PBC, SN and INT. These results are in agreement with previous studies concerning gender differences in entrepreneurial attitudes and intentions (Haus, et al. 2013; Tognazzo et al., 2016). Moreover, the differential test function (DTF) analysis suggested that the effect of DIF across all the items for each scale was negligible.

The study contributes to previous research that uses the TPB model to study entrepreneurial intentions (Maes et al., 2014; Schlaegel and Koenig, 2014). Our results suggest that after controlling for the underlying TPB construct, the response to an item is not related to whether the respondent is male or female. Thus, the TPB constructs appear to

function equivalently for men and women at the item level. Furthermore, our DTF analyses for each TPB construct, where we assessed the overall impact of DIF effects with all items being taken into account simultaneously, suggested that the scales of the TPB as whole are measurement invariant. These findings provide evidence that the constructs used in the present research provide valid comparisons between male and female respondents.

Our findings suggest that actually women tend to demonstrate lower entrepreneurial intentions compared to men (at least in a country such as Greece) and this gender-related difference is not dependent on the properties of the instrument being used. This opens the road for researchers to examine other theoretical variables that influence the lower entrepreneurial intention of women. For example Zampetakis and his colleagues (2016) proposed that gender identity, that is the extent to which people incorporate gender roles into their self-concepts, is a promising construct for the study of gender differences in intentions related to entrepreneurship.

Although our study sheds some light on measurement invariance of the TPB constructs applied to entrepreneurship across gender, it has several limitations that further research can seek to address. First, our study design is cross sectional, where we did not measure actual business startup, but only respondents' intent to start a business. As such, one could consider our INT construct as general attitude to become an entrepreneur. Although our CFA results suggest that ATT and INT are two separate factors, future research could employ longitudinal designs, including actual business startup, in order to validate the INT construct.

Second, our study was limited to a sample of Greek participants. To extend the generalizability of our results, we encourage scholars in this area to examine our proposed model with different samples across different countries. Second, we applied nonparametric DIF detection methods. Nonparametric methods make fewer assumptions concerning the distribution of the latent trait in the population, but have the disadvantage that they rely on an observed score as the matching variable. This suggests that if our measurement contain widespread bias, it is possible that some bias within the measurement was not detected. Future research could use parametric DIF estimates in the framework of item response theory (IRT); IRT-based methods use a latent variable modeling approach.

Third, our analyses were based on manifest grouping variables such as gender, where DIF and DTF results depend on the contrasting group. Future research could benefit from the use of latent DIF detection approaches that relies on the use of mixture IRT models, that is, a combination of IRT and latent class models (see Benítez et al., 2016). The use of mixture IRT models to detect DIF differentiates groups based on an unknown latent grouping variable that is not specified a priori but is determined by the results from the model parameter estimation.

One last consideration concerns the social and economic context in which the study took place. The recent global economic crisis with its peak in 2008 resulted in shocking changes for the labor market: in many countries workers lost their jobs, the work hours

shortened while wage earnings declined (Giorgi, et al., 2015; Pines, et al., 2010). Greece is facing severe economic challenges in recent years. The economic crisis is an important stressor with negative effects on the health of workers and especially women (Mucci, et al., 2016). According to Drydakis (2015) during the Greek economic crisis, women were more negatively affected by unemployment in terms of their physical and mental health in comparison to men. Higher stress regarding employment status may exacerbate gender roles and may have further influenced relative cross-gender differences in entrepreneurial intentions and attitudes.

6. Conclusion

The present study examined differential item function analysis (DIF) in constructs of the TPB, a theoretical framework that is often used for describing entrepreneurial intention. DIF analysis indicated that differences at the item and scale level are almost nonexistent between male and female participants. However, DIF results may not generalize across inventories, especially when they have different theoretical frameworks. As such we believe that DIF should be conducted in constructs used in different theoretical frameworks of entrepreneurship research as testing for DIF enables developers to determine whether the constructs behave differently for women and men. In our opinion, DIF should be a prerequisite of meaningful group comparisons across male and female respondents, for the study of entrepreneurship related phenomena.

References

- Ahl, H. (2006). Why research on women entrepreneurs needs new directions. *Entrepreneurship Theory & Practice* 30(5), 595-621.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes* 50, 179-211.
- Arbuckle, J.L. (2006). *AMOS 7.0. User Guide*. Chicago: SmallWaters Corporation.
- Benítez, I., Padilla, J.L., Hidalgo Montesinos, M.D., and Sireci, S.G. (2016). Using Mixed Methods to Interpret Differential Item Functioning. *Applied Measurement in Education* 29(1), 1-16.
- Bird, B., and Brush, C. (2002). A gendered perspective on organizational creation. *Entrepreneurship Theory and Practice* 26(3), 41-66.
- Brislin, R.W. (1980). "Translation and content analysis of oral and written material," in *Handbook of cross cultural psychology (Vol. 2)*, eds. H.C. Triandis & J.W. Berry. (Boston: Allyn & Bacon), 398-444.
- Camilli, G., & Shepard, L. A. (1987). The inadequacy of ANOVA for detecting test bias. *Journal of Educational Statistics*, 12, 87-99.

- Camilli, G., & Shepard, L. A. (1994). *Methods for identifying biased test items*. Thousand Oaks, CA: Sage.
- Church, A.T., Alvarez, J.M., Mai, N.T., French, B.F., Katigbak, M.S., and Ortiz, F.A. (2011). Are cross-cultural comparisons of personality profiles meaningful? Differential item and facet functioning in the Revised NEO Personality Inventory. *Journal of personality and social psychology* 101(5), 1068-1089.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd ed.)*. Hillsdale, NJ: Lawrence Earlbaum Associates.
- Cole, N. S. (1981). Bias in testing. *American Psychologist*, 36, 1067-1077.
- Crane, P.K., Gibbons, L.E., Jolley, L., and van Belle, G. (2006). Differential item functioning analysis with ordinal logistic regression techniques: DIFdetect and difwithpar. *Medical Care*, S115-S123.
- Crane, P. K., van Belle, G., & Larson, E. B. (2004). Test bias in a cognitive test: Differential item functioning in the CASI. *Statistics in Medicine*, 23, 241-256.
- Dabic, M., Daim, T., Bayraktaroglu, E., Novak, I., and Basic, M. (2012). Exploring gender differences in attitudes of university students towards entrepreneurship: An international survey. *International Journal of Gender and Entrepreneurship* 4(3), 316-336.
- De Beer, M. (2004). Use of Differential Item Functioning (DIF) Analysis for bias analysis in test construction. *SA Journal of Industrial Psychology*, 30(4), 52-58.
- Dorans, N. J., & Holland, P. W. (1993). DIF Detection and Description: Mantel-Haenszel and Standardization. In P. W. Holland, and H. Wainer (Eds.), *Differential Item Functioning* (pp. 35-66). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Dorans, N. J., & Kulick, E. (1986). Demonstrating the utility of the standardization approach to assessing unexpected differential item performance on the Scholastic Aptitude Test. *Journal of Educational Measurement*, 23, 355-368.
- Di Marco, D., López-Cabrera, R., Arenas, A., Giorgi, G., Arcangeli, G., and Mucci N. (2016). Approaching the discriminatory work environment as stressor: the protective role of job satisfaction on health. *Frontiers in Psychology* 7:1313. doi: 10.3389/fpsyg.2016.01313.
- Drydakis, N. (2015). The effect of unemployment on self-reported health and mental health in Greece from 2008 to 2013: a longitudinal study before and during the financial crisis. *Social Science & Medicine* 128, 43-51.
- Faggen, J. (1987). Golden rule revisited: Introduction. *Educational Measurement: Issues and Practice*, 6, 5-8.

- French A.W., & Miller, T. R. (1996). Logistic regression and its use in detecting differential item functioning in polytomous items. *Journal of Educational Measurement*, 33, 315–332.
- Giorgi, G., Arcangeli, G., Mucci, N., and Cupelli, V. (2015). Economic stress in the workplace: the impact of fear of the crisis on mental health. *Work* 5(1), 135-142.
- Gutek, B.A., Searle, S., and Klepa, L. (1991). Rational versus gender role explanations for work-family conflict. *Journal of Applied Psychology* 76, 560-568.
- Haus, I., Steinmetz, H., Isidor, R., and Kabst, R. (2013). Gender effects on entrepreneurial intention: A meta-analytical structural equation model. *International Journal of Gender and Entrepreneurship* 5(2), 130-156.
- Hambleton, R. K., & Rogers, H. J. (1989). Detecting potentially biased test items: Comparison of IRT area and Mantel-Haenszel methods. *Applied Measurement in Education*, 2, 313-334.
- Hong, S., & Roznowski, M. (2001). An investigation of the influence of internal test bias on regression slope. *Applied Measurement in Education*, 14(4), 351-68.
- Henry, C., Foss, L., and Ahl, H. (2016). Gender and entrepreneurship research: A review of methodological approaches. *International Small Business Journal* 34(3), 217-341.
- Holland, P.W., and Wainer, H. (1993). *Differential Item Functioning*. Hillsdale, NJ: Erlbaum.
- Ioannidis, S. (2013). "Entrepreneurship in Greece: The evolution of entrepreneurial indexes during economic recession". Foundation for Economic & Industrial Research, Athens, Greece.
- Jennings, J.E., and Brush, C.G. (2013). Research on women entrepreneurs: Challenges to (and from) the broader entrepreneurship literature? *Academy of Management Annals* 7(1), 661-713.
- Johnson, W., Spinath, F., Krueger, R. F., Angleitner, A., & Riemann, R. (2008). Personality in Germany and Minnesota: An IRT-Based Comparison of MPQ Self-Reports. *Journal of Personality*, 76, 665–706.
- Kautonen, T., Van Gelderen, M., and Fink, M. (2015). Robustness of the theory of planned behavior in predicting entrepreneurial intentions and actions. *Entrepreneurship: Theory and Practice* 39(3), 655-674.
- Kelley, D., Brush, C., Greene, P., and Litovsky, Y. (2013). "Global Entrepreneurship Monitor 2012 Women's Report". Wellesley, MA: Babson College).
- Kolvereid, L. (1996). Prediction of employment status choice intentions. *Entrepreneurship Theory and Practice* 21(1), 47-57.

- Kristensen, T. S., Bjorner, J. B., Christensen, K. B., & Borg, V. (2004). The distinction between work pace and working hours in the measurement of quantitative demands at work. *Work & Stress*, 18, 305–322.
- Langowitz, N., and Minniti, M. (2007). The entrepreneurial propensity of women. *Entrepreneurship theory and practice* 31(3), 341-364.
- Li, Z., and Zumbo, B.D. (2009). Impact of differential item functioning on subsequent statistical conclusions based on observed test score data. *Psicologica* 30, 343-370.
- Linan, F., and Chen, Y.W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice* 33(3), 593-617.
- Maddox, T. (2013). Professional women's well-being: The role of discrimination and occupational characteristics. *Women & Health* 53(7), 706-729.
- Maes, J., Leroy, H., and Sels, L. (2014). Gender differences in entrepreneurial intentions: A TPB multi-group analysis at factor and indicator level. *European Management Journal* 32(5), 784-794.
- Mellenbergh, G.J. (1982). Contingency table models for assessing item bias. *Journal of Educational Statistics*, 7(2), 105-118.
- Millsap, R.E., Everson, H.T. (1993). Methodology review - statistical approaches for assessing measurement bias. *Applied Psychological Measurement*, 17, 297-334.
- Millsap, R.E. (2012). *Statistical approaches to measurement invariance*. New York: Routledge- Taylor & Francis Group.
- Minniti, M., Arenius, P., and Langowitz, N. (2005). "Global Entrepreneurship Monitor 2004 Report on women and entrepreneurship". Babson Park, MA: The Center for Women's Leadership at Babson College.
- Mucci, N., Giorgi, G., Roncaioli, M., Perez, J.F., and Arcangeli, G. (2016). The correlation between stress and economic crisis: a systematic review. *Neuropsychiatric disease and treatment* 12, 983-993.
- Mueller, S.L., and Dato-on, M.C. (2013). A cross cultural study of gender-role orientation and entrepreneurial self-efficacy. *International Entrepreneurship and Management Journal* 9(1), 1-20.
- Osterlind, S. J. (1983). Test item bias. Newsbury Park: Sage.
- Penfield, R.D. (2005). DIFAS: Differential item functioning analysis system *Applied Psychological Measurement* 29, 150-151.
- Penfield, R.D. (2003). Applying the Breslow-Day test of trend in odds ratio heterogeneity to the analysis of nonuniform DIF. *The Alberta Journal of Educational Research*, 49(3), 231-243.

- Penfield, R.D. (2007). An approach for categorizing DIF in polytomous items *Applied Measurement in Education* 20(3), 335-355.
- Penfield, R.D. (2013). DIFAS: Differential item functioning analysis system, User's manual *Unpublished manuscript*.
- Penfield, R.D., & Algina, J. (2006). A generalized DIF effect variance estimator for measuring unsigned differential test functioning in mixed format tests. *Journal of Educational Measurement*, 43(4), 295-312.
- Penfield, R. D., & Lam, T. C. M. (2000). Assessing differential item functioning in performance assessment: Review and recommendations. *Educational Measurement: Issues and Practice*, 19(3), 5-15.
- Penfield, R.D., and Algina, J. (2003). Applying the Liu-Agresti estimator of the cumulative common odds ratio to DIF detection in polytomous items. *Journal of Educational Measurement* 40, 353-370.
- Penfield, R.D., and Algina, J. (2006). A generalized DIF effect variance estimator for measuring unsigned differential test functioning in mixed format tests. *Journal of Educational Measurement* 43, 295-312.
- Piacentini, M. (2013). "Women Entrepreneurs in the OECD: Key Evidence and Policy Challenges". OECD Social, Employment and Migration Working Papers, No. 147.
- Pines, M. A., Lerner, M., and Schwartz, D. (2010). Gender differences in entrepreneurship: equality, diversity and inclusion in times of global crisis. *Equality, diversity and inclusion: An International journal* 29(2), 186-198.
- Potenza, M. T., & Dorans, N. J. (1995). DIF assessment for polytomously scored items: A framework for classification and evaluation. *Applied Psychological Measurement*, 19, 23- 37.
- Raffiee, J., and Feng, J. (2014). Should I quit my day job? A hybrid path to entrepreneurship. *Academy of Management Journal* 57(4), 936-963.
- Rogers, H.J. & Swaminathan, H. (1993). A comparison of logistic regression and Mantel-Haenszel procedures for detecting differential item functioning. *Applied Psychological Measurement*, 17, 105-116.
- Sarri, K., and Trihipoulou, A. (2005). Female entrepreneurs' personal characteristics and motivation: A review of the Greek situation. *Women in Management Review* 20(1), 24-36.
- Schlaegel, C., and Koenig, M. (2014). Determinants of entrepreneurial intent: a meta-analytic test and integration of competing models. *Entrepreneurship Theory and Practice* 38(2), 291-332.

- Scott, N.W., Fayers, P.M., Aaronson, N.K., Bottomley, A., de Graeff, A., Groenvold, M., Gundy, C., Koller, M., Petersen, M.A., Sprangers, M.A.G.: A simulation study provided sample size guidance for differential item functioning (DIF) studies using short scales. *Journal of Clinical Epidemiology*, 62, 288-295.
- Scott, N.W., Fayers, P.M., Aaronson, N.K., Bottomley, A., de Graeff, A., Groenvold, M., Gundy, C., Koller, M., Petersen, M.A., Sprangers, M.A.G., & the EORTC Quality of Life Group and the Quality of Life Cross-Cultural Meta-Analysis Group. (2010). Differential item functioning (DIF) analyses of health-related quality of life instruments using logistic regression. *Health and Quality of Life Outcomes*, 8: 81.
- Shook, C.L., Ketchen, D.J.J., Hult, G.T.M., and Kacmar, K.M. (2004). An assessment of the use of structural equation models in strategic management research. *Strategic Management Journal* 25, 397-404.
- Sieger, P., Fueglistaller, U., and Zellweger, T. (2014). " Student entrepreneurship across the Globe: A look at intentions and activities. International Report of the GUESSS Project 2013/2014". Swiss Research Institute of Small Business and Entrepreneurship at the University of St.Gallen.
- Stevenson, L. (1986). Against all odds: The entrepreneurship of women. *Journal of Small Business Management* 24(4), 30-36.
- Stewart, W.H., Watson, W.E., Carland, J.C., and Carland, J.W. (1999). A proclivity for entrepreneurship: A comparison of entrepreneurs, small business owners, and corporate managers. *Journal of Business venturing* 14(2), 189-214.
- Suárez-Álvarez, J., Pedrosa, I., García-Cueto, E., and Muñiz, J. (2014). Screening enterprising personality in youth: An empirical model. *The Spanish Journal of Psychology* 17(e60), 1-9.
- Teresi, J.A. (2006). Different approaches to differential item functioning in health applications: Advantages, disadvantages and some neglected topics. *Med Care*, 44, 152-170.
- Thissen, D., Steinberg, L., Gerrard, M. (1986). Beyond group differences: The concept of bias. *Psychological Bulletin*, 99, 118-128.
- Tissen, D., Steinberg, L., & Wainer, H. (1988). Use of item response theory in the study of group differences in trace lines. In H. Wainer & H. I. Braun (Eds.), *Test validity* (pp. 147-169). Hillsdale, NJ: Erlbaum.
- Thompson, E.R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice* May, 669-694.

- Tognazzo, A., Gubitta, P., Gianecchini, M., and Gianecchini, M. (2016). "My Old and My New Family" - The impact of family relationships on students' entrepreneurial intentions: An Italian study. *International Review of Entrepreneurship* 14(4).
- Van Praag, C.M., and Versloot, P. (2007). What is the value of entrepreneurship? A review of recent research. *Small Business Economics* 29 (4), 351-382.
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, 3(1), 4-70.
- Whitmore, M. L., & Schumacker, R. E. (1999). A comparison of logistic regression and analysis of variance differential item functioning detection methods. *Educational and Psychological Measurement*, 59, 910-927.
- Zampetakis, L.A., Bakatsaki, M., Kafetsios, K., and Moustakis, V. (2016). Sex differences in entrepreneurs' business growth intentions: An identity approach. *Journal of Innovation and Entrepreneurship* 5(29). doi: 10.1186/s13731-016-0057-5.
- Zumbo, B.D. (1999). A handbook on the theory and methods of differential item functioning (DIF): Logistic regression modeling as a unitary framework for binary and Likert-type (ordinal) item scores. Ottawa, ON: Directorate of Human Resources Research and Evaluation.
- Zumbo, B.D. (2003). Three generations of DIF analyses: Considering where it has been, where it is now, and where it is going. *Language Assessment Quarterly*, 4(2), 223-233.

ANNEX II

Deliverable 2 of WP2 entitled

“Entrepreneurial intention models and female entrepreneurship”

1. Introduction

During the last years, Greece is undergoing a major economic crisis which is associated with a deep and prolonged depression both in economic and social terms. According to the OECD (2016), the GDP has fallen significantly, public debt has increased, poverty and especially youth poverty has risen, life satisfaction has dropped, unemployment and income inequality have increased. Entrepreneurship has also been affected in multiple ways in the country, by the current economic crisis. Greeks show low intentions to start a business (8,3%) compared to other European countries, which can partly be explained by the fact that few people see good opportunities (14,2%) for starting businesses (Ioannidis et al., 2016; Kelley et al 2016).

On the other hand, entrepreneurship is also seen as a way out of the economic crisis as start-ups and entrepreneurial activities have proven to accelerate structural change, to improve the competitive position of a nation in the global business environment, and to create new jobs (Ripsas, 1998). Compared to established firms, start-ups are less resistant to change, and they are often more flexible and innovative. Entrepreneurs play a central role in the process of creative destruction (Schumpeter, 1934) (understood as *“the devaluation of still technically functioning products or services which goes hand-in-hand with the introduction of innovative products and production processes”* (Volkmann et al 2010, p.6), by recognizing new opportunities and turning them into business ideas, which is especially important in periods of economic crises (Schaper and Volery, 2007). As stated by Alison Coleman in Forbes *“While the Euro crisis devastated the Greek economy, it also forced a change in the perception of entrepreneurship, with the need to restore growth through entrepreneurship becoming critical. Potential was identified in various sectors and, with a dearth of career alternatives, entrepreneurship was seen as the way forward for Greece.”* (Forbes, 2014).

In this unstable economic climate raising the entrepreneurial intentions of the Greek population is imperative, as the intention to start a company is a central part of the entrepreneurial process and an immediate antecedent of actual behaviour (Ajzen, 1991). Meta-analyses on the intentions-behaviour/action gap confirm this, as up to 39% of the variance in actual behaviour can be explained by intentions (Bullough, 2014). Therefore, entrepreneurial intentions are one of the best predictors of planned behaviour (Krueger and Carsrud, 1993). Raising intentions in an economic crisis era, however can be a major challenge for governments, because the features of the economic setting unavoidably worsen and people see fewer business opportunities. On the other hand, such an economic climate can possibly boost entrepreneurial activities. According to Landini et al. (2005) *“when unemployment is high and raising, in fact, the choice to become an entrepreneur depends also on the extent to which self-employment is perceived as a viable second- best alternative to unemployment.”* (p. 12). So, the economic crisis may have a counteractive effect on entrepreneurship.

It is also imperative to identify drives and barriers towards the formation of entrepreneurial intentions both for males and females. Ahl (2006) pointed out numerous limitations regarding research in entrepreneurship: a) the one-sided empirical focus on men,

b) the use of male-gendered measuring instruments and c) the lack of theoretical grounding. Furthermore, examining the reasons for gender differences in entrepreneurial intentions, will support the understanding of the lower entrepreneurial activity of women compared to men (Ljunggren and Kolvereid, 1996) and some factors that impede females from becoming entrepreneurs can be overcome very early in the entrepreneurial process. Then measures can be taken in order to foster female entrepreneurship and limit the gender gap in entrepreneurial activity. Furthermore, by researching potential and not existing entrepreneurs the “success” bias can be avoided or overcome and policy makers and educators can still intervene in order to raise people’s entrepreneurial intentions and in extension future entrepreneurial activity. Alsos and Ljunggren (1998) argue that when researching existing entrepreneurs *“the gender imbalance is already materialized, and the (male and female) respondents in the studies are only those who succeeded in setting up a business”* (p.137).

We structure this report as follows. First, we provide an overview of entrepreneurship in Greece over the years and female entrepreneurship in particular. Then we continue, with an extended literature review on entrepreneurial intentions and the models used in the literature to explain entrepreneurial intentions. Third, we look in detail at several antecedents of entrepreneurial intentions that have been proposed in the literature and derive our integrated research model. Forth, we detail the research method and present the results. Finally, we discuss our findings and state the implications.

2. Literature review

2.1. Entrepreneurship in Greece

The attitude of the Greek society towards entrepreneurship is not characterized as positive, and Greeks associate entrepreneurship mainly with large and established companies. Until recently the entrepreneur has often been labeled as a “fraud man or an adventurer or a manipulator of the market” and profit resulting from entrepreneurial activities has been considered as negative and reprehensible. Furthermore, entrepreneurial activities occasionally were related with an exercise of pressure towards political powers in order to have certain benefits or privileges, which resulted in the creation of large distortions in the competition and in the prosperity of enterprises and employees. In such a climate, young people were kept from engaging in entrepreneurial activities. However, this situation and perception of entrepreneurship in Greece has changed radically, allowing entrepreneurs to envision their future without the distortions of past and providing the benefit of equal opportunities to all. (Barsakelis et al., 2010).

The ongoing economic crisis in Greece, as expected, drastically affects entrepreneurship in the country (Ioannidis et al., 2016; Kelley et al., 2016). Greeks show low intentions to start a business (8,3%) compared to other European countries, which can partly be explained by the fact that few people see good opportunities (14,2%) for starting businesses. Entrepreneurs in Greece are self-confident about their capabilities towards entrepreneurship (46.8%) in comparison to entrepreneurs in other European countries, but at the same time, they have the lowest perceptions about opportunities relative to new business starts and the fear of failure is one of the highest in Greece (46.9%) among all economies in the GEM study. This continues to be an ongoing pattern over the past years. Furthermore, more than half of adults (61%) believe entrepreneurship is a good career choice and 68% indicate a high status to successful entrepreneurs, whereas fewer (38%) see positive images of entrepreneurs in the media (Kelley et al., 2016).

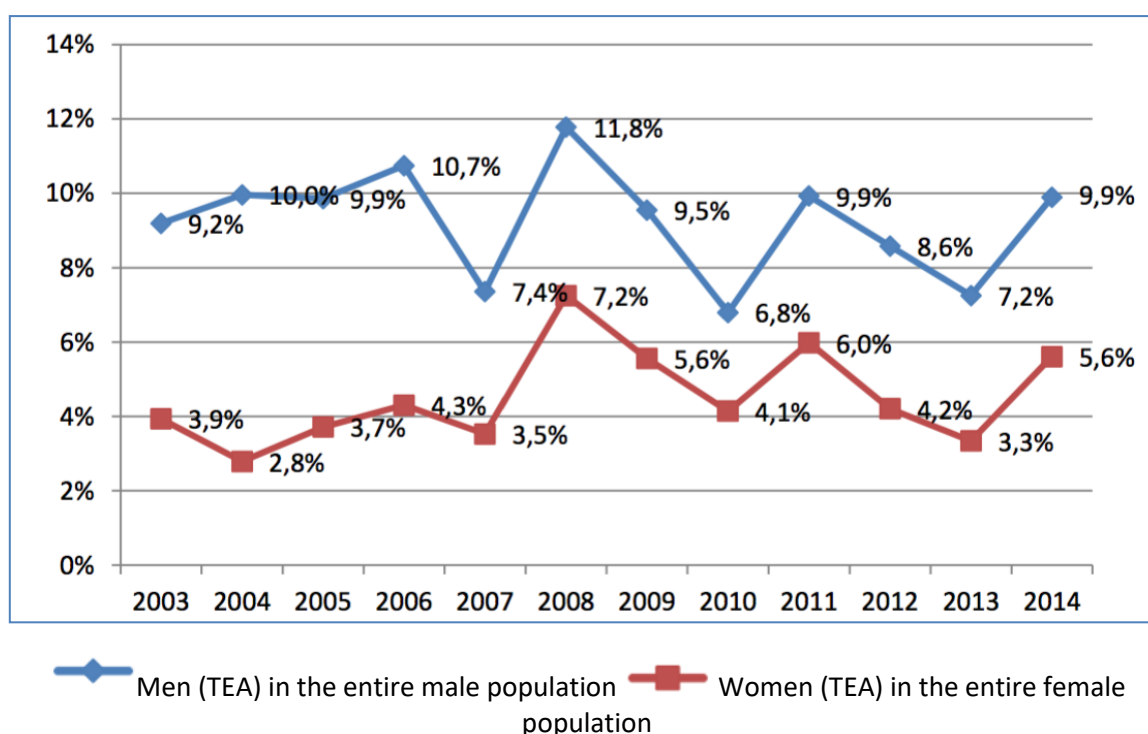
As far as demographics are concerned, one-fourth of the entrepreneurs fall into the 45–54 year category, whereas there are few young entrepreneurs (18-24 years old). Possible

explanations could be graduate studies and military service for the male population of the study. Besides these, it could be that older people not only see more entrepreneurial opportunities, but they also have the capacity to pursue them. The majority of Greek early stage entrepreneurs (50%) holds a degree from higher education institute. The percentage of entrepreneurs who have completed secondary education 45.5% and only 4.5% have completed basic training. This means that knowledge based entrepreneurship is feasible due to the high skills and knowledge of early stage entrepreneurs.

In 2014, the total early-stage entrepreneurship (TEA) in Greece, which includes nascent (people involved in setting up a business) and new entrepreneurs (owner-manager of a new business up to 3.5 years old), increased significantly from only 5.2% in 2013 to 7.8% in 2014, at levels higher than the long-term average of the index as it can be seen in Figure 6. In 2009, TEA, dropped to 7.5% from 9.5% in 2008, while in 2010 it dropped even further to 5.5%. This substantial decrease in 2010 is a reflection of the debt crisis that permeated the country in the spring of 2010 and made it difficult for entrepreneurs to access finance (Kelley et al., 2011). The analysis of the 2015 data shows a further decrease in the TEA rate to 6.9% which however is in accordance with the long- term average (see Figure 6). This fact may signal a possible mitigation of uncertainty of starting and doing business in Greece brought about by the economic crisis (Ioannidis et al., 2016).

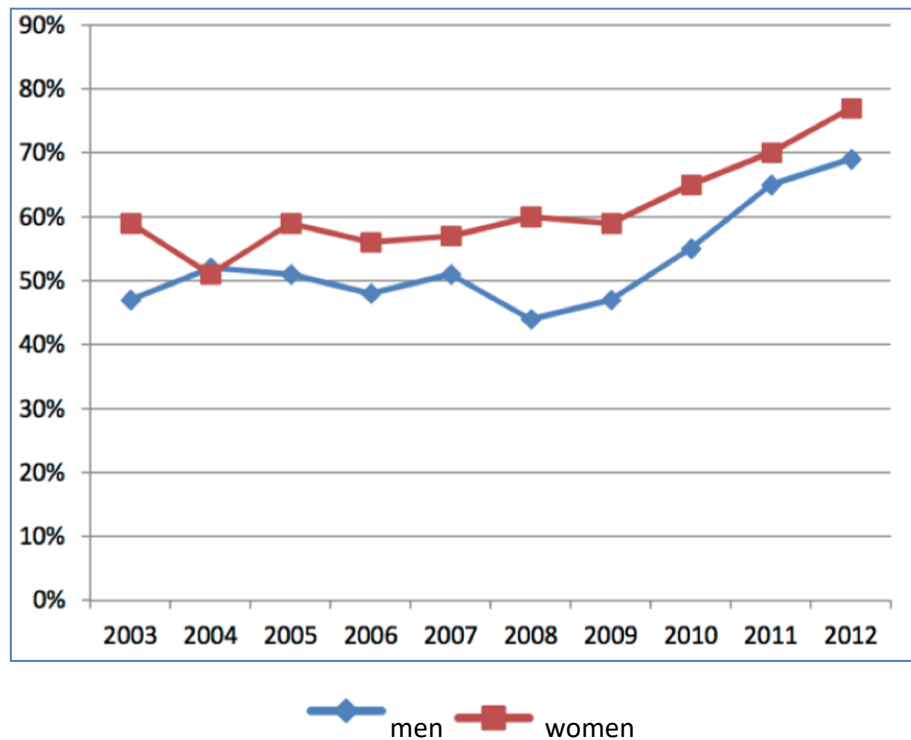
According to the latest report on women entrepreneurship published by GEM in 2015, in Greece, in addition to the gender gap in entrepreneurial intentions, with men showing higher intentions than women, there is a gender gap also in TEA and established activity and this trend is consistent throughout all years that Greece participates in GEM. In 2014, the level of female participation in early-stage entrepreneurship was 5.6% and the level of male participation was 9.9%. In 2009, the level of female participation in early-stage entrepreneurship was 6% and was lower compared to the year before (7.7%). The evolution of female and male TEA can be found in Figure 1.

Figure 1: The evolution of female and male TEA, Greece (2003-2014)



Necessity entrepreneurship in Greece appears stronger in female early stage entrepreneur's early stages than their male counterparts. The economic crisis may have pushed women towards entrepreneurship, because of the associated unemployment and the need to earn an income to support their families. Women in Greece seem to have lower perceptions as to their capacity and skills to undertake entrepreneurial initiatives than men and a higher fear of failure (77% for women and 69% for men) as shown in the next figure (Ioannidis and Giotopoulos, 2014).

Figure 2: Evolution of fear of failure by gender



Source: Ioannidis and Giotopoulos, 2014, p. 69

Women seem to engage in entrepreneurial activities later than men, they have a similar educational background as men and perceive to a smaller percentage (50%) than men (68%) entrepreneurship as a good career choice (Ioannidis and Giotopoulos, 2014). Female Greek entrepreneurs mainly run their business in consumer-oriented services and rarely in high-tech sectors and they perceive their products or services to be less innovative than men and use marginally more than men new technologies in their businesses. The vast majority of both men (46.51%) and women (42.86%) entrepreneurs state that their businesses are not export-oriented. 9.52% of female entrepreneurs indicate that 76-100% of their sales comes from exports, while the corresponding figure for men is just under 7%.

2.2. Entrepreneurial intentions

A large part of what is called entrepreneurial activity is a direct outcome of repeated attempts to exercise control over the entrepreneurial process, in order to achieve in creating a business. There are several obstacles that must be overcome so as to succeed in this process and therefore there is a need for subsequent actions over a considerable period of time, actions that are clearly intentional (Shaver et al., 2001). Scholars argue that entrepreneurship is

exactly the type of planned behavior for which intention models are ideally suitable (Bird, 1988), because intentions have a profound effect and are usually determinants of most entrepreneurial behavior (Krueger and Carsrud, 1993). Furthermore, intentions are central to understanding entrepreneurship, as they are the first step in the sustained and long-term process of starting a new business (Krueger and Carsrud, 1993).

The intention to start a company is a central part of the entrepreneurial process and an immediate antecedent of actual behavior (Ajzen, 1991). Meta-analyses on the intentions-behavior/action gap confirm this, as up to 39% of the variance in actual behavior can be explained by intentions (Bullough, 2014). Therefore, entrepreneurial intentions are one of the best predictors of planned behavior (Krueger and Carsrud, 1993), as opposed to attitudes, beliefs, demographics or personality (Kolvereid, 1996; Krueger and Carsrud, 1993, Krueger et al., 2000). Intentions capture the degree to which people are willing to put an effort in order to perform a behavior and show the motivational factors that affect the behavior (Ajzen, 1991). Bird (1988) defines intentionality as *“a state of mind directing a person's attention (and therefore experience and action) toward a specific object (goal) or a path in order to achieve something (means)”* (p.442). Based on this definition of Bird, Souitaris, et al. (2007) define entrepreneurial intentions as the state of mind, which directs a person's attention and action towards becoming self-employed as opposed to becoming an employee. Following this definition entrepreneurial intentions are very important because they can be a strong indicator not only of entrepreneurial behavior such as becoming self-employed or starting a business, but also of entrepreneurial success. Another simpler definition of entrepreneurial intentions is, the intention of an individual to start a new business (Krueger, 2009).

Early factors that were used to explain differences in entrepreneurial intentions among individuals, are related to individual-level factors such as demographic and psychological traits. For example, many studies show significant higher levels in entrepreneurial intentions for males, as compared to females (e.g., Laspita et al., 2007; Scheiner et al., 2008; Díaz-García and Jiménez-Moreno, 2010). As far as psychological traits are concerned, Douglas and Shepherd (2002) show for example, that individuals with a strong risk-taking propensity are particularly oriented towards undertaking entrepreneurial activities. Other personal-level variables, such as perceived skills and perceived barriers towards entrepreneurship may be associated with entrepreneurial intentions (Dickson et al., 2008). Skills can stimulate creativity and the recognition of opportunities and, therefore, could lead to the formation of entrepreneurial activities (Liñán et al., 2011). Parents, as a major source of the socialization process for a child and as people that a child repeatedly observes, have often been suggested to influence their children's career choice through the process of role modeling (Matthews and Moser, 1996) and entrepreneurial intentions specifically (Laspita et al., 2012). The role of entrepreneurship education in forming entrepreneurial intentions has also been studied in the entrepreneurship research. In many cases though, results are contradictory and sometimes even confusing (Slavtchev et al., 2012).

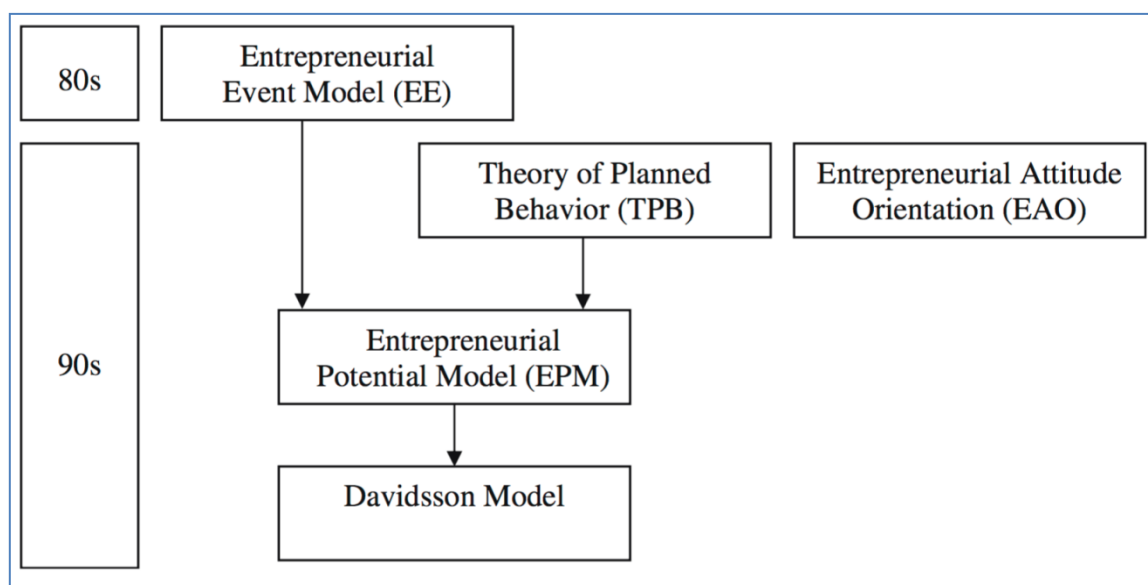
Despite the important role of entrepreneurial intentions research up to now, on the one hand, has mainly been focused on existing entrepreneurs and not on potential entrepreneurs and on the other hand, scholars up to now have a rather limited understanding of the factors or of the processes through which entrepreneurial intentions develop and become existent. In this sense, studies suffer from the bias of over-selecting people that managed to become entrepreneurs and simply ignore the issues of success and survival bias. It is of great importance to go back in the first steps of the entrepreneurial process, because by surveying potential and not existing entrepreneurs a researcher can better understand the process of how and why someone decides to start a business and in this way, he/she could help in fostering future entrepreneurial activity.

2.3. Models of entrepreneurial intentions

A central question that occupies entrepreneurship scholars for a long time is “*What drives people into becoming entrepreneurs?*” Early research that tried to answer this question paid particular attention to personality traits like for example the “*need for achievement*” (McClelland, 1961), “*risk-taking propensity*” (Brockhaus, 1980) and “*locus of control*” (Rotter, 1966). However, whereas the trait approach offered some insights to the entrepreneurial process, due to inconsistencies and shortcomings it was argued that perhaps other approaches would be more suitable (e.g. Carland et al., 1988). The development of intention models (e.g. Ajzen, 1991; Bird 1988; Shapero 1984), has offered a more comprehensive framework for explaining actual behavior (Drennan, 2005; Krueger et al., 2000). The use of intention models is well established in the entrepreneurship literature and there is little difference in the amount of variance explained by the various models (Krueger et al., 2000).

Several intention models have been developed through the years (Bullough et al., 2014) in entrepreneurship literature, three of them have been the most dominant ones. Bird’s (1988) model of implementing entrepreneurial ideas, Shapero’s (1984) model of entrepreneurial event and Ajzen’s (1991) theory of planned behavior. These models are to a great extent similar as they all integrate attitudes, social learning theory and include individual and contextual factors that influence the decision to start a business. According to Guerrero et al. (2006), in the 80s and 90s, six main models were developed to explain entrepreneurial intentions: The Entrepreneurial Event Model, The Theory of Planned Behavior, Entrepreneurial Attitude Orientation, Intentional Basic Model, Entrepreneurial Potential Model and Davidsson Model. These, along with Bird’s model will be shortly introduced in the next sections.

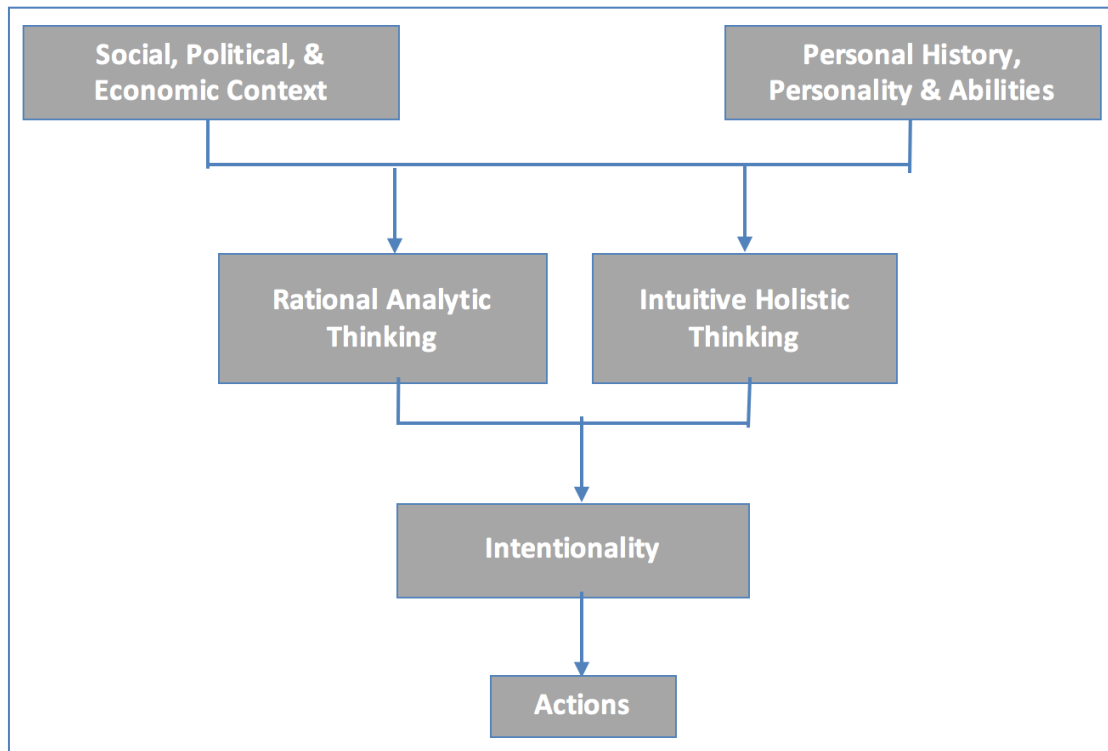
Figure 3: Evolution of entrepreneurial intention models



Source: Guerrero et al. (2006), p. 37

2.3.1. Bird’s Model of implementing entrepreneurial ideas

Bird's model, grounded in the theory in cognitive psychology, illustrates the implementation of entrepreneurial ideas and tries to predict and understand human behavior. Individuals are predisposed to intention "based upon a combination of both personal and contextual factors" (Boyd and Vozikis, 1994, p. 66). Contextual factors include social, political, and economic variables and personal factors include personal characteristics and abilities, personal history, prior experiences and demographics. Personal and social contexts interact with rational analytic thinking (which includes the writing of a business plan, opportunity analysis, resource acquisition) and intuitive holistic thinking (which includes the potential entrepreneur's vision, hunch, etc.). The last two frames and structure entrepreneurial



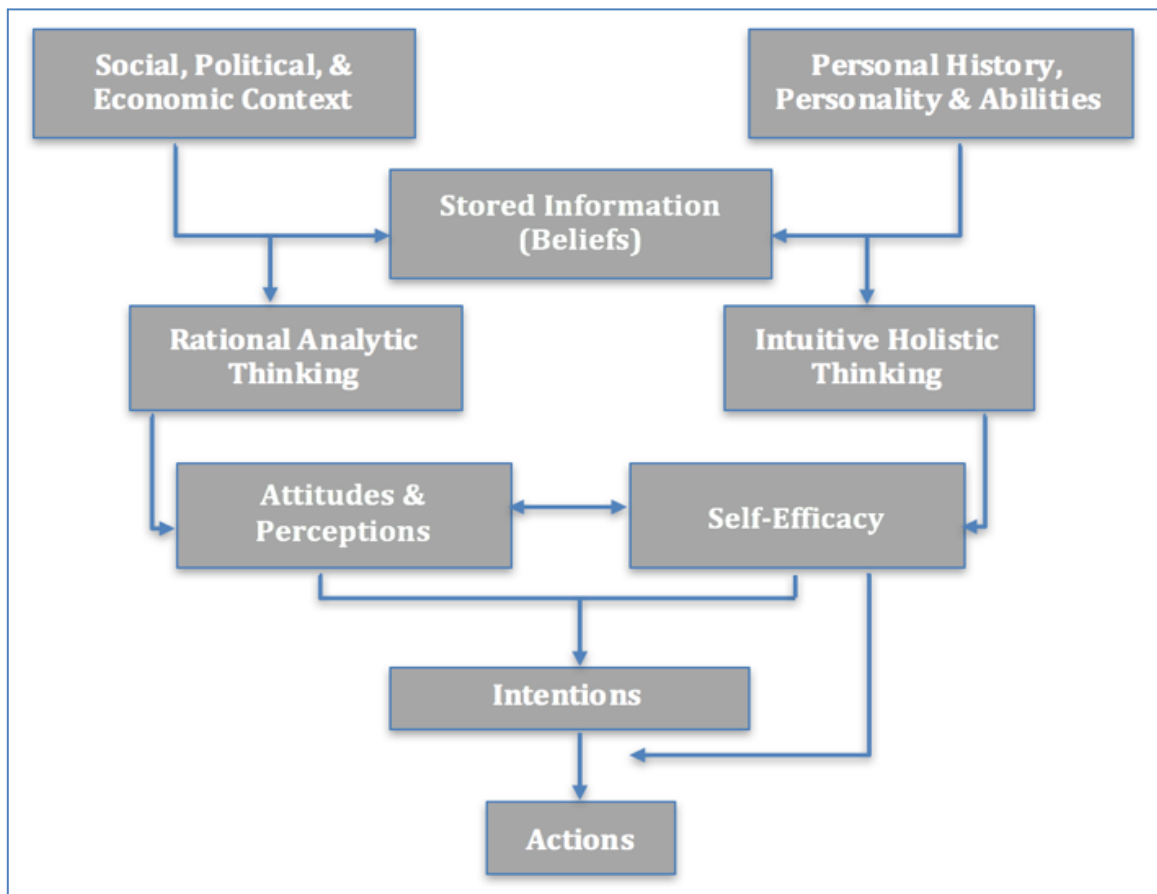
intention and action Bird's context of Entrepreneurial Intentionality can be found in Figure 4.

Figure 4: Context of Entrepreneurial Intentionality

Source: Bird, B. (1988), p. 444

This model was significantly revised by Boyd and Vozikis (1994) who argue that self-efficacy, “a person’s belief in his or her capability to perform a task” (p.63), influences the entrepreneurial process and especially entrepreneurial intention and activity. The concept of self-efficacy is derived from social learning theory (Bandura, 1982) and it influences an individual's views as to whether or not certain objectives might have a chance to be achieved. A person’s self-perception as to his or her competencies influence choices and aspirations. For example, if a person believes he is capable performing a task, he will act accordingly despite possible setbacks or social demand for the particular behavior (Boyd and Vozikis, 1994). Self-efficacy may be influenced by several ways which include mastery experiences (i.e. successful performance accomplishments), vicarious experiences through modelling (i.e. observational learning from role models), social persuasion (i.e. positive feedback from others) and a person’s own psychological state (i.e. anxiety levels, mood, etc.). Boyd and Vozikis also include another variable in their model which is stored information. This refers to the repertory of stored pieces of information that individuals develop and that are result of their personal and contextual history. This model can be found in the figure below.

Figure 5: A Revised Model of Bird's Contexts of Entrepreneurial Intentionality



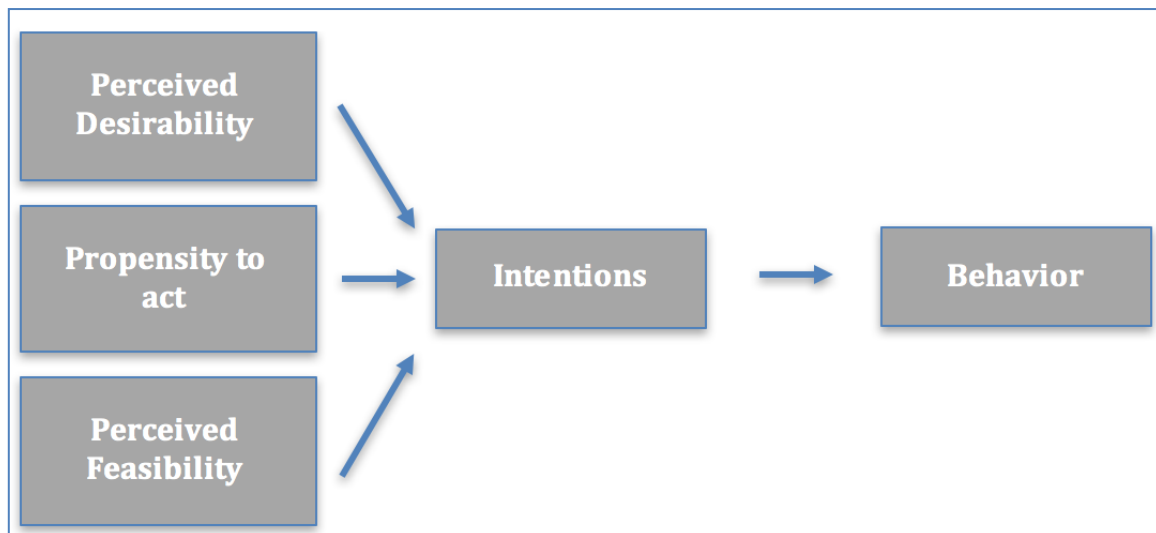
Source: Boyd and Vozikis (1994), p. 69

2.3.2. Model of entrepreneurial event

Shapero's work in the early 1980s was the starting point of the theoretical and empirical research of entrepreneurial intentions which led to rapid growth the years after (Fayolle and Linan, 2014). Shapero and Sokol (1982) theory of entrepreneurial event is a fundamental intention-based model and aims to explain entrepreneurial intentions and tries offer a better understanding of subsequent behavior. The model hypothesizes that the intention to start a business is influenced by three factors: perceived desirability, perceived feasibility and propensity to act. Perceived desirability refers to the degree to which, an individual feels attracted towards a career as an entrepreneur, perceived feasibility refers to the degree to which an individual feels confident to start a business and considers the possibility to be feasible and the propensity to act refers to the degree to which an individual has the disposition to act on his or her decision (Shapero and Sokol, 1982). Perceived feasibility for example can be influenced by the presence of role models, barriers, support, education, perceived skills to perform entrepreneurial tasks, or perceived availability of resources needed to create a business (Gasse and Tremblay, 2011). According to this model, prospective entrepreneurs develop entrepreneurial intentions when they think of entrepreneurship as a credible career choice. Furthermore, according to Shapero's work (1975), entrepreneurial events are a consequence of interrelating situational and social-cultural elements. *"Each entrepreneurial event occurs as a result of a dynamic process providing situational momentum that has an impact upon individuals whose perceptions and values are determined by their social and cultural inheritance and their previous experience."* (Elfving et al., 2009 p. 24)

Intentions only develop if the person in question experiences something that leads to a change in behavior: a positive or negative displacement event (Peterman and Kennedy, 2003). Positive events may include an inheritance and the recognition of an opportunity and negative events may include unemployment and forced migration. These events (positive or negative) change the behavior of an individual, who then looks for the best opportunity taking into consideration all the different alternatives (Katz, 1992). According to Shapero *"a person's attitude towards entrepreneurship would be indirectly influenced by his or her prior exposure to entrepreneurship, through prior work experience and the existence of role models"* (Peterman and Kennedy 2003, p.130). This model was tested empirically by Krueger et al. (2000), Peterman and Kennedy (2003), and Audet (2002). Shapero's model of entrepreneurial event can be found in the figure below.

Figure 6: Entrepreneurial Event Model



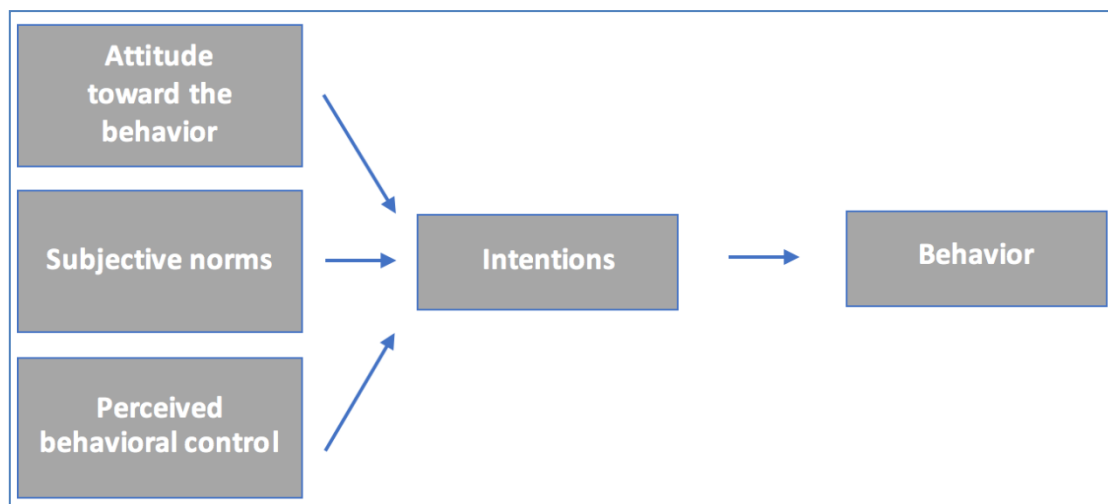
Source: Schlaegel, C., & Koenig, M. (2014,) p. 294.

2.3.3. Theory of planned behavior

The theory of reasoned action (Fishbein & Ajzen, 1975) has served as the basis for the development of the theory of planned behavior (Ajzen, 1991). According to the theory of planned behavior (Ajzen, 1991; Ajzen and Fishbein, 1980), an individual's intention becomes the central factor in explaining behavior and is shaped by three attitudinal antecedents: attitude toward behavior, subjective norms, and perceived behavioral control. Attitude towards behavior refers to *"the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question"* (Ajzen, 1991, p. 188). Subjective norms refer to *"the perceived normative beliefs about significant others, such as family, relatives, friends, as well as other important individuals and groups of individuals"* (Schlaegel and Koenig, 2014, p.293). Subjective norms have two components. The one is related to normative beliefs about the perceived probability that important referent individuals or groups will approve or reject a given behavior. Perceived behavioral control refers to *"an individual's belief about being able to execute the planned behavior and the perception that the behavior is within the individual's control"* (Schlaegel and Koenig, 2014, p. 294).

The theory of planned behavior has been the one mostly used from scholars in the entrepreneurship research. This is mostly because *"unlike other models, the TPB offers a coherent and generally applicable theoretical framework, which enables us to understand and predict entrepreneurial intention by taking into account not only personal but also social factors"* (Iakovleva, et al., 2011, p.356).

Figure 7: Theory of Planned Behavior



Source: Ajzen, I. (1991). p. 182.

2.3.4. Entrepreneurial Attitude Orientation

Robinson et al. (1991) generated the entrepreneurial attitude orientation scale, which describes the attitude of the entrepreneur taking into consideration other factors than personality and demographic characteristics. The scale explains the attitude prediction through four different sub scales:

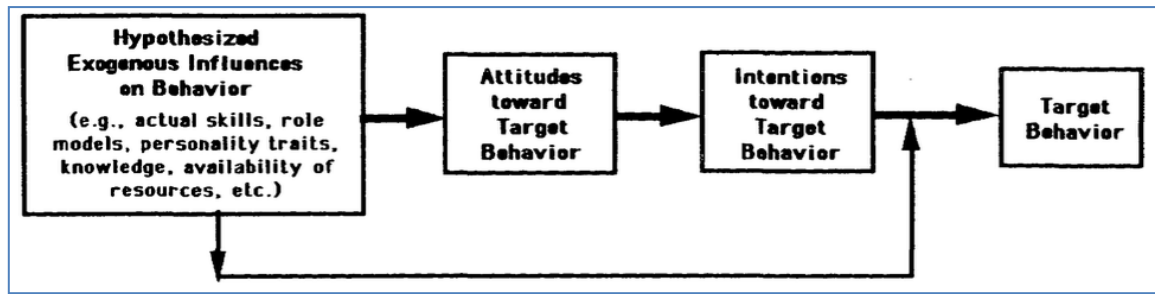
1. *Achievement in business*, referring to concrete results associated with the start-up and growth of a business venture (Robinson et al., 1991, p. 19)
2. *Innovation in business*, relating to perceiving and acting upon business activities in new and unique ways. (Robinson et al., 1991, p. 19)
3. *Perceived personal control of business outcomes*, concerning the individual's perception of control and influence over his or her business. (Robinson et al., 1991, p. 19)
4. *Perceived self-esteem in business*, pertaining to the self-confidence and perceived competency of an individual in conjunction with his or her business affairs. (Robinson et al., 1991, p. 19)

The scale also explains three types of reactions. The affective reaction refers to positive or negative feelings toward the object. The cognitive reaction refers to the beliefs that an individual has about an attitude object. The conative refers to tendencies to behave in a given way. This scale has been used in various empirical studies regarding potential entrepreneurs (Koh, 1995; Paramond, 2004; Tan et al., 1996; Tkachev and Kolvereid, 1999).

2.3.5. Intentional basic model

The basic intention based model was proposed by Krueger and Carsrud (1993). In this model, intentions affect behaviour directly and attitudes affect intentions. Exogenous influences, such as role models and personality traits drive attitudes or moderate the relationship between intentions and behavior. The influence of exogenous factors is indirect most times as these are generally either person or situation variables. The model is depicted in the next figure.

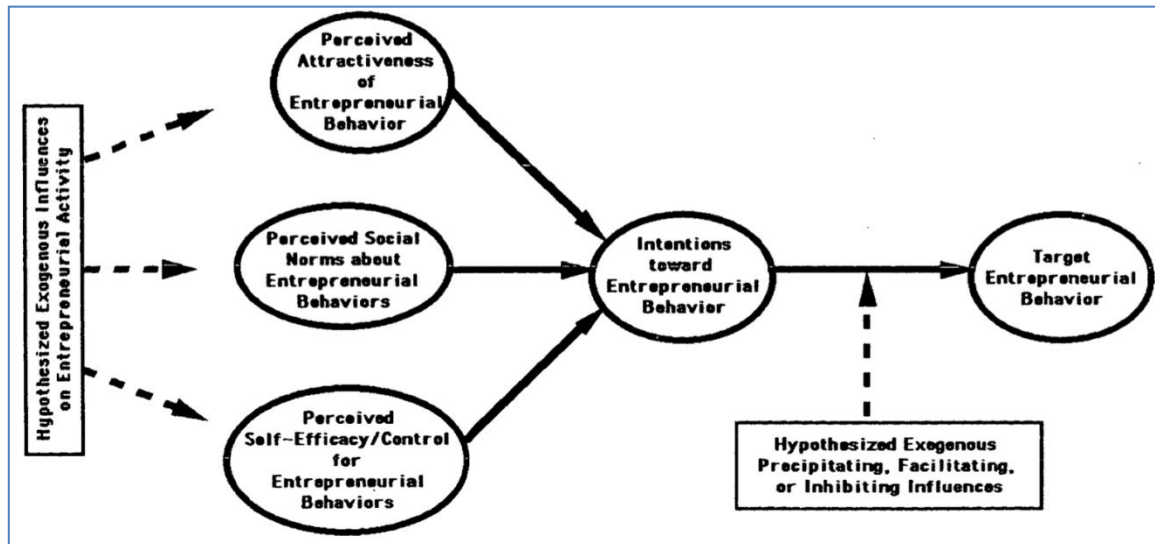
Figure 8: The basic intention-based process model



Source: Krueger and Carsrud (1993), p. 317

Krueger and Carsrud (1993) also proposed the “*Theory of planned behavior entrepreneurial model*”, which is based on Ajzen’s theory of planned behavior, however it is adjusted to the entrepreneurial context. According to this model starting a new business is an intentional process that can be influenced by three antecedents: a) the attitude to venture creation, b) the perceived social norms for engagement in business creation and c) the perceived control for an entrepreneurial behavior.

Figure 9: Theory of planned behavior entrepreneurial model

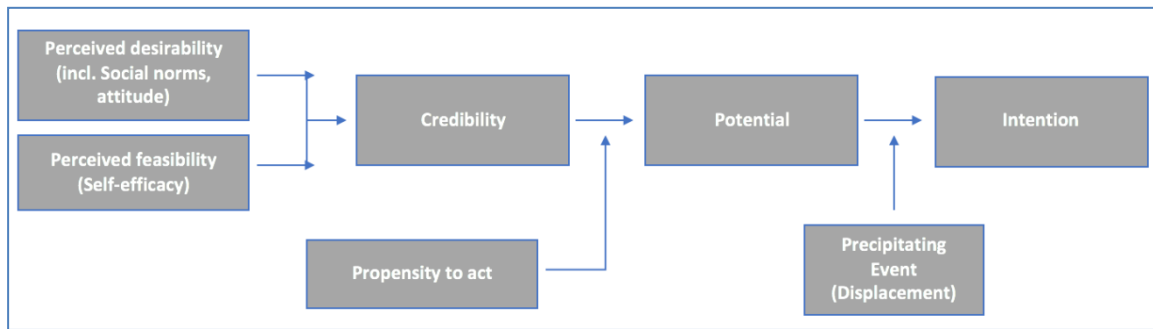


Source: Krueger and Carsrud (1993), p. 323

2.3.6. Model of entrepreneurial potential

The model of entrepreneurial potential proposed by Krueger and Brazeal (1994) is based primarily on the work of Ajzen as well as on the work of Shapero as described in the previous sections). The entrepreneurial potential model, as shown below suggests three critical constructs: Perceived desirability, Perceived feasibility, and propensity to Act. According to Guerrero et al., (2006) and Singh et al. (2012) this model is one of the best robust measures of entrepreneurial intention however it is not often used in related studies.

Figure 10: Model of Entrepreneurial Potential

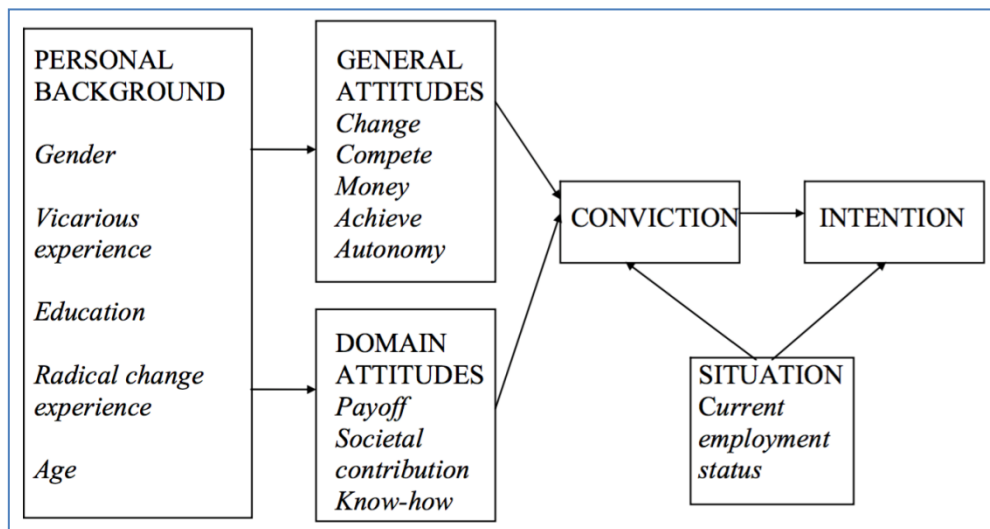


Source: Krueger and Brazeal (1994), p. 95

2.3.7. An economic-psychological model

The model proposed by Davidsson (1995) includes economic and psychological factors that affect an individual's intentions for venture creation. According to this model, intention can be influenced by general attitudes including: willingness to change, competitiveness, money orientation, achievement, and autonomy. Furthermore, intention can be influenced by domain attitudes (payoff, social contribution and know-how), and the situation such as the current employment status.

Figure 11: An economic-psychological model



Source: Davidsson, P. (1995).

2.3.8. Comparison of the models

The above-mentioned models have been used by various researchers in order to establish a better understanding on entrepreneurial intention and the entrepreneurial process in general. For example, Peterman and Kennedy (2003) used Shapero's model of entrepreneurial event to study the effect of participation in an enterprise educational programme on perceptions of the desirability and feasibility of starting a business. Maes et al. (2014) used the theory of planned behavior for a better understanding of the origin of gender differences in entrepreneurial behavior. They found that the effect of gender on entrepreneurial intentions is mediated from personal attitudes and perceived behavioral control but not subjective norms.

Guerrero et al., (2006) used Krueger & Brazeal's model, to analyze the relationship between desirability and feasibility of student's intentions to create a new firm in Catalonia.

Krueger et al. (2000) compared the two main intention-based models (Shapero's model of entrepreneurial event and the theory of planned behavior) and their ability to predict entrepreneurial intention. The results of their study show statistical support for both models. Furthermore, both models are largely homologous to one another. Perceived behavior control reflects the perceived feasibility of performing the behavior that is included in the Entrepreneurial Event model and both are conceptually associated with perceived self-efficacy. Attitude towards the behavior reflects the perceived desirability and the subjective norms (Krueger et al., 2000). The propensity to act variable included in the entrepreneurial event model is not included in Ajzen's framework. Finally, the elements used in the Davidsson model are similar to perceived self-efficacy included in previous approaches developed by Krueger and Carsrud (1993) and Krueger and Brazeal (1994).

2.4. The antecedents of entrepreneurial intentions

Going a step backwards one can pose the question what determines or affects entrepreneurial intentions. Therefore, there is need to identify factors that precede intentions, so as to have a better understanding of the entrepreneurial process (Krueger et al., 2000). There are a number of antecedents of entrepreneurial intentions that could be taken into consideration and that are related for example with the person (e.g. demographics, personality, personal factors, etc.), the micro-social environment (e.g. family, education, etc.) and the macro-social environment (e.g. economic climate, etc.). These factors seem to have an indirect influence on entrepreneurship through influencing key attitudes (such as perceived behavioral control and the perceived attitude towards entrepreneurship) and general motivation to act (Krueger et al., 2000). Some of these factors are taken into consideration in this report. Several authors integrated antecedents of intention into entrepreneurial intention models. Davidsson (1995) for example, included in his model, values and beliefs and culture that are assumed to be related to entrepreneurial intentions, not directly but through general attitudes and domain attitudes.

2.4.1. Demographics

Demographic characteristics such as age (individuals' entrepreneurial intentions can change with age (e.g., Matthews and Moser, 1996), gender (entrepreneurial intentions was found to be gender dependent (e.g., Wang and Wong, 2004)) and work experience (Kent et al., 1982) have an impact upon the decision to become an entrepreneur. Demographic variables, however have been found to indirectly influence intentions and only if they change the decision-maker's attitudes (Krueger et al., 2000). Here the focus will be on one demographic characteristic, that is gender.

- **Gender**

The term gender, introduced in the 1970s and 1980s, is used as a useful tool to differentiate between biological sex and socially constructed sex or gender identity, which is seen as a result of social interaction and upbringing. This differentiation had the objective to point out that inequalities between the two sexes were not only caused by nature, but also from other factors such as historic-societal development and therefore could be changed (Ahl, 2006). So, gender is a combination of the biological sex and socialization that starts with birth and goes on throughout a person's life.

Entrepreneurship scholars have also concentrated themselves on research that has differences and similarities between the two genders in focus and the field of female entrepreneurship has emerged the last decades (e.g. Birley 1989; Mueller 2004; Sexton and Bowman-Upton 1990; Verheul and Thurik 2001). Whereas women entrepreneurs make an important contribution to the development of the world economy, particularly in low- and middle-income countries, there is still a gender gap in entrepreneurial activity. However according to the newest Global Entrepreneurship Monitor special Report on women entrepreneurship published in 2015, the gender gap has narrowed by 6% in comparison to 2012 (Kelley et al., 2015). Gender gap ratios saw positive upward movement in three regions: factor- and efficiency-driven Asia, Latin America and the Caribbean and innovation-driven Europe. ^[1]_{SEP}

Brush's (1992) literature review on female entrepreneurs showed that there are more gender similarities than differences in individual characteristics such as demography and business skills. However, gender related differences have been found in several entrepreneurship aspects such as business and industry choices, financing strategies, growth patterns, and governance structures (Greene et al., 2003; Hisrich 1982). Females develop different products, pursue different goals, use less debt and launch their businesses on a smaller scale (Carter et al., 1997; Chaganti and Parasuraman 1996; Fischer et al., 1993). Besides that, women judge their knowledge, experience and success lower than men (Sternberg et al., 2004). In comparison to men, women are less likely to own multiple businesses and are less likely to expand their businesses, are more risk averse and spend less time on networking (Rosa et al., 1996; Verheul and Thurik 2001). Independence and the need for achievement are strong motivators for both males and females (Cromie 1987; Shane et al., 1991). However male entrepreneurs favor occupations because of the financial gain, while female entrepreneurs prefer careers that allow work-family balance (DeMartino and Barbato, 2003). Women pursue self-employment because it allows them to work at home which eases the burden of finding childcare (Boden, 1996)

Despite the latest growing interest in female entrepreneurship from scholars and policy makers, little is known about women entrepreneurs (Sarri and Trihopoulou, 2005; Orhan, 2001) and less is known about potential female entrepreneurs. Entrepreneurship research has been concentrated on existing entrepreneurs fails to answer two questions. Firstly, whether the supply of potential male and female entrepreneurs is the same (Mueller, 2004) and secondly when do the differences or similarities of male and female entrepreneurs occur. Do they occur after the commencement of business activities or before that? By answering these questions, some factors that impede females from becoming entrepreneurs can be overcome very early in the entrepreneurial process and measures can be taken in order to foster female entrepreneurship and limit the gender gap in entrepreneurial activity (Laspita, 2010).

Furthermore, research indicates that there is a relationship between gender and entrepreneurial intention (Kristiansen and Indarti, 2004). Researching the reasons for gender differences in entrepreneurial intentions will support the understanding of the lower entrepreneurial activity of women compared to men (Ljunggren and Kolvereid, 1996). Drawing from the fact that there are more male than female entrepreneurs one could argue that also the interest of males towards entrepreneurship will be higher than that of their female counterparts. Wang and Wong (2004) indeed could verify this and found that the level of interest in entrepreneurship is related to gender and that males' interest is higher. Kourilsky and Walstad (1998), found similar results. However, more research is needed to support these findings.

2.4.2. Personality factors

Early research that tried to answer the question “who the entrepreneur is”, paid significant attention to personality traits, as entrepreneurs were said to be different from the general population. Special attention has been given to traits like “need for achievement” (McClelland, 1961) and “risk-taking propensity” (Brockhaus, 1980), locus of control (Rotter, 1966), etc.

- Need for achievement

The question what motivates someone to become an entrepreneur has bothered entrepreneurship scholar for a long time. McClelland (1987, p.183) defines a motive as “*a recurrent concern for a goal state that drives, orients and selects behavior*”. One of the earliest motives that drives people to become entrepreneurs has been found to be the “need for achievement” (McClelland, 1961). The need for achievement “*seems to entail expectations of doing something better or faster than anybody else or better than the persons own earlier accomplishments*” (Hansemark 2003,p.302).McClelland suggested that people that have a high need for achievement probably have a preference towards tasks that have to do with effort, set high goals, like to face challenges and are innovative. Such characteristics are related to entrepreneurship more than they are to other professions and therefore the need for achievement may affect the intention to start an own business.

- Risk taking propensity

Entrepreneurs have to assume different risks when engaging in entrepreneurial activities. Among others, these can be financial, social, even health risks (Schaper and Volery, 2007). Investing own capital in the start-up or giving some kind of collateral in order to raise finance is not untypical for entrepreneurs. The long hours that they have to work often create problems within the family or other social commitments may suffer. Furthermore, in some societies that do tolerate failure, failed entrepreneurs are often stigmatized (Schaper and Volery, 2007). Very often entrepreneurs consider their ventures like their “own babies” and in a case of bankruptcy or close down of the firm they have feelings of grief and desperation (Shepherd, 2003; Shepherd, 2009) and these negative emotions could have a significant negative impact on themselves and their family’s well-being. Finally, job stress and burnouts are not uncommon among entrepreneurs. Therefore, entrepreneurs are considered to be engaging in risky behavior and risk taking propensity has been defined as “*the tendency to take or avoid risk*”(Norton and Moore, 2006). This tendency may affect the intention to start a new business, despite the fact that also situational factors may play a role in a person’s risk preference. Indeed, research shows “*that individual predispositions do influence behavior across situations involving uncertainty or risk*” (Zhao et al., 2010, p.388).

- Locus of control

The locus of control, “*measures subjects’ perceived ability to influence events in their lives*” (Begley and Boyd, 1987) and has been one of the most studied psychological traits in entrepreneurship research. People with an internal locus of control believe that events in their life derive primarily from their own actions whereas people with an external locus of control tend to believe that external factors are responsible for what is happening in their lives and that they personally have little or no control over such things. Entrepreneurs have been found to be people with an internal locus of control as they are initiators, they depend more on their skills and not on others and they take responsibility for their actions (Mueller and Thomas, 2001).For example, Brockhaus (1975) found that business students with entrepreneurial intentions had a tendency towards a higher internal locus of control than those students who

did not have entrepreneurial intentions. Similar results were found by Shapero (1975) and Pandey and Tewary (1979).

2.4.3. Personal factors

A person's specific reactions to the given situation and personal beliefs seem to have an effect on entrepreneurship (Rychlak, 1981). Perceived skills and perceived barriers are taken into consideration in this report.

- Perceived skills

The perception of a person's skills indicates how confident people feel to make the step towards entrepreneurship and also influences people's self-efficacy that is gradually acquired through experience (Bandura 1982, Boyd and Vozikis 1994, Linan 2008). For example, a person that previously worked as an employee and obtained the necessary skills and experience may be more confident to start an own business (Heilman and Chen, 2003). Specific entrepreneurial skills may also be related to higher personal attraction and subjective norms (Scherer et al., 1991; Carsrud, 1992) and could help a lot in the individual's decision to start a firm (Linan, 2008). Studying perceived skills is of great importance for the enhancement of entrepreneurial intentions as for example: *"education and training initiatives trying to increase entrepreneurial potential in the participants should include workshops specifically addressed to the development of those entrepreneurial skills"* (Linan, 2008, p. 267).

- Perceived barriers

In the entrepreneurship literature, several factors have been identified that are perceived as barriers towards making the step into entrepreneurship (Kouriloff, 2000). These barriers could be related to personal, social, cultural, psychological, and political, economic factors and may include time for family, stress, discrimination, political instability, unfavorable economic conditions, etc. Luthje and Franke (2003) found that that the perceived contextual barriers play a significant role for the entrepreneurial behaviour of technical students. For example, when students perceive that there is an unfriendly environment for entrepreneurs, (e.g., due for example to bank's unwillingness to provide loans), they have lower intentions to become entrepreneurs. Understanding the factors that potential entrepreneurs perceive as barriers for making the step into entrepreneurship is of great importance as measures and suitable initiatives can be taken so as to alter such perceptions with the aim to increase entrepreneurship rates (Kouriloff, 2000; Luthje and Franke, 2003).

2.4.4. Micro-social factors

Several factors of the micro-social environment such as entrepreneurial parents and entrepreneurship education were found to have an impact on entrepreneurial intentions (Laspita et al., 2012; Kolvereid and Moen, 1997).

- Family background

Entrepreneurial socialization, anchored in social learning theory is often used as an explanation and as an antecedent of the entrepreneurial intention and career choice of children of self-employed parents (Lerner et al., 1995). Social learning theory suggests that through observation of the behavior of others, known as role models, learning and the adaption of a

behavior takes place, which is driven by following the example of the role model rather than by direct experience (Bandura, 1977). *“Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action”* (Bandura, 1977, p.22).

Parents, as a major source of the socialization process for a child and as people that a child repeatedly observes, have often been suggested to influence their children’s career choice through the process of role modeling (Laspita et al., 2012; Dyer and Handler, 1994; Hundley, 2006; Krueger and Carsrud, 1993; Matthews and Moser, 1996; Scherer et al., 1989; Scott and Twomey, 1988; Tkachev and Kolvereid, 1999; Wang and Wong, 2004). Early exposure to entrepreneurship and the family business creates values and attitudes towards business ownership (Carr and Sequeira, 2007). The work experiences of the parents have significant effects on children and can be internalized as norms of behavior within the children (Menaghan and Parcel, 1995). Children of self-employed learn to value autonomy and having control over their own lives and to value hard work for the accomplishment of their goals (Aldrich et al., 1998). The “entrepreneurial capital” or the “entrepreneurial inheritance” in terms of values that children obtain from being exposed to the family firm has been a possible explanation for the predisposition towards self-employment among the offspring of the self-employed (Aldrich et al., 1998; Hundley, 2006). This exposure tends to improve the business knowledge of children from a young age and increases their entrepreneurial intentions (Wang and Wong, 2004).

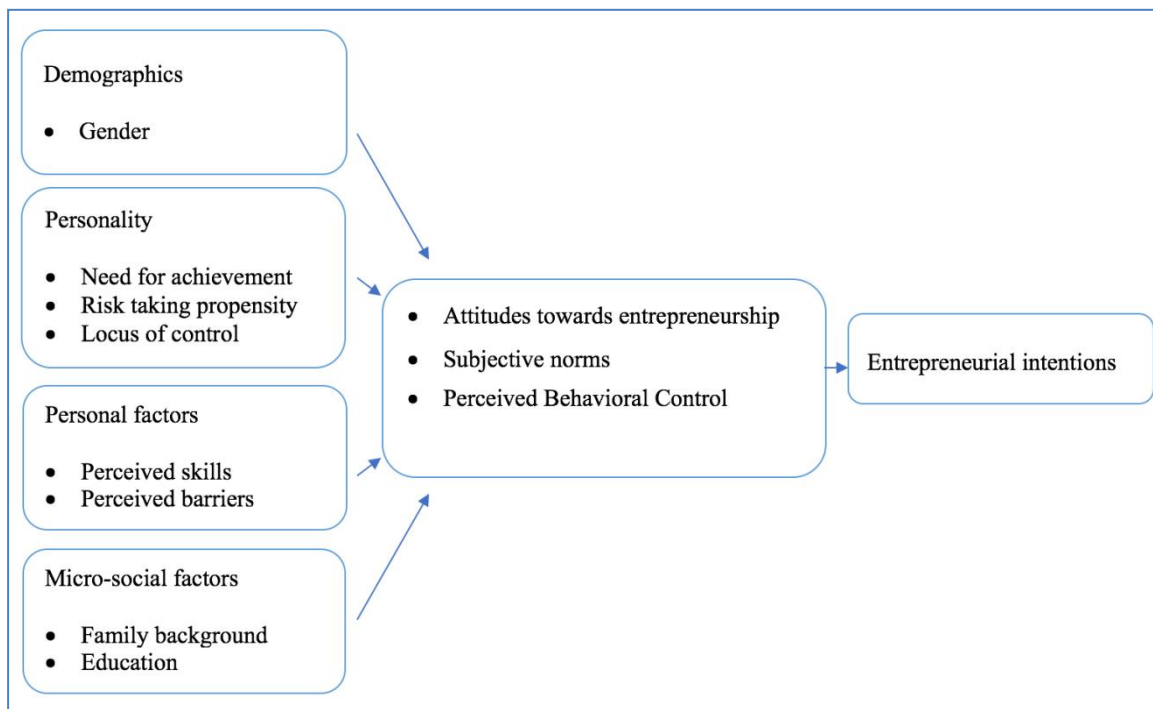
- Entrepreneurship education

The link between entrepreneurship education and entrepreneurial attitudes and intentions has been proposed several times by scholars. Education can help to increase perceptions of feasibility and desirability for potential entrepreneurs (Krueger et al., 2000). The perception of feasibility can be increased, as students on the one hand, gain more knowledge and develop critical competencies, thus their self-efficacy is promoted and on the other hand by making known entrepreneurial successes of famous role models. Showing students that being self-employed is an activity supported by the community and the positive personal feelings (e.g. independence) and rewards that are associated with it, could increase perceptions of desirability towards entrepreneurship. Dyer (1994) suggested that specialized courses in entrepreneurship could raise the confidence that people need in order to become self-employed. Robinson et al. (1991) argued that educators and practitioners may influence entrepreneurial attitudes and in extension also intentions since attitudes are open to change. These studies however did not empirically verify the proposed positive link.

2.4.5. Integrated model

This model depicted below provides a holistic view of entrepreneurial intentions and its antecedents. The variables used in theory of planned behavior, were used, as this model is the most frequently used in entrepreneurship research and it has proven to entail a strong predictive value. As antecedents, various personal and micro-social factors were used, as described in the previous sections of the literature review.

Figure 12: Integrated model



3. Methodology

3.1. Data Collection and Sample Characteristics

A survey was conducted between February and June 2016. The questionnaire used was in Greek and a random sample took part in the survey which was not an online survey. In order to ensure that the questions in the questionnaire were formulated consistently, a bilingual native speaker assisted in the translation process. Consistent with the strict back-translation process (Brislin, 1970), an independent bilingual expert who did not help create the original survey translated the Greek version back into English. No major differences between the original English and the back-translated version were found.

In total 419 people participated in the survey from whom 38.4 percent were male and 61.6 percent were female. The mean age of the respondents is 27.6 and 63.7 percent were students, 7.2 percent were unemployed, 10.8 percent worked for the public sector and 18.2 percent worked for the private sector. 48.5 of the respondents were singles, 31.2 were in a relationship and 20.3 percent were married. 4.7 percent of the respondents had a monthly family income below 300 Euros, 11.5 percent were in the 301-700 Euros category, 34.6 percent in the 700-1200 Euros category, 28.4 percent in the 1200-2000 category and finally 20.8 percent in the above 2000 Euros category. 72.4 percent of the respondents had no family background in entrepreneurship and 81.9 percent knew someone that had already started a business.

3.2. Measures

All the main constructs included in the analysis were assessed with self-report measures based on multi-item scales. 7-point Likert scales were used ranging from 1 (I totally disagree) to 7 (I totally agree).

- Entrepreneurial intention

In order to measure entrepreneurial intention, the scale by Linan and Chen (2009) was applied, with six items (general sentences indicating different aspects of intention). The six items are the following: I am ready to do anything to be an entrepreneur, My professional goal is to become an entrepreneur, I will make every effort to start and run my own firm, I am determined to create a firm in the future, I have very seriously thought of starting a firm, I have the firm intention to start a firm some day. These items were averaged to yield an intention score (Cronbach's reliability coefficient = 0.949)

- Attitude towards entrepreneurship

In order to measure attitude towards entrepreneurship, the validated scale by Linan and Chen (2009) was applied. The items used were: Being an entrepreneur implies more advantages than disadvantages to me, A career as entrepreneur is attractive for me, If I had the opportunity and resources, I'd like to start a firm Being an entrepreneur would entail great satisfactions for me, Among various options, I would rather be an entrepreneur. These items were averaged to yield an attitude towards entrepreneurship score (Cronbach's reliability coefficient = 0.906)

- Perceived behavioral control

In order to measure the perceived behavioral control, the validated scale by Linan and Chen (2009) was applied. The items used were: To start a firm and keep it working would be easy for me, I am prepared to start a viable firm, I can control the creation process of a new firm, I know the necessary practical details to start a firm, I know how to develop an entrepreneurial project, If I tried to start a firm, I would have a high probability of succeeding. These items were averaged to yield a perceived behavioral control score (Cronbach's reliability coefficient = 0.898).

- Subjective norms

In order to measure the subjective norms, the validated scale by Linan and Chen (2009) was applied. Respondents were asked: If you decided to create a firm, would people in your close environment approve of that decision? Indicate from 1 (total disapproval) to 7 (total approval). Three target groups were included: Your close family, Your friends, Your colleagues. These items were averaged to yield a subjective norms score (Cronbach's reliability coefficient = 0.813).

- Locus of control

Locus of control was measured according to Chen et al. (1998) who followed Levenson. The items that were averaged in order to create the aggregated locus of control score were: I am usually able to protect my personal interests, When I make plans, I am almost certain to make them work, I can pretty much determine what will happen in my life, My life is determined by my own actions, When I get what I want, it's usually because I worked hard for it (Cronbach's reliability coefficient = 0.750).

- Need for achievement

In order to measure need for achievement the established scale by McClelland was used. The items that were averaged in order to create the aggregated need for achievement score were: Nothing else in life is a substitute for a great achievement, My ambitions and my goals are

high, I spend more time thinking about future despite my previous successes, Usually I push myself and I feel real satisfaction when my work is among the best available (Cronbach's reliability coefficient = 0,694)

- Risk taking propensity

Risk taking propensity was measured according to Norton & Moore (2006). The items that were averaged in order to create the aggregated risk taking propensity score were: I am not willing to take risks when choosing a work environment, I prefer a low risk/high security work environment with predictable income over a high risk and high reward environment, I prefer to remain in an environment that has problems that I know about rather than to take the risks of a new environment that has unknown problems, even if the new environment offers greater rewards, I view job-related risk as a situation to be avoided at all costs. (Cronbach's reliability coefficient = 0,752)

- Perceived skills

Perceived skills were measured according to Linan (2008). The items that were averaged in order to create the aggregated perceived skills score were: Recognition of opportunity, Creativity, Problem solving skills, Leadership and communication skills, Development of new products and services, Networking skills, and making professional contacts (Cronbach's reliability coefficient = 0,814)

- Perceived barriers

Finally, the operationalization of the barriers was done based on prior studies conducted by using different sources such as Kourikoff (2000). The list with the items can be found in the appendix.

4. Results

Table 1 shows descriptive statistics of entrepreneurial intention and its antecedents such as attitude, subjective norms and behavioral control, etc.

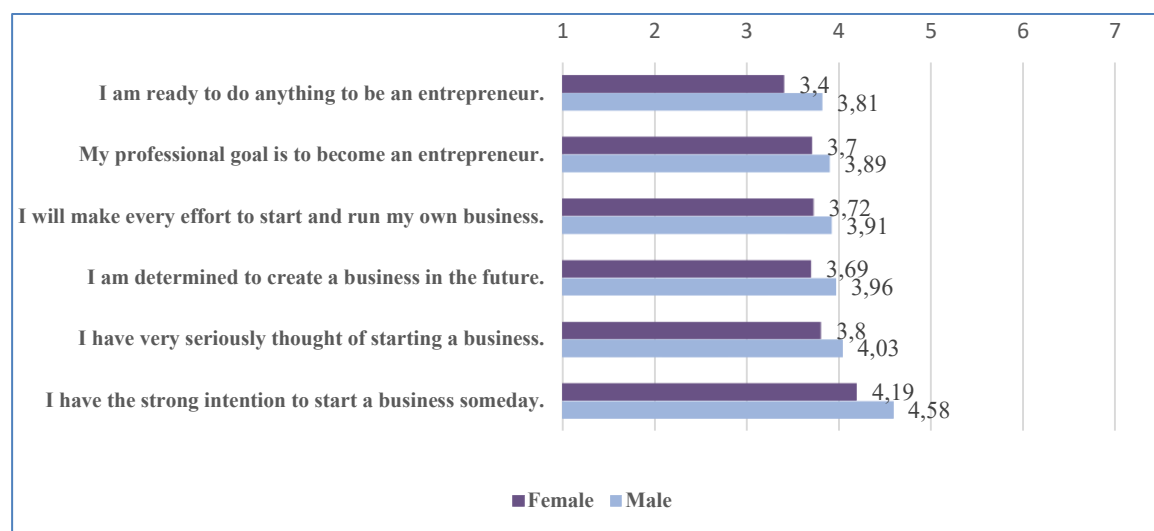
Table 1: Means for entrepreneurial intention and its antecedents

	N	AM	SD	Cron. a
Entrepreneurial intentions	418	3,77	1,689	0,949
Attitudes towards entrepreneurship	418	4,54	1,416	0,906
Perceived Behavioral Control	417	3,24	1,272	0,898
Subjective norms	417	5,12	1,348	0,813
Locus of control	419	5,11	1,130	0,750
Need for achievement	419	5,09	1,064	0,694
Risk taking propensity	419	3,89	1,211	0,752
Perceived skills	419	4,99	0,927	0,814

Despite the fact that entrepreneurial intentions are rather low, respondents have a rather favorable attitude towards entrepreneurship, they perceive their skills to be high, they have a rather high need for achievement and a high internal locus of control. The subjective norms are also quite high, meaning that social environment has a positive attitude towards entrepreneurship. The low level of entrepreneurial intentions suggests that there may be other variables which affect the relationship between attitude and the actual behavior. For example, people in our sample are quite risk averse and this finding may to some extent explain the low level of the entrepreneurial intentions. Findings reveal a very low perceived behavioral control which means that individuals in Greece and during the economic crisis regard themselves as not able to engage in entrepreneurial activities and they perceive that the entrepreneurial behavior is not within their control. So, despite the fact that people may have a positive attitude towards entrepreneurship, the unstable economic climate in the country renders entrepreneurship not a feasible career path.

We also tested for gender differences in the aggregated entrepreneurial intention index. The entrepreneurial intention for male respondents ($M=3.93$, $SD=1.746$) is higher than that for female respondents ($M=3.67$, $SD=1.647$), however the difference was not significant ($t(416)=1.508$, $p>0.05$). The following figure provides a more detailed picture of the results.

Figure 13: Entrepreneurial intentions by gender



We tested for gender differences in the above-mentioned variables but there were no statistical differences (except from perceived behavioral control), as can be seen in the tables below. This may be due to fact that the bad economic conditions in the country affect attitudes, personal factors and personality variables similarly. However, men regard themselves more able to engage in entrepreneurial activities and they perceive that the entrepreneurial behavior is more within their control than their female counterparts (see tables 2 and 3).

Table 2: Gender differences in vocal variables

	Gender	N	Mean	Std. Deviation	Std. Error
Entrepreneurial intentions	Male	161	3.9246	1.74592	.13760
	Female	257	3.6690	1.64762	.10278
Attitudes towards entrepreneurship	Male	161	4.6422	1.43081	.11276
	Female	257	4.4722	1.40523	.08766
Perceived Behavioral Control	Male	161	3.5031	1.34480	.10599
	Female	256	3.0760	1.19805	.07488
Subjective norm	Male	161	5.1159	1.24834	.09838
	Female	256	5.0931	1.40978	.08811
Locus of control	Male	161	5.1146	1.36622	.10767
	Female	258	5.1021	.95561	.05949
Need for Achievement	Male	161	5.0864	1.09782	.08652
	Female	258	5.0901	1.04489	.06505
Risk taking propensity	Male	161	4.0000	1.25437	.09886
	Female	258	3.8253	1.17998	.07346
Perceived Skills	Male	161	4.9832	.93136	.07340
	Female	258	4.9961	.92538	.05761

Table 3: Results t-tests (gender differences)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Entrepreneurial intentions	Equal variances assumed	1.035	.310	1.508	416	.132	.25564	.16947	-.0775	.58876
	Equal variances not assumed			1.488	325.09	.138	.25564	.17174	-.0822	.59351
Attitudes towards entrepreneurship	Equal variances assumed	.014	.906	1.196	416	.233	.17006	.14223	-.1095	.44964
	Equal variances not assumed			1.191	335.27	.235	.17006	.14283	-.1109	.45100
Perceived Behavioral Control	Equal variances assumed	3.713	.055	3.379	415	.001	.42706	.12640	.17860	.67553
	Equal variances not assumed			3.291	310.97	.001	.42706	.12977	.17173	.68240
Subjective norm	Equal variances assumed	3.082	.080	.168	415	.866	.02284	.13577	-.2440	.28973
	Equal variances not assumed			.173	370.18	.863	.02284	.13207	-.2369	.28255
Locus of control	Equal variances assumed	.437	.509	.110	417	.913	.01246	.11358	-.2108	.23573
	Equal variances not assumed			.101	257.66	.919	.01246	.12302	-.2298	.25471
Need for Achievement	Equal variances assumed	.231	.631	-.034	417	.973	-.0037	.10701	-.2140	.20668
	Equal variances not assumed			-.034	326.98	.973	-.0037	.10825	-.2166	.20927
Risk taking propensity	Equal variances assumed	.634	.426	1.439	417	.151	.17474	.12143	-.0640	.41344
	Equal variances not assumed			1.419	323.99	.157	.17474	.12317	-.0676	.41705
Perceived Skills	Equal variances assumed	.003	.959	-.138	417	.890	-.0129	.09317	-.1960	.17025
	Equal variances not assumed			-.138	338.00	.890	-.0129	.09331	-.1964	.17065

A correlation analysis has been conducted to explore the relationship between entrepreneurial intentions and all other variables. The results can be found in the table below.

Table 4: Correlations between entrepreneurial intention and its antecedents

		1	2	3	4	5	6	7
1	Entrepreneurial intentions							
2	Attitudes towards entrepreneurship	.689**						
3	Perceived Behavioral Control	.456**	.507**					
4	Subjective norms	.342**	.426**	.196**				
5	Locus of control	.096*	.231**	.268**	.168**			
6	Need for achievement	.158**	.274**	.294**	.213**	.437**		
7	Risk taking propensity	-.240**	-.185**	-.084	-.008	-.004	.013	
8	Perceived skills	.301**	.343**	.455**	.146**	.343**	.453**	-.043

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The table above shows a significant positive correlation for all variables with entrepreneurial intentions except for the risk-taking propensity which is significant but negative. This means that more risk averse people are, the less their intention to become self-employed. This finding is in accordance with previous research that provided evidence that individuals with a greater risk tolerance have a stronger entrepreneurial intention (Hmieleski and Corbett, 2006). Furthermore, a rather strong correlation exists between entrepreneurial intentions and perceived desirability and the attitude towards entrepreneurship and a modest correlation between entrepreneurial intentions perceived feasibility, perceived behavioral control and subjective norms. These findings, are similar to other studies that used the theory of planned behavior to explain entrepreneurial intentions (Ozaralli and Rivenburgh, 2016). Consistent with the trait approach, personality characteristics, such as the need for achievement, appear to be related to entrepreneurial intention, even if the correlation is quite small.

A confirmatory factor analysis (varimax rotation, main component analysis) reduced the 36 different barriers into nine factors. These are: public policy barriers ($\alpha=0.810$), personal barriers ($\alpha=0.830$), social barriers ($\alpha=0.772$), economical barriers ($\alpha=0.661$), operation barriers ($\alpha=0.809$), networking barriers ($\alpha=0.791$), stress barriers ($\alpha=0.633$), regulation barriers ($\alpha=0.565$) and finally business risk barriers ($\alpha=0.258$). The nine factors together explain a total of 63.38 percent of the variance.

Table 5 shows descriptive statistics of the perceived barriers. As the results show the economic barriers, the public policy barriers and the business risk barriers are considered of the most important barriers towards undertaking entrepreneurial activities and reflect the difficult economic and political situation in Greece. The least important barriers are personal barriers and operation barriers.

Table 5: Descriptive statistics of the perceived barriers

	N	AM	SD
Public policy barriers	418	5,76	0,9552
Personal barriers	416	4,12	1,310
Social barriers	415	4,32	1,179
Economical barriers	418	5,89	1,036
Operation barriers	416	4,27	1,322
Networking barriers	417	4,32	1,337
Stress barriers	418	4,82	1,163
Regulation barriers	418	4,97	1,241
Business risk barriers	418	5,45	1,046

The correlation analysis between the perceived barriers and entrepreneurial intention shows that there is in almost all cases a very weak negative relationship. In other words, the stronger the inhibiting factors are perceived the lower becomes the intention to become self-employed. However, the negative relationship with the entrepreneurial intentions is significant only for two barriers that is stress barriers and business risk barriers. So surprisingly the perceived barriers do not seem influence the intentions to become an entrepreneur. This may be due to the fact that people because of the economic crisis that leaves them without many alternatives because of the high unemployment are willing to make the step into entrepreneurship even if they perceive that this process will be associated with different barriers. The results show modest or strong correlations between different kinds of barriers.

Table 6: Correlations between entrepreneurial intention and perceived barriers

		1	2	3	4	5	6	7	8	9
1	Entrepreneurial intentions									
2	Public policy barriers	-.075								
3	Personal barriers	.000	.213**							
4	Social barriers	-.060	.422**	.462**						
5	Economic barriers	-.047	.530**	.187**	.260**					
6	Operation barriers	-.008	.302**	.284**	.456**	.256**				
7	Networking barriers	-.046	.260**	.459**	.410**	.245**	.500**			
8	Stress barriers	-.152**	.378**	.244**	.367**	.294**	.291**	.313**		
9	Regulation barriers	.012	.465**	.197**	.331**	.355**	.325**	.341**	.231**	
10	Business risk barriers	-.153**	.384**	.282**	.308**	.332**	.290**	.304**	.389**	.235**

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

We also tested for gender differences in the perceived barriers. Differences were found in the perception of personal barriers that include self-confidence and ambition, the perception of operations barriers that include finding business opportunities and marketing methods, the

perception of networking barriers that include business contacts and the perception of stress barriers that include work stress. Men regard these barriers as less problematic than women.

Table 7: Gender differences in perceived barriers

	Gender	N	Mean	SD	Std. Error
Public policy barriers	Male	160	5.7372	1.05479	.08339
	Female	258	5.7674	.88981	.05540
Personal barriers	Male	158	3.8443	1.28557	.10227
	Female	258	4.2920	1.29758	.08078
Social barriers	Male	158	4.2282	1.14856	.09137
	Female	257	4.3718	1.19677	.07465
Economic barriers	Male	160	5.7828	1.20581	.09533
	Female	258	5.9551	.91107	.05672
Operation barriers	Male	159	4.0681	1.30874	.10379
	Female	257	4.3995	1.31644	.08212
Networking barriers	Male	159	4.0818	1.29098	.10238
	Female	258	4.4683	1.34551	.08377
Stress barriers	Male	160	4.5771	1.25989	.09960
	Female	258	4.9677	1.07502	.06693
Regulation barriers	Male	160	4.9875	1.28115	.10128
	Female	258	4.9612	1.21855	.07586
Business risk barriers	Male	160	5.3875	1.11303	.08799
	Female	258	5.4845	1.00182	.06237

Table 8: Gender differences (t-tests)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
public_policy	Equal variances assumed	3.488	.063	-.314	416	.753	-.03024	.09622	-.21938	.15891
	Equal variances not assumed			-.302	294.787	.763	-.03024	.10011	-.22726	.16679
personal	Equal variances assumed	.016	.899	-3.427	414	.001	-.44769	.13062	-.70445	-.19092
	Equal variances not assumed			-3.435	334.479	.001	-.44769	.13033	-.70406	-.19131
social	Equal variances assumed	.731	.393	-1.205	413	.229	-.14363	.11916	-.37786	.09061
	Equal variances not assumed			-1.217	342.857	.224	-.14363	.11799	-.37571	.08846
economical	Equal variances assumed	3.522	.061	-1.656	416	.098	-.17229	.10402	-.37676	.03218
	Equal variances not assumed			-1.553	270.533	.122	-.17229	.11093	-.39068	.04610
operation	Equal variances assumed	.003	.955	-2.500	414	.013	-.33135	.13253	-.59186	-.07083
	Equal variances not assumed			-2.504	336.372	.013	-.33135	.13235	-.59168	-.07102
networking	Equal variances assumed	1.569	.211	-2.894	415	.004	-.38659	.13359	-.64919	-.12398
	Equal variances not assumed			-2.922	345.233	.004	-.38659	.13228	-.64677	-.12640
stress	Equal variances assumed	9.506	.002	-3.378	416	.001	-.39062	.11564	-.61793	-.16330
	Equal variances not assumed			-3.255	297.477	.001	-.39062	.12000	-.62677	-.15446
regulation	Equal variances assumed	.293	.589	.210	416	.834	.02626	.12507	-.21958	.27210
	Equal variances not assumed			.208	324.302	.836	.02626	.12655	-.22269	.27521
business_risk	Equal variances assumed	1.756	.186	-.922	416	.357	-.09700	.10523	-.30384	.10985
	Equal variances not assumed			-.899	310.426	.369	-.09700	.10786	-.30922	.11522

5. Summary and discussion of the results

The main goal of this paper was to examine the entrepreneurial intention of people in Greece in an era of an economic crisis, but also to explore antecedents that may enhance or hinder the entrepreneurial intentions. Another goal was to identify gender similarities or differences on the entrepreneurial intention but also on its antecedents. Drawing mainly on the theory of planned behavior, this paper offers preliminary results of a study that took place between February and June and consists of 419 respondents.

An important finding is that respondents showed relatively low intention to start their business whereas, their personal attitudes toward becoming an entrepreneur and perceived desirability are high. One explanation could be that the perceived risks associated with new business creation and the unstable economic and political climate render entrepreneurship an unfeasible career choice. Similar levels of entrepreneurial intentions in Greece were also shown in the Greek data of the GUESSS study that took place in 2013 (Sarri and Laspita, 2014). However, the lack of potential entrepreneurs or entrepreneurs in the first steps of their activities could be an obstacle to the fast revival of the economy in the country, as especially during times of financial instability, new businesses generate jobs, they spread innovation and provide support to the local economy and the economy as a whole (Engle et al., 2010). In our study the attitude towards entrepreneurship was higher than perceived behavioral control and Fitzsimmons and Douglas (2011) have found that individuals reporting high perceived desirability but low feasibility were less likely to report entrepreneurial intentions, which may also explain the level of entrepreneurial intention of the respondents in our sample.

The negative relationship between risk preference and entrepreneurial intentions is in accordance with other studies (e.g. Hmieleski and Corbett, 2006; Barbosa et al, 2007). Similar to our results Kennedy et. al (2003) also found that subjective norms positively related with entrepreneurial intentions. Finally, there was a rather small positive correlation between entrepreneurial intentions and need for achievement and locus of control. The positive correlation has been confirmed by previous studies conducted by Brockhaus (1975) and Borland (1974).

Another interesting result is that the economic barriers, the public policy barriers and the business risk barriers are considered of the most important barriers towards undertaking entrepreneurial activities and not for example barriers that have to do with the person (such as stress towards undertaking entrepreneurial activities or networking). This is in accordance with the findings of Kouriloff (2000) who pointed out that the government instead of being the key player in fostering entrepreneurship; it may in fact be a source of several important barriers to entrepreneurship. This is why the role of the government and of the society as a whole in creating an entrepreneurial environment is essential in order to boost entrepreneurial activity in the current period. Policy makers could put in use measures that include facilitation of access to financial services and funding which is especially important in times of economic recession, the reduction of bureaucracy, regulations and taxation (OECD, 2009). Such measures not only can render entrepreneurship a feasible (people in our study regard entrepreneurship desirable but less feasible) careers path but could also restore long-term growth for current businesses.

Our results show that generally male and female potential entrepreneurs are quite alike in the motivation towards becoming self-employed during this period of the economic crisis in Greece, as it also shown in the literature on existing entrepreneurs (Brush, 1992; Veena and Nagaraja, 2013). Similarities were found for example in the risk-taking propensity, the perceived skills, need for achievement, locus of control, etc. If however, both potential and existing male and female entrepreneurs do not mainly differ in their motivation to become entrepreneurs, the question of the gender gap in entrepreneurial activity still remains open and

is subject to future research. For example, Pines et al. (2010) found gender similarities in the motivation for starting a business, the sense of significance it provided and their entrepreneurial traits. They argue that women's inferiority in entrepreneurship is a result of social and economic exclusion and lack of equality, whose role is reinforced in times of an economic crisis. *"In times of crisis money 'talks' and women have no money. Financial organizations are reluctant to lend money to small and vulnerable businesses (that tend to characterize women) and they are reluctant to lend money to new businesses (that tend to characterize women)"* (Pines et al., 2010, p. 192). The small differences that we found in motives and hurdles could be influenced by socialization. *"Society requires women to take on the mothering role, which often leads to unsatisfactory, truncated careers, while men are expected to be bread-winners. As a result of different socialization what one might expect would simply be fewer independent businesswomen than independent businessmen"* (Cromie, 1987, p.259).

In our study, we did not identify significant differences in the entrepreneurial intentions of men and women (even if men show higher intention than women). However, in times of economic crisis, when there is a need for women to earn money for the survival of their families, stereotypes concerning women being a part of the workforce may be overcome, however obstacles regarding, for example, access to finance for women from banks may still remain as banks may face females that try to become entrepreneurs with some incredulity. These matters should be taken into consideration in order to reduce the gender gap in entrepreneurial intentions and activity. However, a gender gap in entrepreneurial activity still exists in the country and this has important implications for policy makers and educators since measures are needed to be taken in order to raise female's interest in entrepreneurship. Policy makers could put in use measures that include facilitation of access to financial services, legal protection of women entrepreneurs, a combination of mentoring and practical sessions, through which women can improve their business knowledge and their self-efficacy. In all the measures taken, women's special needs (e.g. children, care of older people, etc.) should be taken into consideration. Educators could bring in class successful female entrepreneurs or organize excursions to companies founded by women in order to increase students' perceptions of entrepreneurship as something feasible and desirable.

References

- Ahl, H. (2006). Why research on women entrepreneurs needs new directions. *Entrepreneurship theory and practice*, 30(5), 595-621.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Aldrich, H., Renzulli, L. A., & Langton, N. (1998). Passing on privilege: Resources provided by self-employed parents to their self-employed children. *Research in Social Stratification and Mobility*, 16, 291-318.
- Alsos, G. A. and Ljunggren, E., (1998). *Does the business start-up process differ by gender? A longitudinal study of nascent entrepreneurs*, In: Bygrave, W., Manigart, S., Mason, C., Meyer, G., Carter, N. & Shaver, K. (eds.) *Frontiers of Entrepreneurship Research*. Boston, MA: Babson College.
- Audet, J. (2002). A longitudinal study of the entrepreneurial intentions of university students. Paper presented at the annual meeting of the Babson Kaufmann Entrepreneurship Research Conference, Boulder, CO (June).

- Bandura, A. (1977). *Social learning theory* (illustrated ed.). Englewood Cliffs, N.J.: Prentice Hall.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American psychologist*, 37(2), 122.
- Barbosa, S. D., Gerhardt, M. W., & Kickul, J. R. (2007). The role of cognitive style and risk preference on entrepreneurial self-efficacy and entrepreneurial intentions. *Journal of Leadership & Organizational Studies*, 13(4), 86-104.
- Begley, T. M., & Boyd, D. P. (1987). Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses. *Journal of business venturing*, 2(1), 79-93.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442-453.
- Birley, S. (1989). Female entrepreneurs: Are they really any different? *Journal of Small Business Management*, 27(1), 32-37.
- Boden, R. (1996). Gender and Self-Employment Selection: An Empirical Assessment. *Journal of Socio- Economics*, 25(6), 671-682.
- Borland, C.M. (1974). Locus of control, need for achievement and entrepreneurship. *Unpublished Dissertation*. University of Texas.
- Boyd, N. G., & Vozikis, G. S. (1994). The Influence of Self-Efficacy on the Development of Entrepreneurial Intentions and Actions. *Entrepreneurship: Theory & Practice*, 18(4), 63-77.
- Brislin, R.W., (1970). Back translation for cross-cultural research. *Journal of Cross-Cultural Psychology* 1 (3), 185–216.^[1]_{SEP}
- Brockhaus, R.H. (1980) Risk taking propensity of entrepreneurs, *The Academy of Management Journal*, 23(3), pp. 509-20.
- Brockhaus, R. H. (1975). Ie locus of control scores as predictors of entrepreneurial intentions. In *Academy of Management Proceedings* (Vol. 1975, No. 1, pp. 433-435). Academy of Management.
- Brush, C. G. (1992). Research on women business owners: Past trends, a new perspective and future directions. *Entrepreneurship: Theory and Practice*, 16(4), 5-30.
- Bullough, A., Renko, M., & Myatt, T. (2014). Danger Zone Entrepreneurs: The Importance of Resilience and Self-Efficacy for Entrepreneurial Intentions. *Entrepreneurship: Theory & Practice*, 38(3), 473-499.
- Carland, J. W., Hoy, F., and Carland, J. A. C. (1988). Who is an entrepreneur?" is a question worth asking, *American Journal of Small Business*, spring, pp 33–39.
- Carr, J. C. & Sequeira, J. M. (2007). Prior family business exposure as intergenerational influence and entrepreneurial intent: A theory of planned behavior approach. *Journal of Business Research*, 60(10), 1090-1098.
- Carsrud, A. L. (1992). *The psychology of entrepreneurship*. Stirling: University of Stirling.
- Carter, N. M., Williams, M., & Reynolds, P. D. (1997). Discontinuance among new firms in retail: The influence of initial resources, strategy and gender. *Journal of Business Venturing*, 12(2), 125-145.
- Chaganti, R. & Parasuraman, S. A. (1996). A study of the impacts of gender on business performance and management patterns in small businesses. *Entrepreneurship: Theory and Practice*, 21(2), 73-75.
- Chen, C.C., Greene, P.G. & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13, 295-316.
- Coleman Alison (2014). Post-Eurozone Crisis: Greek Entrepreneurship Starts To Flourish. Available at: <http://www.forbes.com/sites/alisoncoleman/2014/07/25/hardly-a-tragedy-as-greek-entrepreneurship-begins-to-flourish/#4b3893a5592f>

- Cromie, S. (1987). Motivations of aspiring male and female entrepreneurs, *Journal of Organizational Behavior*, 8, 251-261.
- Davidsson, P.(1995). Determinants of entrepreneurial intentions. *RENT IX Conference*. Piacenza Italy, Nov 23-24.
- DeMartino, R.,&Barbato, R. (2003). Differences between women and men MBA entrepreneurs: Exploring family flexibility and wealth creation as career motivators, *Journal of Business Venturing*, 18(6), 815-832.
- Díaz-García, M. C., & Jiménez-Moreno, J. (2010). Entrepreneurial intention: the role of gender. *International Entrepreneurship and Management Journal*, 6(3), 261-283.
- Dickson, P. H., Solomon, G. T., & Weaver, K. M. (2008). Entrepreneurial selection and success: does education matter?. *Journal of small business and enterprise development*, 15(2), 239-258.
- Drennan, J., Kennedy, J., & Renfrow, P. (2005). Impact of childhood experiences on the development of entrepreneurial intentions. *The International Journal of Entrepreneurship and Innovation*, 6(4), 231-238.
- Douglas, E. J., & Shepherd, D. A. (2002). Self-employment as a career choice: Attitudes, entrepreneurial intentions, and utility maximization. *Entrepreneurship theory and practice*, 26(3), 81-90.
- Dyer, W. (1994). Toward a Theory of Entrepreneurial Careers. *Entrepreneurship Theory and Practice*, 19, 7-21.
- Dyer, W. G. & Handler, W. (1994). Entrepreneurship and family business: Exploring the connections. *Entrepreneurship Theory and Practice*, 19 (1), 71-83.
- Elfving, J., Brännback, M., & Carsrud, A., (2009). Towards a contextual models of entrepreneurial intentions. In A.L. Carsrud and M. Brännback (eds) *Understanding the Entrepreneurial Mind* (pp. 23-33). Springer Science + Business Media.
- Engle, R. L., Dimitriadi, N., Gavidia, J. V., Schlaegel, C., Delanoe, S., Alvarado, I., & Wolff, B. (2010). Entrepreneurial intent: A twelve-country evaluation of Ajzen's model of planned behavior. *International Journal of Entrepreneurial Behavior & Research*, 16(1), 35-57.
- Fayolle, A., & Liñán, F. (2014). The future of research on entrepreneurial intentions. *Journal of Business Research*, 67(5), 663-666.
- Fischer, E. M., Reuber, A. R., & Dyke, L. A. (1993). A theoretical overview and extension of research on sex, gender, and entrepreneurship. *Journal of Business Venturing*, 8(2), 151-168.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fitzsimmons, J. R., & Douglas, E. J. (2011). Interaction between feasibility and desirability in the formation of entrepreneurial intentions. *Journal of Business Venturing*, 26(4), 431-440.
- Gasse, Y., & Tremblay, M. (2011). Entrepreneurial beliefs and intentions: a cross-cultural study of university students in seven countries. *International Journal of Business*, 16(4), 303.
- Greene, P. G., Hart, M. M., Gatewood, E. J., Brush, C. G., & Carter, N. M. (2003). Women entrepreneurs: Moving front and center: An overview of research and theory. Coleman White Paper Series, 3, 1-47.
- Guerrero, M., Rialp, J., & Urbano, D. (2006). The impact of desirability and feasibility on entrepreneurial intentions: A structural equation model. *International Entrepreneurship Management Journal*, 35-50.
- Hansemark, O. C. (2003). Need for achievement, locus of control and the prediction of business start-ups: A longitudinal study. *Journal of Economic Psychology*, 24(3), 301-319.

- Heilman, M. E., & Chen, J. J. (2003). Entrepreneurship as a solution: The allure of self-employment for women and minorities. *Human Resource Management Review*, 13(2), 347-364.
- Hisrich, R. D. (1982). The woman entrepreneur as a reflection of the type of business. In K. H. Vesper (Ed.), *Frontiers of entrepreneurship research*. (pp. 54-67). Boston, MA: Babson College.
- Hmieleski, K. M., & Corbett, A. C. (2006). Proclivity for improvisation as a predictor of entrepreneurial intentions. *Journal of Small Business Management*, 44, 45-63.
- Hundley, G. (2006). Family background and the propensity for self-employment. *Industrial Relations*, 45(3), 377-392.
- Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education+ Training*, 53(5), 353-370.
- Katz, J. A. (1992). A psychosocial cognitive model of employment status choice. *Entrepreneurship: Theory and Practice*, 17(1), 29-37.
- Kelley, D., Bosma, N. & Amorós, J.E., (2011), Global Entrepreneurship Monitor, 2010 Global Report, Babson College and Universidad del Desarrollo.
- Kelley D. J., Brush C. G., Greene P. G., Herrington M., Ali A., Kew P.(2015), Global Entrepreneurship Monitor: Special Report 2015: Women's Entrepreneurship, Babson College, and the Global Entrepreneurship Research Association (GERA).
- Kelley D., Singer S. Herrington M. (2016). 2015/16GlobalEntrepreneurship Monitor Report. Global Entrepreneurship Research Association (GERA)
- Kent C., Van Auken S., Young D. (1982). Managers and entrepreneurs: Do lifetime experiences matter? In Vesper K. (Ed.), *Frontiers of entrepreneurship research* (pp. 516-525). Babson Park, US: Babson College
- Kennedy, J., Denman, D. J., Renfrow, D. P., & Watson, D. B. (2003). *Situational factors and entrepreneurial intentions*. 16th Annual Conference of Small Enterprise Association of Australia and New Zealand, pp. 1-12.
- Koh, H. C. (1995). Factors associated with entrepreneurial inclination: An empirical study of business undergraduates in Hong Kong. *Journal of Small Business Entrepreneurship*, 12(2), 29-41.
- Kolvereid, L. (1996). Prediction of employment status choice intentions. *Entrepreneurship Theory and Practice*, 21(1), 47-58.
- Kolvereid, L. & Moen, Ø. (1997). Entrepreneurship among business graduates: Does a major in entrepreneurship make a difference? *Journal of European Industrial Training*, 21(4), 154-160.
- Kouriloff, M. (2000). Exploring perceptions of a priori barriers to entrepreneurship: A multidisciplinary approach. *Entrepreneurship: Theory and practice*, 25(2), 59-59.
- Kourilsky, M. L. and Walstad, W. B. (1998). Entrepreneurship and female youth: Knowledge, attitudes, gender differences, and educational practices, *Journal of Business Venturing*, 13, 77-88.
- Kristiansen, S. and Indarti, N. (2004). Entrepreneurial intention among indonesian and norwegian students, *Journal of Enterprising Culture*, 12(1), 55-78.
- Krueger, N.F. (2009). Entrepreneurial intentions are dead: Long live entrepreneurial intentions. In A.L. Carsrud & M. Brännback (Eds.), *Understanding the entrepreneurial mind, international studies in entrepreneurship* (pp. 51-72). New York: Springer.
- Krueger, N. F. & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship & Regional Development: An International Journal*, 5(4), 315-330.
- Krueger, N. F., & Brazeal, D. V. (1994). Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship theory and practice*, 18, 91-91.

- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5-6), 411-432.
- Landini, F., Arrighetti, A., Caricati, L., & Monacelli, N. (2015). Entrepreneurial intention in the time of crisis: a field study. In DRUID 2015 conference.
- Laspita, S., (2010). Strategic business creation: An insight into the entrepreneurial intentions of young potential entrepreneurs. PhD Dissertation: EBS Universität für Wirtschaft und Recht, Wiesbaden, Germany
- Laspita, S., Breugst, N., Heblich, S., & Patzelt, H. (2012). Intergenerational transmission of entrepreneurial intentions. *Journal of Business Venturing*, 27(4), 414-435.
- Laspita S., Scheiner C., Chlosta S., Brem A., Voigt K.-I. & Klandt H. (2007). *Students' attitude towards entrepreneurship: Does gender matter?*. Review of international comparative management, 8(4), pp. 92-118.
- Lerner, M., Brush, C. G., & Hisrich, R. D. (1995). *Factors affecting performance of israeli women entrepreneurs: An examination of alternative perspectives*. In W. D. Bygrave et al. (Eds.), *Frontiers of entrepreneurship research*. (pp. 308-322). Boston, MA: Babson College.
- Linan, F. (2008). Skill and value perceptions: how do they affect entrepreneurial intentions?. *International Entrepreneurship and Management Journal*, 4(3), 257-272.
- Liñán, F., & Chen, Y. W. (2009). Development and Cross-Cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship theory and practice*, 33(3), 593-617.
- Liñán, F., Rodríguez-Cohard, J., & Rueda-Cantuche, J., (2011). Factors affecting entrepreneurial intention levels: a role for education. *International Entrepreneurship and Management Journal*, 7, 195-218.
- Ljunggren, E. and Kolvereid, L. (1996). New business formation: Does gender make a difference?, *Women in Management Review*, 11(4), 3-12.
- Luthje, C. and Franke, N.(2003). The 'making' of an entrepreneur: Testing a model of entrepreneurial intent among engineering students at MIT, *R&D Management*, 33, 135-147.
- Matthews, C.H. and Moser S.B.(1996). A longitudinal investigation of the impact of family background and gender on interest in small firm ownership. *Journal of Small BusinessManagement*, Vol.34, No. 2, pp. 29-43.
- McClelland, D.C. (1961). *The achieving society*, Van Nostrand, New York.
- McClelland, D. C. (1987). *Human motivation*. Cambridge, New York, Oakleigh, Madrid, Cape Town: Cambridge Univ Press.
- Menaghan, E. G. & Parcel, T. L. (1995). Social sources of change in children's home environments: The effects of parental occupational experiences and family conditions. *Journal of Marriage and the Family*, 57(1), 69-84.
- Mueller, S. (2004). Gender gaps in potential for entrepreneurship across countries and cultures. *Journal of Developmental Entrepreneurship*, 9(3), 199-220.
- Mueller, S. L., & Thomas, A. S. (2001). Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. *Journal of Business Venturing*, 16(1), 51-75.
- Norton Jr, W. I., & Moore, W. T. (2006). The influence of entrepreneurial risk assessment on venture launch or growth decisions. *Small Business Economics*, 26(3), 215-226.
- OECD (2009). The Impact of the Global Crisis on SME and Entrepreneurship Financing and Policy Responses
- OECD (2016). Economic Survey of Greece 2016. Available at: <http://www.oecd.org/greece/economic-survey-greece.htm>

- Orhan, M.(2001). Women business owners in France: the issue of financing discrimination, *Journal of Small Business Management*, 39, 95-102.
- Ozaralli, N., & Rivenburgh, N. K. (2016). Entrepreneurial intention: antecedents to entrepreneurial behavior in the USA and Turkey. *Journal of Global Entrepreneurship Research*, 6(1), 3.
- Pandey, J. and Tewary, N.B. (1979). Locus of control and achievement values of entrepreneurs. *Journal of Occupational Psychology* 50:107–111.
- Paramond, S. (2004). Attitude towards entrepreneurship in organizations. *The Journal of Entrepreneurship*, 13(1), 53–68.
- Peterman, N. E., & Kennedy, J. (2003). Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship theory and practice*, 28(2), 129-144.
- Pines, A., Lerner, M., & Schwartz, D. (2010). Gender differences in entrepreneurship: equality, diversity and inclusion in times of global crisis. *Equality, diversity and inclusion: An International journal*, 29(2), 186-198.
- Ripsas, S. (1998). Towards an interdisciplinary theory of entrepreneurship, *Small Business Economics*, 10(2), pp. 103-15.
- Robinson, P.B., Stimpson, D.V., Huefner, J.C. & Hunt, H.K. (1991). An Attitude Approach to the Prediction of Entrepreneurship, *Entrepreneurship Theory and Practice*, 15(4), pp. 13-31.
- Rosa, P., Carter, S., & Hamilton, D. (1996). Gender as a determinant of small business performance: Insights from a british study. *Small Business Economics*, 8(6), 463-478.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80(1), 1-28.
- Rychlak, J. F. (1981). *Introduction to personality and psychotherapy: A theory- construction approach*. Boston: Houghton Mifflin.
- Sarri, A. & Laspita, S. (2014). Student Entrepreneurship in Greece: A Survey of Intentions and Activities. Greek Report of the GUESSS Project 2013/2014. Thessaloniki: University of Macedonia, Greece.
- Sarri, K. and Trihopoulou, A. (2005). Female entrepreneurs' personal characteristics and motivation: a review of the Greek situation, *Women in Management Review*, 20(1), 24 – 36
- Schaper, M. & Volery, T.(2007).*Entrepreneurship and small business*, 2, illustrated ed. John Wiley & Sons Australia, Milton, Qld.
- Scheiner, C., Laspita, S., Brem, A., Chlosta, S. & Voigt, K.-I. (2008). Founding Intentions: a gender perspective. *Journal of Asia Entrepreneurship and sustainability*. Vol. IV (4), pp. 15-35.
- Scherer, R. F., Adams, J. S., Carley, S. S., & Wiebe, F. A. (1989). Role model performance effects on development of entrepreneurial career preference. *Entrepreneurship Theory and Practice*, 13(3), 53-71.
- Scherer, R. F., Brodzinsky, J. D., & Wiebe, F. A. (1991). Examining the relationship between personality and entrepreneurial career preference. *Entrepreneurship and Regional Development*, 3, 195–206.
- Schlaegel, C., & Koenig, M. (2014). Determinants of Entrepreneurial Intent: A Meta-Analytic Test and Integration of Competing Models. *Entrepreneurship Theory and Practice*, 38(2), 291-332.
- Schumpeter, J. A. (1934).*The theory of economic development*, Oxford University Press, New York.
- Scott, M. G. & Twomey, D. F. (1988). The long-term supply of entrepreneurs: Students' career aspirations in relation to entrepreneurship. *Journal of Small Business Management*, 26(4), 5-13.

- Sexton, D. L. & Bowman-Upton, N. (1990). Female and male entrepreneurs: Psychological characteristics and their role in gender-related discrimination. *Journal of Business Venturing*, 5(1), 29-36.
- Shane, S., Kolvereid, L., and Westhead, P. (1991). An exploratory examination of the reasons leading to new firm formation across country and gender, *Journal of Business Venturing*, 6(6), 431-446.
- Shapero, A. (1975). The displaced, uncomfortable entrepreneur. *Psychology Today* 9(6):83–88.
- Shapero, A.(1984). *The Environment for Entrepreneurship* (C.A. Kent, ed.), Lexington Books, Lexington, Ma., pp. 21-40
- Shapero, A. & Sokol, L. (1982). Social dimensions of entrepreneurship. In C.A. Kent, D.L. Sexton, & K.H. Vesper (Eds.), *The encyclopedia of entrepreneurship* (pp. 72–90). Englewood Cliffs, NJ: Prentice-Hall.
- Shaver, K. G., Gartner, W. B., Crosby, E., Bakalarova, K., & Gatewood, E. J. (2001). Attributions about entrepreneurship: A framework and process for analyzing reasons for starting a business. *Entrepreneurship: Theory & Practice*, 26(2), 5-32.
- Shepherd, D. A. (2003). Learning from business failure: Propositions of grief recovery for the self-employed. *Academy of Management Review*, 28(2), 318-328.
- Shepherd, D. A. (2009). Grief recovery from the loss of a family business: A multi- and meso-level theory. *Journal of Business Venturing*, 24(1), 81-97.
- Singh, I., Prasad, T., & Raut, D. R. (2012). Entrepreneurial Intent – A Review of Literature. Ninth AIMS International Conference on Management, (pp. 201-207).
- Slavtchev, V., Laspita, S. and Patzelt, H., (2012), Effects of entrepreneurship education at universities, No 2012-025, *Jena Economic Research Papers*, Friedrich-Schiller-University Jena.
- Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, 22(4), 566-591.
- Sternberg, R., Bergmann, H., & Lückgen, I. (2004). Global Entrepreneurship Monitor. Länderbericht Deutschland 2003. Köln, Wirtschafts-und Sozialgeographisches Institut, Universität zu Köln.
- Tan, W. L., Long, A., & Robinson, P. (1996). Entrepreneurship attitude orientation and the intention to start a business. *Journal of Small Business Management*, 13(4), 50–61.
- Tkachev, A. & Kolvereid, L. (1999). Self-Employment intentions among russian students. *Entrepreneurship & Regional Development: An International Journal*, 11(3), 269-280.
- Verheul, I. & Thurik, R. (2001). Start-Up capital: " Does gender matter?". *Small Business Economics*, 16(4), 329-346.
- Volkman, C.K., Tokarski, K.O. & Grünhagen, M. (2010). *Entrepreneurship in a European perspective concepts for the creation and growth of new ventures*, Gabler Verlag, Wiesbaden.
- Wang, C. K. & Wong, P. (2004). Entrepreneurial interest of university students in Singapore. *Technovation*, Vol. 24, pp.163-172.
- Veena, M., & Nagaraja, N. (2013). Comparison of Male and Female Entrepreneurs–An Empirical Study. *International Journal of Engineering and Management Research*, 3(6), 138-143.
- Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of management*, 36(2), 381-404.
- Βαρσακέλης, Ν., Κουτσουλιάνος, Χρ., Ζήκου, Ε., (2010), Αυτοδιοίκηση και Επιχειρηματικότητα, πολιτικές για την ανάπτυξη της επιχειρηματικότητας, ΖΥΓΟΣ. Θεσσαλονίκη.

- Ιωαννίδης, Σ., Κόρρα, Ε., Γιωτόπουλος Ι. (2016). Επιχειρηματικότητα 2014-15: Η Δυναμική του Επιχειρηματικού Συστήματος στην Ελλάδα της Κρίσης. Ίδρυμα Οικονομικών & Βιομηχανικών Ερευνών
- Ιωαννίδης, Σ., Γιωτόπουλος Ι. (2014). Η Επιχειρηματικότητα στην Ελλάδα 2012-13: Ενδείξεις Ανάκαμψης της Μικρής Επιχειρηματικότητας. Ίδρυμα Οικονομικών & Βιομηχανικών Ερευνών.

ANNEX III

Deliverable 3 of WP3-Report entitled

Entrepreneurial growth models in female entrepreneurship²

1. Introduction

The development and growth of existing business is a process with many societal benefits including job and wealth creation, and the advancement of innovation (Tang & Koveos, 2004; Van Praag & Versloot, 2007). Entrepreneurs' decision for growing their business is complex, is neither linear nor dependent on a limited number of factors (Miller, Washburn, & Glick, 2013). Entrepreneurs not only have to make important decisions for different tasks which are different in nature but also have to ensure that those decisions are the right ones not only for their business but also for themselves. While some entrepreneurs are pleased to be self-employed in a small scale, others have growth aspirations for their ventures (Shane, 2009).

Research clearly delineates that women-owned businesses tend to have lower levels of growth and remain smaller than men-owned businesses (Coleman, 2016; Cliff, 1998; Davis & Shaver, 2012), suggesting the existence of a gap between men and women in entrepreneurship; this is an issue that is attracting increasing academic attention (Coleman, 2016). However, much of that research has investigated differences in the levels of start-up activity between men and women (see Jennings & Brush, 2013). Little research has examined the growth aspirations of ventures led by women. Compared to male entrepreneurs, female entrepreneurs tend to pursue non-economic goals such as balancing work and family roles and have preferences for employee relationship and society satisfiers which in turn may detract from economic performance or growth (Eddleston & Powell, 2008; Jennings & Brush, 2013).

As noted by Henry, Foss and Ahl (2015), normative representations of entrepreneurship are dominated by masculinity. This marginalizes female entrepreneurs and renders them invisible. The authors note that whilst the awareness that "gender" (masculine and feminine) is socially constructed and corresponds to a learned set of behaviors that does not refer to simply the biological sex (male/man and female/woman) of the entrepreneur seems widespread among scholars, several detrimental themes related to women are persistent. For instance, many scholars use male norms to judge women's activities merely comparing men and women, with little or no attention paid to constructions of gender (Ahl, 2006; Lewis, 2006). However, this practice neglects the fact that masculine and feminine

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aspects will be incorporated into the process of business growth for both men and women. That is to say, gender could be a vital aspect of business growth intention.

Taken together, to date, research does not provide conclusive explanations for the variation in the growth trajectory that men and women would like their venture to follow (i.e., their growth intention) (Dutta & Thornhill, 2008; Bulanova, Isaksen, & Kolvereid, 2016). Growth intention is considered an essential characteristic of entrepreneurial behavior and a key element in understanding venture development and growth (Sadler-Smith et al., 2003). Moreover, intentions have proven to be the best predictor of planned behavior (Ajzen, 1991), especially if the phenomenon involves unpredictable time lags, planning and a high degree of cognitive processing, such as business growth (Krueger, Reilly, & Carsrud, 2000). Growth intentions are considered a key predictor of actual business growth (Delmar & Wiklund, 2008; Wiklund & Shepherd, 2003).

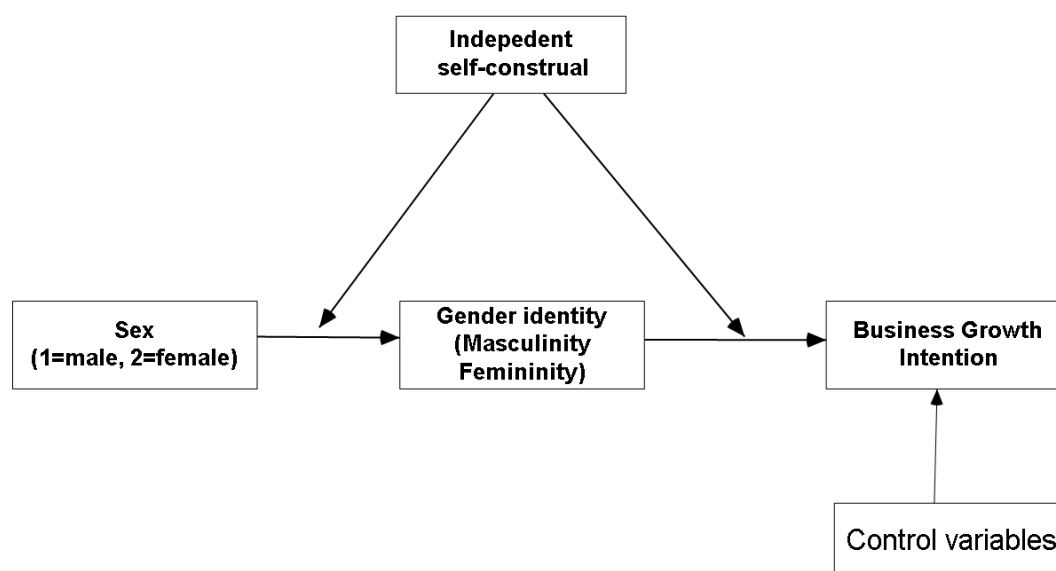
Considerable evidence suggests that an individual's identity (or concept of self) in general (Fauchart & Gruber, 2011; Hoang & Gimeno, 2010) and gender identity (or related gender roles) in particular (Eddleston & Powell, 2008; Gupta et al., 2009) can contribute to substantial differences between men and women in entrepreneurial behavior. People tend to differ in the extent to which they incorporate gender roles into their self-concepts. In this study we propose that entrepreneurs' gender identity or the extent to which entrepreneurs possess traits associated with traditional gender stereotypes (Bem, 1981; Mueller, 2004; Wood & Eagly, 2010) is an important cognitive mechanism that relates entrepreneurs' sex to business growth intentions. We argue that gender identity shapes the way entrepreneurs view themselves, how they understand the world around them and approach other people, but also what they aim to achieve in the future (Eddleston & Powell, 2008; Hoang & Gimeno, 2010).

However, the mechanisms by which sex and gender identity exert influence on entrepreneurs' growth intentions and the moderating influences that constitute boundary conditions of the theory are in need of further investigation. Self-construal, is such a potential moderator of the relationship between gender, gender identity and growth intentions. Self-construal refers to individuals' culturally-contingent thoughts, feelings and actions that are concerned with one's understanding of the self as connected to others (interdependent self-construal) or distinct from others (independent self-construal) (Markus & Kitayama, 1991). Individual's exposure to certain conditions can increase the likelihood they exhibit independent (individualistic) or interdependent (collectivistic) tendencies (Hong et al., 2000). The concepts of "entrepreneur" and "entrepreneurship" are considered male-gendered (Ahl, 2006; Lewis, 2006). Cues or symbols in the environment that entrepreneurs utilize to operate their business could make independent self-construal more accessible (Hong et al., 2000), since the masculine identity highlights individuals' unique attributes (Cross & Madson, 1997). A systematic consideration of the potential moderating effects of self-construal will contribute

to a fuller understanding of the conditions under which the effects of sex on growth intentions are more likely to hold.

In summary, the current study extends the entrepreneurship literature to examine the relationship between entrepreneurs' sex, gender identity and business owner's growth intentions of their established ventures and to determine the role of self-construal in this relationship (see conceptual model in Figure 1). We reasoned that an exploration into the growth intentions of business owners of established firms might help explain sex differences in the decision to grow. To date, there has been little research explaining the influence of these domains and entrepreneurs' intention for the growth established business. However, this is important considering that individuals start and operate their ventures for a variety of reasons other than growth or maximizing economic returns (Wiklund, Davidsson, & Delmar, 2003).

Figure 1. Representation of the hypothesized theoretical model.



The paper commences with an analysis of business growth intentions; this is followed by an evaluation of the influence of gender identity on growth intentions and the moderating role of self-construal. Next, we describe our sample, research methods and data analysis techniques which include ANOVA and moderated mediation analyses. Finally, we discuss the outcomes of the empirical analysis and the limitations of the research, present the practical implication of research results and propose areas for further research.

2. Growth intention and entrepreneurs' gender identity

Business growth is a multidimensional and complex phenomenon that involves careful planning and thinking on the part of the entrepreneur. As such, business growth can be considered a deliberate and planned intentional behavior and consequently applicable for

intention models (Ajzen, 1991; Krueger et al., 2000). Growth intentions are central to the understanding of business growth as they are the first step in the process and involve a purposive element with specific steps to reach the goal (Delmar & Wiklund, 2008; Venugopal, 2016). Intentions have been identified as a key predictor of actual behavior, across a wide range of different behaviors including business startup (Delmar & Wiklund, 2008; Wiklund & Shepherd, 2003). Moreover, research provides evidence that the proportion of entrepreneurs with growth intentions in the population is a significant predictor of economic growth compared to self-employment rates or general start-up rates (Stam et al., 2009).

Up to date, research on entrepreneurs' growth intentions has produced mixed results regarding empirical differences between men and women and not all scholars agree that women and men differ in their overall business growth intent (Cassar, 2006; Davis & Shaver, 2012). For instance, Cassar (2006) found that women entrepreneurs had lower estimates of future revenues than did men. However, Menzies, Diochon, and Gasse (2004) in a study conducted in Canada, found no statistically significant differences between women and men in their expressed preferences for unrestrained growth. In the present study we propose that gender socialization processes may explain differences between male and female entrepreneurs' business growth intentions.

Contemporary research in entrepreneurship suggests that decisions such as the growth of established ventures are intimately intertwined with the entrepreneurs' identity (Shepherd & Haynie 2009). Identity is a fluid social process that has a range of conceptual meanings and theoretical roles associated with it (Fauchart & Gruber, 2011; Hoang & Gimeno, 2010). It can be viewed as peoples' representation of the internalization and incorporation of socially held behavioral expectations. Moreover, identity can be regarded as a fundamental bridging concept between the individual and the social (Hoang & Gimeno, 2010). Individuals are socially constructed through social interactions and that they acquire throughout their lives diverse and multiple social identities. In the case of the entrepreneurial process, Ireland and Webb (2007) note in their review that for entrepreneurs, the entrepreneurial process is based on and driven by self-identities. Recent conceptual models of the role of identity in entrepreneurship propose strong links between entrepreneurs' self-concept and entrepreneurial actions and outcomes (Shepherd & Haynie 2009) but to date empirical research is limited (Farmer, Yao, & Kung-Mcintyre, 2011). Gender identity is considered an essential element of a many-sided conception of the self that situates individuals within social structures (Eddleston & Powell, 2008; Wood & Eagly, 2010). Gender is something that is different from sex (Ahl, 2006). Feminist researchers separated sex from gender during the 1970s and 1980s to distinguish between biological characteristic of males and females and the meanings that societies and individuals ascribe to male and female categories (Bem, 1981; Wood & Eagly, 2010). Individuals throughout the life course are taught (implicitly or explicitly) which behaviors and roles are desirable for men or women in society. As such

most individuals accept or internalize the cultural meanings associated with their sex-meanings. Gender identity represents the extent to which an individual believes that he or she possesses traits associated with traditional gender stereotypes (Bem, 1981; Wood & Eagly, 2010).

People differ in the extent to which they incorporate gender roles into their self-concepts. Two independent dimensions of gender identity arise: masculinity, or beliefs about the extent to which one possesses traits associated with males (e.g., dominance independence, ambition) and femininity, or beliefs about the extent to which one possesses traits associated with females (e.g., sensitivity to the needs of others, compassion, understanding) (Eddleston & Powell, 2008; Wood & Eagly, 2010). Women are socialized to identify with attributes that are considered feminine and men are socialized to identify with attributes that are considered masculine (Bem, 1981). As such, male entrepreneurs are more likely to exhibit a stereotypical masculine orientation and female entrepreneurs are most likely to exhibit a stereotypical feminine orientation (Bird & Brush, 2002).

People use their gender identity as a standard against which to regulate their behavior. Entrepreneurs who have a masculine self-concept involving independence and dominance might regulate their behavior by, for example, seeking opportunities for high growth and financial rewards from their businesses (Bird & Brush, 2002). Eddleston and Powell (2008) in their survey of entrepreneurial alumni show that women entrepreneurs value different sources of career satisfaction than men. Male entrepreneurs preferred satisfiers associated with status attainment (e.g., earning a lot of money, having high prestige and social status, being in a leadership role, leading a large, rapidly growing enterprise etc.) whereas female entrepreneurs preferred satisfiers associated with employee relationships (e.g., working with friendly and congenial people, having supportive employees, working as part of a team, etc.) and making a contribution to society. Nevertheless the study presents no evidence on whether business owners' masculinity relates more strongly to growth intentions compared to business owners' femininity.

3. Boundary conditions: The role of independent self-construal

Research provides convincing evidence that the concept of entrepreneurial activity is gender-biased: Entrepreneurship is often depicted as a form of masculinity and the terms "entrepreneur" and "male" have tended to become interchangeable (Ahl & Marlow, 2010; Gupta et al., 2009). This supports an hierarchical valuation in which the masculine is prioritized over the feminine and the characteristics of successful business owners (i.e., proactivity, need for achievement, risk taking competitiveness, confidence etc.) are stereotypically perceived to be masculine (Ahl, 2006; Bird & Brush, 2002; Coleman, 2016). Moreover, the behavior of women involved in entrepreneurial activity is defined and evaluated according to the standards of an invisible masculine norm (Lewis, 2006). Women

entrepreneurs have to manage different identities simultaneously which can result in conflict (Ahl, 2006; Bird & Brush, 2002).

Accordingly, to be recognized as credible actors within entrepreneurship women have to learn the delicate balance between adopting a credible entrepreneurial identity which reflects masculinized norms but, without denying ascribed femininity (Ahl & Marlow, 2010). Thus, one important question raised is how women entrepreneurs' growth intentions are formed despite the mixed messages they receive from a process that broadly emphasizes masculinity but also expects females specifically to care for and nurturing children or maintaining the household, or be supportive, that is interdependent and connected with others. Building on the cultural dimensions of individualism and collectivism Cross and Madson (1997) propose additional facets of gender identity reflecting investment in an individual versus social sense of self. The authors define masculine identity as an independent sense of self and feminine identity as an interdependent sense of self.

Specifically, independent and interdependent self-construals represent one of the most fundamental and overarching schemata of an individual's selfhood (Markus & Kitayama, 1991; Oyserman et al., 2002). Self-construal refers to the way an individual understands oneself in relation to other people. A person possessing an independent self-construal views one's self as separate from others, aiming to maintain a sense of autonomy and uniqueness. A person possessing an interdependent self-construal views one's self as connected to others, where self-presentations are woven together with representations of close others and social context (Markus & Kitayama, 1991; Oyserman et al., 2002). Men are more likely to be likely to be socialized to construct an independent self-construal and develop a social self that is marked by placing primary emphasis on values of individual needs, autonomy and self-fulfillment. Women are more likely to be socialized to construct an interdependent self-construal and develop a social self that is marked by the motivation to be connected with particular relationships or contexts (Cross & Madson, 1997; Oyserman et al., 2002; Singelis, 1994).

There is limited research to date that has assessed the relationship between self-construal and entrepreneurship. Recent empirical research provides evidence for the moderating role of individual-level self-construal in cognitive models of intention to start a new business (Siu & Lo, 2013; Zampetakis et al., 2015). For instance, Siu and Lo (2013), using a sample of students from China and Hong Kong, found that the strength of perceived social norms in predicting entrepreneurial intention was dependent on interdependent self-construal. Zampetakis and his colleagues (2015) using a sample of students from Greece found that independent self-construal was related to attitudes towards entrepreneurship and moderated relationships between attitudes and entrepreneurial intentions.

As noted above, in order for women to gain legitimacy as entrepreneurs they are encouraged to adopt and reproduce attitudes and behaviors which are in fact reproductions of

what men do and what men are (Ahl & Marlow, 2010). However some evidence suggests that when women emulate the behavior of the idealized male, there is evidence of misfit. For instance, Kerfoot and Miller (2010) evaluated the results of a training program for potential business owners aiming to encourage more women to start their own ventures. The programme established men as natural entrepreneurs rendering women as outsiders and the only hope for entry in the entrepreneurial process was by learning how to emulate the behavior of the idealized male. After undertaking the course, many of the potential female business owners were actively discouraged from starting new ventures. It became evident that they did not ‘fit’ the masculinized image of an entrepreneur (Kerfoot & Miller, 2010).

This suggests that when cues or symbols in the environment make independent self-construal more accessible (Hong et al., 2000; Oyserman & Sorensen, 2009) (i.e., symbols of individual freedom, autonomy, personal fulfillment and separation) then feminine entrepreneurs may have less need for growing their ventures because of the conflict inherent in the relation between independent self-construal and femininity. Specifically, individuals who see themselves as higher in femininity are more likely to consider themselves as a member of a group. This in turn prompts a cognitive style that is concerned with the negative consequences of behavior (that is business growth) and avoiding potential failure (Oyserman & Sorensen, 2009). Thus we expect that the interaction between independent self-construal and femininity for the prediction of growth to be negative.

4. Overview of study aims and hypotheses

The purpose of the present study was to understand differences in the process of business growth of established firms, between male and female entrepreneurs. We focused on a specific aspect of firm growth – the intention of the entrepreneur – and whether and how biological sex, gender identity and independent self-construal affect growth intentions.

Specifically, the study aimed firstly to determine whether and the extent to which biological sex is associated with gender identity and entrepreneurs’ business growth intentions. We expected that the correlation between entrepreneurs’ sex and gender identity to be strong such that male entrepreneurs are most likely to exhibit a stereotypical masculine orientation and female entrepreneurs are most likely to exhibit a stereotypical feminine orientation. Secondly, we aimed to test whether, and the extent to which, gender identity mediates biological sex effects on business growth intentions. We expected that gender identity would at least partially mediate biological sex effects on growth intentions; we expected the effect of masculinity on growth intentions to be stronger compared to the effect of femininity. Finally, we examined the moderating influences of independent self-construal that constitute boundary conditions of the theory. We expected that independent-self construal would moderate the relationship between sex and gender identity and between gender identity and growth intentions. To our knowledge the present study is one of the first to examine

within-culture individual-level cultural orientations as antecedents to business growth intentions in some depth.

We conducted a moderated mediation analysis (Hayes, 2013) in order to clearly distinguish the mediatory power of gender identity and the moderating role of independent self-construal while controlling for both firm-level and individual-level variables.

5. Methods

5.1 Participants and Procedures

Entrepreneurs were selected from email lists of businesses drawn from inventories held by chambers and municipalities of regional governments in a country in south Europe were invited to participate in the study through personal contact by the authors. Entrepreneurs were given the following explanation for the purposes of the study: “This is an effort to combine research into how entrepreneurs run their businesses and get insights of the values and desires that make people like you successful. You will answer a questionnaire without filling in anything that will identify you, or your business and the results will be used to better understand how entrepreneurship progress in your area.”

Five entrepreneurs provided comments on the survey instrument. After reviewing comments from these individuals, we made minor modifications to the instrument. Entrepreneurs who agreed to participate in the survey were sent the research instrument to complete by email or fax. A total of 2600 questionnaires were distributed and 613 entrepreneurs completed useable surveys. To maximize the reliability and generalizability of our results, we employed an instructional manipulation check (Oppenheimer, Meyvis, & Davidenko, 2009). More specifically, one of the survey questions was presented in a very similar way as other questions, except it was followed by a parenthesis in which the respondents were informed that the question was intended to check whether they were paying proper attention, and that they should select the first choice for this particular question. The respondents who failed to make the instructed choice were dropped from the analysis. This process resulted in 572 entrepreneurs representing a response rate of 22%. Data collection took place during January and April 2016.

The sample included 286 males (50%) aged between 21-61 years ($M = 44.83$ years, $SD = 8.37$ years). Average number of years of business operation was 13.67 years ($SD = 9.09$), 44.8% of the respondents had a college/university degree (12.8% had Msc/PhD degrees) and 32.2% had a parent that owned a business. On average entrepreneurs reported having 9 employees ($SD=47.73$) for each firm. Within our sample, entrepreneurs' activities represent different domains. The most frequently indicated domains were tourism (391%), food production (21%), property and business services (13), finance and insurance (12%), health and community services (9%), construction (4%), and smaller percentage in other activities.

5.2 Measurement of theoretical constructs

All the main constructs included in the analysis were assessed with self-report measures based on multi-item scales. Native speakers translated all the items into the Greek language. A back-translation into English by other bilingual individuals revealed that the translation had worked quite well and that the wording had similar connotations. The specific measures used in the analysis, along with sample items of the relevant constructs, are outlined.

Gender identity. To measure masculinity and femininity a short form of the Bem's Sex Role Inventory (BSRI; Bem, 1981) was used. The short BSRI contains six items for each masculine and feminine dimension. These items have been validated in previous research (Carver et al., 2013; Vafaei et al., 2014). Entrepreneurs rated the extent to which six masculine items (with leadership abilities, possessing strong personality, dominant, act like a leader, make decision easily and defend own beliefs) and six feminine items (warm, gentle, affectionate, sympathetic, sensitive to others' needs and tender) described themselves on a 7-point scale (1= Not at all like me, 7= Very much like me). The masculine items were averaged to yield a masculine score (Cronbach's reliability coefficient = 0.83) and the feminine items were averaged to yield a feminine score (Cronbach's reliability coefficient = 0.79).

Business growth intentions. To assess business growth intentions we used two items from previous research (Davis & Shaver, 2012; Edelman et al., 2010). Entrepreneurs rated the extent to which they agreed with the two items using a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree. The two items were: (1) "I want my business to be as large as possible" and (2) "I want a size I can manage myself or with a few key employees" (reverse scored). The items were averaged to yield a growth intentions score (Cronbach's reliability coefficient = 0.83)

Biological sex. Sex was measured as a dummy variable with men coded as 1 and women coded as 2.

Self-construal. We assessed independent and interdependent self-construal using a shortened version of the original Singelis (1994) self-construal scale, a measure of chronic or trait self-construal (Fernández, Paez, & González, 2005). Respondents indicated their level of agreement with each items using a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree. The independent self-construal subscale (IND) contained six items that assess uniqueness, personal reward and "less contextualized self" in social behaviour (1. "I enjoy being unique and different from others in many respects", 2. "I am comfortable with being singled out for praise or rewards", 3. "My personal identity is independent of others is very important for me", 4. "I act the same way no matter who I am

with”, 5. “I prefer to be direct and forthright when dealing with people I’ve just met”, 6. “I’d rather say “no” directly, than risk being misunderstood”). Cronbach’s alpha coefficient for this scale was 0.65. The interdependent self-construal subscale (INTER) included seven items that assessed connectedness in social behaviour concerning in-groups (1. “I would stay in a group if they needed me even if I were not happy with the group”, 2. “I will sacrifice my self-interest for the benefit of the group I am in”, 3. “I often have the feeling that my relationships with others are more important than my own accomplishments”, 4. “It is important for me to respect decisions made by the group”, 5. “My happiness depends on the happiness of those around me”, 6. “I respect people who are modest about themselves”, “It is important for me to maintain harmony within my group”, 7. “It is important to me to respect decisions made by the group”). Cronbach’s alpha coefficient for this scale was 0.76.

Control variables. As controls we used both firm-level and individual-level variables. The firm-level controls included self-reported questions about firm age, number of employees, and the performance of the firm. Firm age was measured as the number of years since the firm had been established. Firm performance was measured by entrepreneurs’ subjective reports of their firms’ performance relative to that of other ventures in their industry (Perf1 – “Relative to competing products/services, those of my business have been more successful in terms of sales”; Perf2 – “Relative to competing products/services, those of mu venture have been more successful in terms of achieving and establishing market share” (Cronbach’s alpha = 0.81).

The individual-level controls included the age of the entrepreneur, the education level, internal locus of control and perceived behavioral control. Younger entrepreneurs are likely to be more eager to grow than older entrepreneurs. Education level was measured with a four point ordinal scale with higher values indicating a higher level of education. Previous research suggests a positive relationship between entrepreneur’s internal locus of control and success of small-scale enterprises (Rauch & Frese, 2000). Entrepreneurs with an internal locus of control (InLOC) believe that they have control of their destiny. It was assessed using the five item scale (Cronbach’s reliability coefficient= 0.74) presented in Chen, Greene and Crick, (1998). Finally we controlled for entrepreneurs’ perceived behavioral control (PBC) that is entrepreneurs’ beliefs that they are capable of performing a given behavior. Venugopal (2016) using the theory of planned behavior (Ajzen, 1991) found that self-efficacy (a construct with conceptual similarities with PBC) had a direct positive effect on business growth intentions. However the effects of both attitudes towards growth and subjective norms on growth intentions were not significant. We assessed entrepreneurs’ PBC by adopting two items from the scale of Linan and Chen (2009). Item are: 1. “I can control the growth process of my firm”, It is easy to manage the sales growth of my business (Cronbach’s reliability coefficient= 0.81).

5.3 Measurement Model

To examine the within and between statistical structure of the measurement scales used, we conducted a four factor confirmatory analysis in Analysis of Moment Structures (AMOS version 7.0) software (Arbuckle, 2006) using the indicators for gender identity (masculinity, femininity), independent self-construal, and growth intentions. Goodness of fit was determined using the root mean square error of approximation (RMSEA) and the comparative fit index (CFI), and commonly used threshold values were used as indicators of poor fit ($RMSEA \geq 0.08$ and $CFI \leq 0.90$) (Shook, et al., 2004). The Akaike Information Criterion (AIC) was used for model comparisons; smaller values indicate better fitting model. Overall, the hypothesized measurement model fit the data quite well when evaluated in terms of the recommended cut offs or the combination cut off approach: χ^2 (155, $N = 572$) = 418.11, $p = 0.00$; $RMSEA = 0.055$ (90% CI: 0.048-0.060); $CFI = 0.928$ and $AIC = 568.10$. The four-factor model was then compared to a measurement model that specified perfect correlation among all four latent variables, in order to test overall discriminability.

The one-factor model also provides a test for common method bias (Podsakoff, et al., 2003). The hypothesized measurement model fit the data better than a single factor model [χ^2 (158, $N = 572$) = 594.29, $p = 0.00$; $RMSEA = 0.088$ (90% CI: 0.079-0.096); $CFI = 0.881$ and $AIC = 738.29$] both in terms of the fit statistics and when directly contrasted with a change in AIC. In summary, the results suggest that the proposed factor structure presents a statistically adequate and sufficient fit to the data, indicating the absence of severe common method variance

5.4 Statistical analysis approach

The main statistical procedure used was conditional process analysis (Hayes, 2013). The analysis was conducted using model 58 in the PROCESS macro developed by Hayes (Hayes, 2013). We used a bootstrap procedure (and the bias corrected method) that generated a sample size of 5,000 for our regression analyses (Shrout & Bolger 2002). The independent variable was sex (1=male, 2=female) and the dependent variable was business growth intention. The mediating variables were masculinity and femininity. These were entered as mediators operating in parallel.

Independent self-construal was entered as a continuous moderator variable that influenced the paths from sex to each of the mediating gender identity variables (first stage of the mediated effect of sex on growth intentions) and moderated the paths from each of the gender identity variables to business growth intention (the second stage of the mediated effect of sex on growth intentions) (see Figure 1). All independent variables were standardized before being entered into the regression. In addition, all interactions were graphed using procedures described by Cohen, et al. (2003). Each graph was plotted at 1 standard deviation above and below the mean.

6. Results

Means, standard deviations, and bivariate correlations for all measured items are shown in Table 1. We conducted multiple analyses in order to examine multicollinearity in our data. The highest correlation between any pair of independent variables was 0.48 (see Table 1), no variance inflation scores were greater than 1.55 ($M=1.33$) (below the value of 10 that is seen as problematic) and all conditional index scores were less than 25.61. These tests show multicollinearity not to be a concern, as each of these results falls well within acceptable ranges (Cohen, et al., 2003).

Table 1. Means, standard deviations, and intercorrelations among variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Sex ^a	1.50	0.50	1.00												
2. Age	44.83	8.37	-0.13**	1.00											
3. Education level ^b	2.60	0.84	0.04	-0.23**	1.00										
4. Internal locus of control	5.38	0.87	-0.03	0.00	0.07	1.00									
5. Perceived behavioral control	4.97	1.29	-0.10*	0.03	0.05	0.33**	1.00								
6. Years of firm operation	13.67	9.09	-0.15**	0.48**	-0.18**	0.01	0.01	1.00							
7. Number of employees	9.15	47.73	-0.08*	0.02	0.14**	0.07	0.02	0.01	1.00						
8. Firm performance	5.02	1.02	-0.06	-0.02	0.09	0.37**	0.33**	0.09*	0.09*	1.00					
9. Masculinity	4.91	1.07	-0.14**	0.01	0.15**	0.41**	0.21**	-0.01	0.10*	0.32**	1.00				
10. Femininity	5.52	0.90	0.18**	-0.06	-0.02	0.24**	0.07	-0.04	-0.04	0.13**	0.21**	1.00			
11. Independent self-construal	5.18	0.84	0.06	-0.01	0.02	0.35**	0.11**	-0.03	0.03	0.13**	0.44**	0.26**	1.00		
12. Interdependent self-construal	5.36	0.88	0.04	0.04	-0.05	0.10**	0.15**	0.02	0.00	0.10**	0.03	0.38**	0.34**	1.00	
13. Business growth intention	5.33	1.45	0.00	-0.06	0.02	0.28**	0.36**	-0.10*	0.07	0.17**	0.24**	0.19**	0.20**	0.16**	1.00

Note: $N=572$. ^a Sex is coded such that 1= male and 2 = female;

Education level: 1=primary education, 2=secondary education, 3=university/college, 4=M.Sc/Phd

* $p<0.05$, ** $p<0.01$ (two tailed tests).

Analyses using independent t-tests indicated significant differences between male and female respondents in terms of: age [$t(507) = 3.021, p < 0.001$]; number of employees [$t(570) = 2.031, p < 0.001$]; firm age [$t(570) = 3.588, p < 0.001$]; perceived behavioral control [$t(570) = 2.311, p < 0.001$]; masculinity [$t(570) = 3.336, p < 0.001$] and femininity [$t(570) = -4.261, p < 0.001$]. No significant differences were observed in terms of education level, growth intention, internal locus of control, independent and interdependent self-construal.

Growth intention in established firms was positively related to entrepreneur's internal locus of control ($r = 0.28, p < 0.01$), perceived behavioral control of business growth ($r = 0.36, p < 0.01$), firm performance ($r = 0.17, p < 0.01$), masculinity ($r = 0.24, p < 0.01$), femininity ($r = 0.19, p < 0.01$), independent self-construal ($r = 0.20, p < 0.01$), and interdependent self-construal ($r = 0.16, p < 0.01$). Growth intention was not related to entrepreneur's age. Years of firm operation, was negatively related to growth intent ($r = -0.10, p < 0.05$). However there was a small but significant correlation between years of firm operation and firm performance suggesting that firm performance increases with firm age (Haltiwanger, Lane and Spletzer, 1999).

Masculinity was negatively related to sex ($r = -0.14, p < 0.01$) while femininity was positively related to sex ($r = 0.18, p < 0.01$). This suggests that male entrepreneurs are higher in masculinity and lower in femininity than female entrepreneurs, in line with previous research on business owners (Eddleston & Powell, 2008). Cross-tabulation analysis results of entrepreneurs by sex and gender identity suggested that males were most likely to be categorized as masculine (56.3%) and least likely to be categorized as feminine (43.8%). Women were most likely to be categorized as feminine (71%) and least likely to be categorized as masculine (29%). These results are in line with our expectation that is, male entrepreneurs are most likely to exhibit a stereotypical masculine orientation and female entrepreneurs are most likely to exhibit a stereotypical feminine orientation. Masculinity was more strongly related to business growth intentions ($r = 0.24, p < 0.01$) compared to femininity ($r = 0.19, p < 0.01$). However using the Fisher r-to-z transformation (Cohen et al., 2003) the significance of the difference between the two correlation coefficients was not statistically significant ($p = 0.53$, two tailed).

The relationship between sex and business growth intention was not statistically significant. However, recent developments in the research methods literature suggest that it is not necessary to assume a direct effect between the independent and dependent variable to be mediated (Hayes, 2013; Zhao, Lynch & Chen, 2010). According to Zhao et al. (2010) the mediating effect should be tested by estimating and bootstrapping the significance of the indirect effects between the independent, mediator and dependent variables (Shrout & Bolger 2002). In order to estimate the indirect effect of sex on business growth intentions through masculinity and femininity we used model 4 in the PROCESS macro developed by Hayes (Hayes 2013).

The mediation analysis was controlled for firm age, number of employees, firm performance, entrepreneur's age, education, internal locus of control and perceived behavioral control. Accordingly, the suggested mediational model was significant: $F(10, 561) = 14.13, p = 0.000$. Sex significantly related to the mediators, [femininity: $\beta = 0.35$, 95%CI = [(0.19) – (0.51)]]; [masculinity: $\beta = -0.28$, 95%CI = [(-0.44) – (-0.11)]]; Furthermore, the mediators significantly related to business growth intention [femininity: $\beta = 0.11$, 95%CI = [(0.03) – (0.19)]]; [masculinity: $\beta = 0.12$, 95%CI = [(0.03) – (0.20)]]; The indirect effect of sex on business growth through both femininity [$B = 0.0388$, 95%CI = (0.02) – (0.09)] and masculinity [$\beta = -0.0324$, 95%CI = [(-0.07) – (-0.02)]] was statistically significant. Results suggest that masculinity and femininity completely mediated the effect of sex on business growth intentions. Moreover, results of indirect effect contrast definitions suggest that the indirect effect via femininity is greater than the effect via masculinity [the difference is 0.07, 95%CI = (0.03) – (0.12)]. All estimated regression parameters are standardized. Still, these effects are relative small (Preacher and Kelley, 2011).

We expected that the indirect effect of biological sex on business growth intention is conditional on independent self-construal (IND). That is, gender identity (femininity and masculinity) mediates the relationship between biological sex and growth intentions, and IND moderates the paths from sex to gender identity (first stage moderation) and from gender identity to growth intentions (second stage moderation). As shown in Table 2, for the first stage moderation, the sex X IND interaction was statistically significant for femininity [$\beta = -0.19$, 95%CI = [(-0.35) – (-0.11)]] but not masculinity. The direct positive effect of sex on femininity was stronger at lower levels of IND. For low levels of IND (1 SD below mean) the effect of sex on femininity was: $\beta = 0.52$, 95%CI = (0.30) – (0.73). For high levels of IND (1 SD above the mean) the effect of sex on femininity was: $\beta = 0.13$, 95%CI = (-0.09) – (0.34), that is not statistically significant.

For the second stage moderation, both femininity and masculinity related positively to business growth intentions (see Table 2). However, only the interaction IND X femininity was statistically significant: $\beta = -0.09$, 95%CI = (-0.17) – (-0.05). The nature of the interaction was tested by calculating simple slopes at ± 1 standard deviation of IND (Figure 2). The effect of femininity on growth intention was stronger at lower levels of IND [-1SD below mean: $\beta = 0.21$, 95%CI = (0.10) – (0.31)]. For high levels of IND the effect of femininity in growth intention is not significant.

Following Hayes (2013), bootstrapping techniques were used to assess the significance of the conditional indirect effect of sex on growth intention. The estimates and bootstrapped 95% confidence intervals for the conditional indirect effects are presented in Table 3. The pattern of results shown in Table 3 suggest that the indirect effect of biological sex on business growth intentions (via gender identity) is contingent on entrepreneur's

independent self-construal, such that the indirect effect (via femininity) increases as the entrepreneur's independent self-construal decreases.

We have repeated the analyses using interdependent self-construal as moderator variable. Results suggest that interdependent self-construal is not a significant moderator of the indirect effect of biological sex on business growth intentions (via gender identity).

Table 2. Test of first and second stage moderated mediation model

Predictor	First stage moderation			Second stage moderation
	Femininity	Masculinity		Business growth intention
	<i>B</i>	<i>B</i>		<i>B</i>
Constant	0.48** [(-0.72) - (-0.23)]	0.49** (0.26) – (0.72)		0.07 ^{ns} [(-0.23) - (0.25)]
Sex ^a	0.32** (0.16) – (0.48)	-0.32** [(-0.47) - (-0.18)]		0.02 ^{ns} [(-0.13) - (0.17)]
Age				0.001 ^{ns} [(-0.09) - (0.08)]
Education level ^b				-0.06 ^{ns} [(-0.14) - (0.02)]
Entrepreneur's internal locus of control				0.08 ^{ns} [(-0.02) - (0.17)]
Entrepreneur's perceived behavioral control				0.31** (0.23) - (0.38)
Firm age				-0.09* [(-0.18) - (-0.03)]
Number of employees				0.05 ^{ns} [(-0.02) - (0.13)]
Firm performance				-0.02 ^{ns} [(-0.10) - (0.06)]
Femininity				0.10** (0.09) - (0.18)
Masculinity				0.10** (0.08) – (0.19)
Independent self-construal (IND)	0.54** (0.29) - (0.80)	0.44** (0.20) – (0.68)		0.05 ^{ns} [(-0.03) - (0.14)]
sex X IND	-0.19* [(-0.35) - (-0.11)]	0.03 ^{ns} [(-0.14) - (0.14)]		
IND X Femininity				-0.09* [(-0.17) – (-0.05)]
IND X Masculinity				-0.03 ^{ns} [(-0.09) - (0.03)]

Note. The upper and lower bounds of the 95% confidence interval (shown in parentheses) were based on the findings from a bootstrapping analysis using the percentile method. * $p < 0.01$, ** $p < 0.001$ (two tailed tests), ^{ns} non significant.

Table 3. Conditional indirect effect results of biological sex on business growth intentions at values of independent self-construal.

	Mediator	Level of IND	Business growth intention ^a	
Model	Femininity		Estimate	95% Confidence interval*
Biological sex (via gender identity) on business growth intent		-1SD	0.11	(0.03) – (0.20)
		Mean	0.03	(0.01) – (0.07)
		+1SD	0.00	(-0.02) – (0.03)
	Masculinity	-1SD	-0.04	(-0.10) – (-0.01)
		Mean	-0.03	(-0.08) – (-0.008)
		+1SD	-0.025	(-0.08) – (0.008)

Note. $N = 572$; * Bias corrected and accelerated confidence intervals are reported. Bootstrap sample size = 5,000.

SE = Standard Error; IND = Independent self-construal.

^a Control variables = firm age, number of employees, firm performance, entrepreneur's age, education, internal locus of control and perceived behavioral control.

7. Discussion

The present study had two primary goals: (a) To examine whether and how gender role identity (i.e., one's masculinity and femininity orientation) can explain effects of entrepreneurs' sex on business growth intentions in established firms, and (b) to explore the role of independent self-construal regarding this possible mediation effect. In particular, we were interested in finding out whether independent self-construal moderates the indirect effects of sex on business growth intentions. Results from conditional process analysis (Hayes, 2013), suggested that masculinity and femininity fully mediated the effects of entrepreneurs' biological sex on his/her business growth intentions. Moreover, results provided evidence that the indirect effect of sex on business growth intentions (via femininity) was contingent on entrepreneurs' independent self-construal.

The primary contribution of this research is that it is the first to empirically demonstrate that gender identity constitutes an important part in conceptual models that explain sex differences in business growth intentions (Bulanova, Isaksen, & Kolvereid, 2016; Davis & Shaver, 2012; Venugopal, 2016). The study of business growth intentions is important since the growth intentions of entrepreneurs are found to be positively related to subsequent firm growth (Delmar & Wiklund, 2008; Wiklund & Shepherd, 2003). Moreover, taking into account the masculine domain of entrepreneurship, that is the fact that the rules, norms, and general practices in the entrepreneurial process are dominated by masculine values (Bird & Brush, 2002; Gupta et al., 2009), our results suggest that women entrepreneurs tend to have lower business growth intentions at high levels of independent self-construal. The salience of independent self-construal, assumed to be more typical of men, results in conflict to women entrepreneurs who have to manage different identities simultaneously (Ahl, 2006; Bird & Brush, 2002).

Broadly speaking, being a member of two traditionally unrelated groups (i.e, being a woman and an entrepreneur) is not an easy task for women. The image of the entrepreneur has traditionally been masculinized and rooted in masculine discourse (Ahl, 2006). According to Cross and Madson (1997) men endorse higher levels of independent self-construal than women. This suggests that cues or symbols in the entrepreneurial environment should make independent self-construal more accessible (Hong et al., 2000; Oyserman & Sorensen, 2009). In our case, dual identifiers, such as female entrepreneurs, are required very often to adopt opposing sets of cultural proscriptions where the masculine is prioritized over the feminine (Bird & Brush, 2002; Coleman, 2016). Bjursell and Bäckvall (2011) provided empirical insights into how the mother role is taken for granted while the business role is approached as problematic in portrayals of women in family business. Our results provide evidence that under high levels of independent self-construal female entrepreneurs are not willing to grow their ventures as women in lower levels of independent self-construal. Further research is needed to explore the reasons behind females' lower growth intention. Certainly, issues of

individual motivation factors such as ego-depletion (Baumeister, Bratslavsky, Muraven, & Tice, 1998) could be explored. However, issues to do with the social context should also be explored. This research took place in country at southern Europe, where the general cultural mandate is towards interdependence. Self-construal orientations have shown to interact with nation-level cultural orientation to influence entrepreneurship intentions (Siu & Lo, 2013) and further research should explore the contribution of those in women entrepreneurship

The findings of the present study demonstrate that masculinity and femininity completely mediated the influence of sex on growth intentions, after controlling for the effects of perceived behavioral control and internal locus of control. The precise measure of femininity as well as masculinity allows us to look at how gender identity affects the sex and growth intentions relationships. In our study, femininity was measured by asking participants to rate themselves with words or phrases such as "warm, gentle, affectionate, sympathetic, sensitive to others' needs and tender". Masculinity was measured by asking participants to rate themselves with words or phrases such as "leadership abilities, possessing strong personality, dominant, act like a leader, make decision easily and defend own beliefs". Those traits are related to business growth and our conceptual mediation model is supported by our data explaining in part, how a biological construct like entrepreneurs' sex, can relate to business growth. That is, our work documents that growth intentions reflect rational trade-offs among both financial and non-financial factors (Eddleston & Powell, 2008; Jennings & Brush, 2013).

In line with previous research (Eddleston & Powell, 2008), we have found that women entrepreneurs reported more feminine than masculine traits, and that men entrepreneurs endorsed more masculinity than femininity traits. However, cross-tabulation analysis results of entrepreneurs by sex and gender identity suggested that male entrepreneurs were almost equally split between a masculine identity (56.3%) and a feminine identity (43.7%) compared to the percentage of women entrepreneurs categorized as feminine (71%). This finding suggests the existence of substantial heterogeneity in gender identity among male entrepreneurs whereas women entrepreneurs exhibited a rather stereotypical feminine orientation. An alternative explanation however may rest on the fact that Bem's Sex Role Inventory (1981) uses adjectives representing masculine and feminine gender identities that were selected 35 years ago and therefore, do not accurately portray male and female entrepreneurs today.

Our study has some practical implications for business policy formulation and the teaching of entrepreneurship which form part of a strategy directed at increasing the growth of established firms. The findings suggest the development of business growth intention is a complex phenomenon that may be influenced by gender identity. Entrepreneurial educators should craft strategies and learning environments that validate and stimulate womens' identity in a way that does not emulate the behavior of the idealized male entrepreneur. Moreover,

educators should gain a better general understanding of how womens' entrepreneurial intentions are formed, as well as a specific understanding of how entrepreneur' gender identity and independent self-construal merge into the intent to growth a business.

This research has some limitations. Firstly, the primary study variables were measured with the use of a single survey and as such common-method variance could be a problem. However, it should be noted that findings from our confirmatory factor analyses indicated that common method variance is unlikely to influence the results. Second, our research was limited to a sample of entrepreneurs from Greece. To guarantee the generalizability of our results, we encourage scholars in this area to examine our proposed model with entrepreneurs across different countries. Third, it is plausible that male and female entrepreneurs may have been motivated by societal expectations to see themselves as differing in ways consistent with generally accepted gender stereotypes even if they did not actually differ in these ways. Fourth, as previously stated, we acknowledge that gender schemas have been through a significant shift since BSRI was put into use in the 1970s which presents challenges with respect to measuring gender identity in a valid way. However, recent studies provide evidence that the BSRI has been proven to be valid instrument (Carver et al., 2013; Hoffman & Borders, 2001; Vafaei et al., 2014). These limitations represent, in any case, opportunities to advance in our efforts to better understand business growth.

8. Conclusion

The findings of the present study make it clear that business growth intention is a complex phenomenon that may be influenced by gender. Our results indicate that gender identity mediates the influence of sex on business growth intentions and the mediation effects are contingent on entrepreneurs' independent self-construal. Thus, women make decisions related to the growth of their businesses using a different process than men do. Our results reinforce the claims that it is valuable to incorporate a feminine perspective when studying the factors influencing entrepreneurs' growth intentions in established business.

References

- Ahl, H. (2006). Why research on women entrepreneurs needs new directions. *Entrepreneurship Theory & Practice*, 30(5), 595-621.
- Ahl, H., & Marlow, S. (2012). Exploring the dynamics of gender, feminism and entrepreneurship: advancing debate to escape a dead end? *Organization Science*, 19(5), 543-562.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Arbuckle, J. L. (2006). *AMOS 7.0. User Guide*. Chicago: SmallWaters Corporation.

- Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion: is the active self a limited resource? *Journal of Personality and Social Psychology*, 74(5), 1252-1265.
- Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review*, 88(4), 354–364, doi:10.1037/0033-295x.88.4.354.
- Bird, B., & Brush, C. (2002). A gendered perspective on organizational creation. *Entrepreneurship Theory and Practice*, 26(3), 41-66.
- Bjursell, C., & Bäckvall, L. (2011). Family business women in media discourse: the business role and the mother role. *Journal of Family Business Management*, 1(154-173).
- Bulanova, O., Isaksen, E. J., & Kolvereid, L. (2016). Growth aspirations among women entrepreneurs in high growth firms. *Baltic Journal of Management*, 11(2), 187-206.
- Carver, L. F., Vafaei, A., Guerra, R., Freire, A., & Phillips, S. P. (2013). Gender differences: Examination of the 12-item Bem Sex Role Inventory (BSRI-12) in an older Brazilian population. *PLoS ONE*, 8(10), e76356, doi:10.1371/journal.pone.0076356.
- Cassar, G. (2006). Entrepreneur opportunity costs and intended venture growth. *Journal of Business Venturing*, 21(5), 610-632.
- Chen, C. C., Greene, P. G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13(4), 295-316.
- Cliff, J. E. (1998). Does one size fit all? Exploring the relationship between attitudes towards growth, gender, and business size. *Journal of Business Venturing*, 13(6), 523-542.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavior sciences*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Coleman, S. (2007). The role of human and financial capital in the profitability and growth of women-owned small firms. *Journal of Small Business Management*, 45(3), 303-319.
- Coleman, S. (2016). Gender, entrepreneurship, and firm Performance: Recent research and considerations of context. In M. L. Connerley, & J. Wu (Eds.), *Handbook on Well-Being of Working Women* (pp. 375-391). Dordrecht Netherlands: Springer Science.
- Cross, S. E., & Madson, L. (1997). Models of the self: self-construals and gender. *Psychological Bulletin*, 122(1), 5-37.
- Davis, A. E., & Shaver, K. G. (2012). Understanding gendered variations in business growth intentions across the life course. *Entrepreneurship Theory and Practice*, 36(3), 495-515, doi:10.1111/j.1540-6520.2012.00508.x.
- Delmar, F., & Wiklund, J. (2008). The effect of small business managers' growth motivation on firm growth: A longitudinal study. *Entrepreneurship Theory and Practice*, 32(3), 437-457.

- Dutta, D. K., & Thornhill, S. I. (2008). The evolution of growth intentions: Toward a cognition-based mode. *Journal of Business Venturing*, 23(3), 307-332.
- Eddleston, K. A., & Powell, G. N. (2008). The role of gender identity in explaining sex differences in business owners' career satisfier preferences. *Journal of Business Venturing*, 23(2), 244-256.
- Edelman, L. F., Brush, C. G., Manolova, T. S., & Greene, P. G. (2010). Start-up motivations and growth intentions of minority nascent entrepreneurs. *Journal of Small Business Management*, 48(2), 174-196.
- Farmer, S. M., Yao, X., & Kung-Mcintyre, K. (2011). The behavioral impact of entrepreneur identity aspiration and prior entrepreneurial experience. *Entrepreneurship Theory and Practice*, 35(2), 245-273.
- Fauchart, E., & Gruber, M. (2011). Darwinians, communitarians, and missionaries: The role of founder identity in entrepreneurship. *Academy of Management Journal*, 54(5), 935-957.
- Fernández, I., Paez, D., & González, J. L. (2005). Independent and interdependent self-construals and socio-cultural factors in 29 nations. *Revue Internationale de Psychologie Sociale*, 18(1), 35-63.
- Gupta, V. K., Turban, D. B., Wasti, S. A., & Sikdar, A. (2009). The role of gender stereotypes in perceptions of entrepreneurs and intentions to become an entrepreneur. *Entrepreneurship Theory and Practice*, 33(2), 397-417.
- Haltiwanger, J. C., Lane, J. I., & Spletzer, J. R. (1999). Productivity differences across employers: The roles of employer size, age, and human capital. *The American Economic Review*, 89(2), 94-98.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York:: The Guilford Press.
- Henry, C., Foss, L., & Ahl, H. (2016). Gender and entrepreneurship research: A review of methodological approaches. *International Small Business Journal*, 34(3), 217-341.
- Hoang, H., & Gimeno, J. (2010). Becoming a founder: How founder role identity affects entrepreneurial transitions and persistence in founding. *Journal of Business Venturing*, 25(1), 41-53.
- Hoffman, R. M., & Borders, L. D. (2001). Twenty-five years after the Bem Sex-Role Inventory: A reassessment and new issues regarding classification variability. . *Measurement and Evaluation in Counseling and Development*, 34(1), 39-55.
- Hong, Y. Y., Morris, M. W., Chiu, C. Y., & Benet-Martinez, V. (2000). Multicultural minds: A dynamic constructivist approach to culture and cognition. *American Psychologist*, 55(7), 709-720.

- Ireland, R. D., & Webb, J. W. (2007). A cross-disciplinary exploration of entrepreneurship research. *Journal of management*, 33(6), 891-927.
- Jennings, J. E., & Brush, C. G. (2013). Research on women entrepreneurs: Challenges to (and from) the broader entrepreneurship literature? *Academy of Management Annals*, 7(1), 661-713.
- Kerfoot, D., & Miller, C. (2010). Organizing entrepreneurship? Women's invisibility in self-employment. In P. Lewis, & S. Ruth (Eds.), *Revealing and Concealing Gender* (pp. 100-123). UK: Palgrave Macmillan
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5), 411-432.
- Lewis, P. (2006). The quest for invisibility: Female entrepreneurs and the masculine norm of entrepreneurship. *Gender, Work & Organization*, 13(5), 453-469.
- Linan, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224-253.
- Menzies, T. V., Diochon, M., & Gasse, Y. (2004). Examining venture-related myths concerning women entrepreneurs. *Journal of Developmental Entrepreneurship*, 9(89-107).
- Miller, C. C., Washburn, N. T., & Glick, W. H. (2013). Perspective-The myth of firm performance. *Organization Science*, 24(3), 948-964.
- Mueller, S. L. (2004). Gender gaps in potential for entrepreneurship across countries and cultures. *Journal of Developmental Entrepreneurship*, 9(3), 199-220.
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology*, 45(4), 867-872.
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128, 3-72.
- Oyserman, D., & Sorensen, N. (2009). Understanding cultural syndrome effects on what and how we think: A situated cognition model. In R. S. Wyer, C. Chi-yue, & Y. Y. Hong (Eds.), *Understanding culture: Theory, research and application* (pp. 25-52). New York: Taylor & Francis Group.

- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 85(5), 879-903.
- Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: quantitative strategies for communicating indirect effects. *Psychological Methods*, 16(2), 93-115.
- Rauch, A., & Frese, M. (2000). Psychological approaches to entrepreneurial success. A general model and an overview of findings. In c. L. Cooper, & I. T. Robertson (Eds.), *International Review of Industrial and Organizational Psychology* (pp. 101-142). Chichester: Wiley.
- Sadler-Smith, E., Hampson, Y., Chaston, I., & Badger, B. (2003). Managerial behavior, entrepreneurial style, and small firm performance. *Journal of Small Business Management*, 41(1), 47-67.
- Shane, S. (2009). Why encouraging more people to become entrepreneurs is bad public policy. *Small Business Economics*, 33(2), 141-149.
- Shook, C. L., Ketchen, D. J. J., Hult, G. T. M., & Kacmar, K. M. (2004). An assessment of the use of structural equation models in strategic management research. *Strategic Management Journal*, 25, 397-404.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and non-experimental studies: new procedures and recommendations. *Psychological Methods*, 4, 422-445.
- Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin*, 20, 580-591.
- Siu, W. S., & Lo, E. S. C. (2013). Cultural contingency in the cognitive model of entrepreneurial intention. *Entrepreneurship Theory and Practice*, 37, 147-173.
- Stam, E., Suddle, K., Hessels, J., & van Stel, A. (2009). High-growth entrepreneurs, public policies and economic growth. In J. Leitao, & R. Baptista (Eds.), *Public Policies for Fostering Entrepreneurship: A European Perspective* (pp. 91-110). New York: Springer.
- Tang, L., & Koveos, P. E. (2004). Venture entrepreneurship, innovation entrepreneurship and economic growth. *Journal of Developmental Entrepreneurship*, 3, 161-171.
- Vafaei, A., Alvarado, B., Tomás, C., Muro, C., Martinez, B., & Zunzunegui, M. V. (2014). The validity of the 12-item Bem Sex Role Inventory in older Spanish population: An examination of the androgyny model. *Archives of gerontology and geriatrics*, 59(2), 257-263.
- Van Praag, C. M., & Versloot, P. (2007). What is the value of entrepreneurship? A review of recent research. *Small Business Economics*, 29(4), 351-382.

- Venugopal, V. (2016). Investigating women's intentions for entrepreneurial growth. *International Journal of Gender and Entrepreneurship*, 8(1), 2-27.
- Wiklund, J., Davidsson, P., & Delmar, F. (2003). What do they think and feel about growth? An Expectancy-Value approach to small business managers' attitudes toward growth. *Entrepreneurship Theory and Practice*, 27(3), 247-270.
- Wiklund, J., & Shepherd, D. (2003). Aspiring for, and achieving growth: the moderating role of resources and opportunities. *Journal of Management Studies*, 40(8), 1919-1941.
- Wood, W., & Eagly, A. H. (2010). Gender. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology (Vol. 1, 5th ed)* (pp. 629-667). Hoboken, NJ: Wiley.
- Zampetakis, L. A., Lerakis, M., Kafetsios, K., & Moustakis, V. (2015). Investigating the role of self-construal in the formation of entrepreneurial intentions. *Frontiers in Psychology - Organizational Psychology*, 6(1085), doi:10.3389/fpsyg.2015.01085.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197-206.

ANNEX IV

WP2.3 Mapping the implemented support model for candidate female entrepreneurs of ERGANI Center (in Greek)

ΟΛΙΣΤΙΚΗ ΠΡΟΣΕΓΓΙΣΗ ΣΤΗ ΣΤΗΡΙΞΗ ΤΗΣ ΕΠΙΧΕΙΡΗΜΑΤΙΚΟΤΗΤΑΣ ΜΕ ΤΗΝ ΟΠΤΙΚΗ ΤΟΥ ΦΥΛΟΥ:

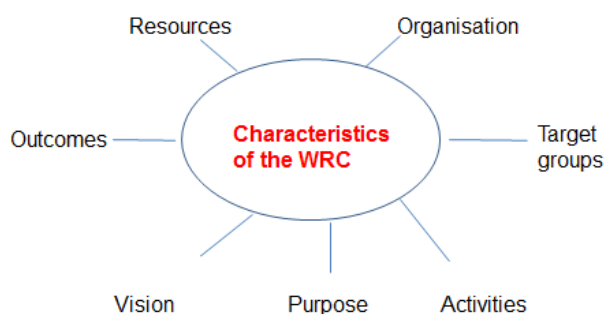
Το μοντέλο του Κέντρου Εργάνη στην υποστήριξη Γυναικών Υποψήφιων Επιχειρηματιών

A. Εισαγωγή - Ιστορικό

Το Κέντρο στήριξης της απασχόλησης και της επιχειρηματικότητας γυναικών Εργάνη δημιουργήθηκε το 1991 με τη μορφή της κοινοπραξίας τεσσάρων (4) φορέων της Θεσσαλονίκης (Εθνικός Οργανισμός Πρόνοιας, Δήμος Συκεών, Αριστοτέλειο Πανεπιστήμιο Θεσσαλονίκης, Σύνδεσμος Βιομηχανιών Βόρειας Ελλάδας), με στόχο την αξιοποίηση της κοινοτικής πρωτοβουλίας NOW (νέες ευκαιρίες για γυναίκες). Μετά από μια συνεχή σειρά αντίστοιχων έργων (Κοινοτική Πρωτοβουλία Απασχόλησης, ECOs OUVERTURE κ.α), στα οποία συνέπραξαν και άλλοι φορείς (π.χ. Σύνδεσμος Εξαγωγέων Βόρειας Ελλάδας, ΚΕΚ ΣΕΒΕ ΣΒΒΕ ΔΕΘ, Ανατολική Α.Ε, Επαγγελματικό Επιμελητήριο Θεσσαλονίκης Γενική Γραμματεία Νέας Γενιάς Ιδιωτικές Επιχειρήσεις Γυναικών κ.α) που κάλυψαν 10 έτη αδιάλειπτης λειτουργίας, οι φορείς που μέχρι εκείνη τη στιγμή το συναποτελούσαν αποφάσισαν να συμπράξουν σε πιο μόνιμη βάση. Το 2001 συστάθηκε η ανεξάρτητη νομική προσωπικότητα του Κέντρου Εργάνη, αυτή της αστικής μη κερδοσκοπικής Εταιρείας. Οι φορείς που συνέστησαν τη νομική μορφή του Κέντρου Εργάνη ήταν έξι (6): Δήμος Συκεών, ΑΠΘ, Σύνδεσμος Εξαγωγέων Βόρειας Ελλάδας, ΚΕΚ ΣΕΒΕ- ΣΒΒΕ- ΔΕΘ, Ανατολική Α.Ε, Δίκτυο Γυναικών Εργάνη Το Εργάνη, πηγαίνοντας ένα βήμα μπροστά από τους φορείς που το δημιούργησαν και παρά την αποσπασματικότητα των προγραμμάτων χρηματοδότησης, κατάφερε να αντέξει στο χρόνο και να ξεπεράσει σήμερα τα 25 χρόνια παρουσίας, μέσα από μια διαρκή προσαρμογή στις συνθήκες και αλλάζοντας συνεχώς, έτσι ώστε να μπορεί να ανταποκρίνεται στις σύγχρονες ανάγκες και στα αιτήματα των ωφελουμένων του. Στο παρόν κεφάλαιο επιχειρείται η παρουσίαση του μοντέλου του Κέντρου Εργάνη και η διεξαγωγή των σχετικών συμπερασμάτων.

Το Κέντρο Εργάνη σήμερα λειτουργεί με βάση το ευρωπαϊκό μοντέλο των Κέντρων Στήριξης Γυναικών (Women Resources Centers) που επικράτησε κυρίως στη Σουηδία.

Σχήμα: Τα χαρακτηριστικά ενός ΚΣΓ



Μια από τις καινοτομίες του Κέντρου, αφορά στο γεγονός ότι είναι η μοναδική δομή σε εθνικό επίπεδο που παρέμεινε και αναπτύχθηκε από τη στιγμή της ίδρυσής της, το 1991, μέσα από τα αποτελέσματα συγχρηματοδοτούμενων προγραμμάτων. Από της ιδρύσεώς του, υποστηρίζει τις γυναίκες επιχειρηματίες και υποψήφιες επιχειρηματίες με ένα συστηματικό τρόπο, χρησιμοποιώντας κατάλληλα εκπαιδευτικά εργαλεία και μεθοδολογικά εργαλεία συμβουλευτικής στην επιχειρηματικότητα των γυναικών.

Το Κέντρο Εργάνη αρχικά υλοποιούσε εκπαιδευτικά προγράμματα για γυναίκες που αναζητούσαν εργασία ή ήθελαν να ξεκινήσουν τη δική τους επιχείρηση, ενώ παρείχε συμβουλευτική υποστήριξη επαγγελματικής σταδιοδρομίας και επιχειρηματικότητας. Με την πάροδο των ετών, το Κέντρο Εργάνη ανέπτυξε και προσάρμοσε τις υπηρεσίες του, διεύρυνε τις ομάδες στόχου, δημιούργησε εκπαιδευτικά εργαλεία επαγγελματικής σταδιοδρομίας και ανάπτυξης της επιχειρηματικότητας των γυναικών, συμμετείχε σε δίκτυα περιφερειακά, εθνικά και διακρατικά μεταφέροντας την εμπειρία του και κερδίζοντας από την εμπειρία αντίστοιχων κέντρων στην Ευρώπη.

Η επιτυχής πορεία και τα αποτελέσματα των παρεχόμενων υπηρεσιών του Κέντρου Εργάνη, το μοντέλο οργάνωσης και λειτουργίας του και η εφαρμοζόμενη μεθοδολογία της συμβουλευτικής επιχειρηματικότητας γυναικών και δικτύωσης, συνιστούν το Κέντρο Εργάνη ως **μοντέλο ολιστικής στήριξης της επιχειρηματικότητας** των γυναικών. Το μοντέλο αυτό μπορεί να αξιοποιηθεί σε μελλοντικές παρεμβάσεις στους τομείς της επιχειρηματικότητας, της κοινωνικής οικονομίας και της απασχόλησης που θα εστιάζουν στη διάσταση του φύλου και θα συμβάλλουν στην αξιοποίηση των γυναικών στην αγορά εργασίας μέσω της επιχειρηματικότητας.

Όραμα και στόχοι

Το όραμα του Κέντρου Εργάνη είναι η ισότιμη ένταξη των γυναικών στο χώρο εργασίας, των επιχειρήσεων και της κοινωνικής επιχειρηματικότητας καθώς και η ένταξη του φύλου στις πολιτικές απασχόλησης και ενίσχυσης της επιχειρηματικότητας.

Οι στόχοι των δράσεων του είναι:

- Η κατανόηση του γεγονότος ότι οι γυναίκες έχουν αυξημένες ανάγκες και χρειάζονται υποστήριξη καθώς και η καταγραφή των εμποδίων, των ιδιαιτεροτήτων και των πραγματικών δεδομένων.
- Η διαμόρφωση ευνοϊκών συνθηκών που θα επιτρέψουν στις γυναίκες και τις υπόλοιπες ομάδες στόχου να αξιοποιήσουν τις ευκαιρίες που δικαιούνται στην εργασία, την οικογένεια, την κοινωνία και τη ζωή γενικότερα.
- Η πολύπλευρη υποστήριξη των γυναικών μέσα από δράσεις συμβουλευτικής, επιχειρηματικής εκπαίδευσης, μέντορινγκ και δικτύωσης.
- Η ευρύτερη συμβολή στην προώθηση της διάστασης του φύλου στον κόσμο της εργασίας και της επιχειρηματικότητας μέσα από έρευνες, εκπαιδευτικά εργαλεία και πρωτοβουλίες δικτύωσης σε περιφερειακό, εθνικό και ευρωπαϊκό επίπεδο.
- Η προώθηση της δικτύωσης, σε όλα τα επίπεδα, των ευπαθών ομάδων και των ομάδων που αντιμετωπίζουν εμπόδια στη δημιουργία μιας επιχείρησης. Το Εργάνη υποστηρίζει συνεργατικά εγχειρήματα και δίκτυα, ως απάντηση στην έλλειψη πηγών ή κεφαλαίου

B Ομάδες στόχου - Υποψήφιες Επιχειρηματίες

Οι υπηρεσίες που παρέχει καλύπτουν όλο το επαγγελματικό φάσμα των γυναικών και καταλήγει στην αναζήτηση εξαρτημένης εργασίας ή στη δημιουργία μιας μικρής ή κοινωνικής συνεταιριστικής επιχείρησης.

Το Κέντρο Εργάνη υποστηρίζει γυναίκες που θέλουν:

- Να ενταχθούν ή να επανενταχθούν στην αγορά εργασίας.
- Να βελτιώσουν την εργασιακή τους θέση.
- Να δημιουργήσουν ή να βελτιώσουν τη δική τους επιχείρηση.
- Να συνεταιριστούν ή να αναπτύξουν τον ήδη υπάρχοντα συνεταιρισμό τους.
- Να δημιουργήσουν ή να βελτιώσουν την κοινωνική τους επιχείρηση.
- Να εξοικειωθούν με τη σύγχρονη τεχνολογία και να την αξιοποιήσουν.

Η υποστήριξη γίνεται στις προσερχόμενες γυναίκες στην έδρα του Κέντρου Εργάνη στη Θεσσαλονίκη, στο παράρτημά του στην Κοζάνη ή σε γυναίκες άλλων περιοχών της χώρας, μέσω των αντενών του Εργάνη και των συμπράξεών του με τους τοπικούς φορείς. Μέρος των υπηρεσιών (μετά την διερεύνηση αναγκών και το πλάνο στήριξης) μπορεί να γίνει και από απόσταση με τη χρήση τηλεφωνικής επικοινωνίας και ίντερνετ (σύγχρονα ή ασύγχρονα).

Από τις Υπηρεσίες συμβουλευτικής του Κέντρου Εργάνη, κατά την περίοδο 2008-2015, ωφελήθηκαν συνολικά 1980 άτομα

Μια από τις μεγάλες κατηγορίες προσερχόμενων είναι αυτές που θέλουν να ξεκινήσουν μια επιχείρηση ή έναν κοινωνικό συνεταιρισμό. Αυτές τα τελευταία χρόνια, όπως φαίνεται και από τον πίνακα που ακολουθεί είναι το 44,75% του συνόλου των εισερχομένων. Η κατάστασή τους μπορεί να είναι οποιαδήποτε και με την σειρά μεγέθους είναι: άνεργες, εργαζόμενες, επιχειρηματίες (που θέλουν να αλλάξουν δραστηριότητα) ή ακόμη και μικρός αριθμός δημοσίων υπαλλήλων και ακόμη μικρότερος συνταξιούχων.

Πίνακας: Αριθμός ωφελούμενων, 2008-2015

2008	2009	2010	2011	2012	2013	2014	2015	Σύνολο
221	336	189	111	221	267	347	288	1980

Πίνακας: Αριθμός ωφελούμενων - υποψηφίων επιχειρηματιών -κοινωνικών επιχειρηματιών

2008	2009	2010	2011	2012	2013	2014	2015	Σύνολο
105	153	70	49	99	132	148	130	886

Πηγή: Βάση δεδομένων ωφελούμενων Κέντρου Εργάνη

Σημείωση: Τα άτομα στους πίνακες αυτούς, υπολογίζονται μόνο μία φορά, ανεξάρτητα εάν προσέρχονται περισσότερες φορές κατά τη διάρκεια του ίδιου έτους ή περισσότερων ετών.

Κατά την τελευταία τριετία, στη συμβουλευτική της επιχειρηματικότητας για τις κοινωνικές επιχειρήσεις συμμετείχαν και άνδρες (ποσοστό 14% των συμμετεχόντων), λόγω της μικτής σύνθεσης, ως προς το φύλο, των κοινωνικών επιχειρήσεων και κάποιων ειδικών προγραμμάτων του Εργάνη που απευθύνονταν και στα δύο φύλα.

Το Εργάνη παραμένει το Κέντρο που παρέχει υπηρεσίες σε γυναίκες που εντάσσονται σε ευπαθείς κοινωνικά ομάδες. Σχεδόν το 50% των ωφελούμενων γυναικών του Εργάνη ανήκουν

σε ειδική κοινωνική κατηγορία (μονογονεϊκές οικογένειες, άνεργες άνω των 45, γυναίκες της υπαίθρου με χαμηλά προσόντα, μετανάστριες και πρόσφυγες).

Γ. Υπηρεσίες και δραστηριότητες που αφορούν στις υποψήφιες επιχειρηματίες

ι. Ατομική συμβουλευτική:

Πρόκειται για ατομικά ραντεβού των γυναικών που αναζητούν στήριξη σε θέματα επιχειρηματικότητας με τις εξειδικευμένες συμβούλους του Κέντρου. Στο πρώτο ραντεβού γίνεται η διερεύνηση των αναγκών κάθε γυναίκας, ώστε μέσα από τη συζήτηση και την ανάλυση των υπηρεσιών του Κέντρου να επιλεγούν οι υπηρεσίες που αρμόζουν στην κάθε περίπτωση. Η πρακτική αποδεικνύει ότι η συντριπτική πλειοψηφία των γυναικών που προσέρχονται στο Κέντρο επιλέγει άμεσα την συνέχιση της ατομικής συμβουλευτικής και προσανατολίζεται στις λοιπές υπηρεσίες επιχειρηματικότητας, ανάλογα με τις ανάγκες της.

Οι τομείς πληροφόρησης που καλύπτονται από την ατομικής συμβουλευτικής είναι οι εξής:

- Γενικές κατευθύνσεις – Οργάνωση – Διοίκηση επιχείρησης
- Αυτογνωσία, Ψυχολογική Ενδυνάμωση, Διαχείριση Άγχους
- Αξιολόγηση επενδύσεων– Τιμολογιακή Πολιτική
- Νομική μορφή - Λογιστικά & Φοροτεχνικά Θέματα
- Θέματα Προώθησης - Προβολής – Διαφήμισης
- Χρηματοδότηση – Προγράμματα
- Νομικά Θέματα
- Εισαγωγή νέων τεχνολογιών
- Δικτύωση και προβολή στο Διαδίκτυο

Στόχος της ατομικής συμβουλευτικής είναι η παροχή πληροφόρησης και κατευθύνσεων στις γυναίκες που προσέρχονται στο Κέντρο. Σε κάθε συνάντηση επιχειρείται σε βάθος ανάλυση των θεμάτων που ενδιαφέρουν τη γυναίκα, χωρίς να υποκαθιστούν οι σύμβουλοι τη δουλειά που θα πρέπει να γίνει από την ίδια την ενδιαφερόμενη.

Κάθε συνάντηση με σύμβουλο διαρκεί 40’-45’ και καθορίζεται με τη βοήθεια της γραμματείας, εφόσον και όταν προκύπτει ανάγκη από την πλευρά της γυναίκας.

Τηλε-συμβουλευτική:

Η τηλε-συμβουλευτική αποτελεί μια προέκταση της υπηρεσίας της ατομικής συμβουλευτικής. Δίνει τη δυνατότητα στις γυναίκες που έχουν χρησιμοποιήσει ατομική συμβουλευτική και κατά συνέπεια γνωρίζουν τον τρόπο λειτουργίας της, να την χρησιμοποιήσουν από απόσταση. Κάτι τέτοιο προτείνεται σε ιδιαίτερες συνθήκες, διότι η συμβουλευτική από απόσταση δεν μπορεί στην πραγματικότητα να υποκαταστήσει τις προσωπικές συναντήσεις. Ενδεικτικά αναφέρεται ότι η τηλε-συμβουλευτική ενδείκνυται να χρησιμοποιηθεί στις περιπτώσεις που η ενδιαφερόμενη θέλει να χρησιμοποιήσει τη συμβουλευτική αλλά:

- δεν μένει στη Θεσσαλονίκη,
- δεν έχει ευχέρεια χρόνου (λόγω εργασίας, παιδιών, κλπ.),
- έχει ήδη κάνει ατομική συμβουλευτική και χρειάζεται εξειδικευμένη στήριξη σε κάποιο συγκεκριμένο θέμα.

Κατάστρωση Επιχειρηματικού Σχεδίου (business plan):

Με βάση τη μακροχρόνια εμπειρία του Κέντρου Εργάνη στην υποστήριξη των γυναικών που θέλουν να καταστρώσουν το επιχειρηματικό σχέδιο (business plan) που θα τους επιτρέψει να ξεκινήσουν τη δική τους επιχείρηση, δημιουργήθηκε από το Κέντρο ένα εξειδικευμένο εκπαιδευτικό υλικό, ένα

σύστημα αυτοεκπαίδευσης, που επιτρέπει στην ενδιαφερόμενη να προχωρήσει βήμα προς βήμα στη διαδικασία δημιουργίας και οργάνωσης μίας επιχείρησης και σύνταξης ενός επιχειρηματικού σχεδίου, χωρίς να απαιτεί εξειδικευμένες γνώσεις.

Το εκπαιδευτικό υλικό υπάρχει σε έντυπη και ηλεκτρονική μορφή και αποτελείται από δύο μέρη: το θεωρητικό μέρος που είναι χωρισμένο σε κεφάλαια - βήματα για τη δημιουργία της επιχείρησης και το πρακτικό μέρος που περιέχει φύλλα εργασίας (πρακτικής) για κάθε κεφάλαιο.

Η ομάδα πραγματοποιεί δύο συναντήσεις την εβδομάδα σε απογευματινές ώρες, για χρονικό διάστημα 4-6 εβδομάδων. Κάθε βήμα - κεφάλαιο παρουσιάζεται από εξειδικευμένο στο θέμα εισηγητή. Ανάλογα με την έκταση της ενότητας η παρουσίαση γίνεται σε μία ή περισσότερες συναντήσεις παρουσίασης του θεωρητικού μέρους και αντίστοιχες συναντήσεις επεξεργασίας των φύλλων εργασίας. Η συνάντηση για την επεξεργασία των φύλλων εργασίας προϋποθέτει ότι οι συμμετέχουσες έχουν ήδη επεξεργαστεί μία σειρά ασκήσεων, με στόχο την εφαρμογή της θεωρίας στα δεδομένα της επιχείρησης που προσπαθεί να δημιουργήσει η κάθε μία. Αυτό έχει ως αποτέλεσμα την παρουσίαση διαφορετικών τρόπων αντιμετώπισης και τον εντοπισμό των καλύτερων πρακτικών, που τελικά γίνεται μέσα από τη συζήτηση από τις ίδιες τις επωφελούμενες, με την καθοδήγηση του εισηγητή.

Λέσχη νέων τεχνολογιών

Το Κέντρο Εργάνη αναγνωρίζοντας το γεγονός της ανάγκης των γυναικών να καταρτιστούν σε θέματα τεχνολογιών, ώστε να παραμείνουν ανταγωνιστικές στην αγορά εργασίας διοργανώνει σύντομους κύκλους σεμιναρίων:

- εκμάθηση βασικών αρχών λειτουργίας ηλεκτρονικών υπολογιστών και επεξεργασίας κειμένου (40 ώρες),
- εκμάθηση προγραμμάτων Microsoft Access (25 ώρες), Microsoft Excel (15 ώρες),
- εκμάθηση internet - e-mail (25 ώρες)
- κατασκευή ιστοσελίδας (20 ώρες)

Στήριξη γυναικών υποψήφιων επιχειρηματιών από Μέντορες

Πρόκειται για μία εξειδικευμένη καινοτόμα υπηρεσία του Κέντρου, στο πλαίσιο της οποίας επιλεγμένοι μέντορες, άτομα με σημαντική εμπειρία και αποδεδειγμένα επιτυχημένη προϋπηρεσία στο χώρο των επιχειρήσεων, ασχολούνται με τη στήριξη των νέων, ή, υποψήφιων γυναικών επιχειρηματιών.

Κάθε μέντορας αναλαμβάνει για ένα προσυμφωνημένο χρονικό διάστημα (συνήθως από τρεις έως έξι μήνες) να υποστηρίξει μία υποψήφια ή νέα επιχειρηματία, με στόχο τη μεταφορά της εμπειρίας του από την «αγορά» στην επωφελούμενη, που βρίσκεται στα πρώτα στάδια της επιχειρηματικής της δραστηριότητας. Ενδεικτικά θα μπορούσαμε να αναφέρουμε ότι στο ρόλο των μεντόρων συμπεριλαμβάνεται η ενημέρωση των επωφελούμενων γυναικών για αποτελεσματικές επιχειρηματικές πρακτικές που έχουν εφαρμόσει οι ίδιοι κατά τη διάρκεια της μακρόχρονης παρουσίας τους στο χώρο των επιχειρήσεων, αλλά και η προσπάθεια να αυξηθεί το δίκτυο των επαφών τους. Η σχέση μπορεί να λειτουργήσει και με τη βοήθεια του διαδικτύου (τηλεμέντορινγκ), εφόσον υπάρχουν οι προϋποθέσεις.

Σε γενικές γραμμές τα πλεονεκτήματα για τις επωφελούμενες συνοψίζονται στα εξής:

- Εμφύχωση τους για τον καθορισμό στόχων και υποκίνηση για την επίτευξη τους
- Ενίσχυση της αυτοεκτίμησης τους κατά την ανάληψη μιας επιχειρηματικής πρωτοβουλίας
- Εποπτεία των νέων γυναικών στο διάστημα θεμελίωσης της νέας επιχείρησης.
- Μεταφορά ιδεών, εμπειριών και γνώσεων

Κατά τη διάρκεια του προγράμματος οι μέντορες περνούν από μια σύντομη διαδικασία εξοικείωσης με το θεσμό και τον καινούριο τους ρόλο, μέσω της οποίας:

- Συμμετέχουν σε επιμορφωτικές συναντήσεις και έχουν στη διάθεσή τους χρήσιμο εκπαιδευτικό υλικό για το μέντορινγκ.
- Ανταλλάζουν απόψεις και εμπειρίες με παλαιότερους μέντορες.
- Προβάλλονται μέσω των εκδόσεων και των πρωτοβουλιών δημοσιοποίησης που διοργανώνει το Εργάνη και παράλληλα προωθούν την ιδέα και το θεσμό του μέντορα.

Ειδική ευέλικτη κατάρτιση: Αξιολόγηση Επιχειρηματικής Ιδέας

Η κατάρτιση αυτή γίνεται ομαδικά και αφορά στα άτομα που προσέρχονται και είτε έχουν μια μη ξεκάθαρη ιδέα, είτε δεν μπορούν να αποφασίσουν ανάμεσα σε περισσότερες ιδέες. Μπορεί επίσης να αφορά σε άτομα που έχουν μεν αποφασίσει την επιχειρηματική δραστηριότητα αλλά είναι σε ιδιαίτερα πρωτόλειο στάδιο χωρίς να έχουν ψάξει τις παραμέτρους υλοποίησης της ιδέας τους. Η κατάρτιση αυτή διαρκεί 20 ώρες και χωρίζεται σε 6-7 συναντήσεις. Γίνεται σε ομαδικό επίπεδο και το υλοποιούν δύο διαφορετικοί σύμβουλοι του Κέντρου. Οι δύο αρχικές συναντήσεις αφορούν σε θέματα δεσίματος ομάδας και αυτογνωσίας - καταγραφής δεξιοτήτων - ικανοτήτων - γνώσεων. Ο/Η σύμβουλος που το υλοποιεί είναι κοινωνιολόγος/ψυχολόγος. Οι επόμενες συναντήσεις αφορούν τον επιχειρηματικό πυρήνα της ιδέας και υλοποιείται από οικονομολόγο. Τα πεδία που περιλαμβάνονται σε αυτή τη φάση είναι: επιχειρηματική ιδέα και καινοτομία, φορολογικές και ασφαλιστικές υποχρεώσεις, νομικά ζητήματα και επιλογή νομικής μορφής, έρευνα αγοράς και επιλογή έδρας, οικονομικός σχεδιασμός και επενδυτικό σχέδιο.

Η κατάρτιση αυτή βοηθάει τα άτομα να σχηματοποιήσουν την φάση από την ιδέα στο χαρτί και η μεθοδολογία που ακολουθούμε είναι βιωματική με ειδικά εργαλεία για κάθε πεδίο. Η συγγραφή των πεδίων τους/τις δίνει ένα αρχικό επιχειρηματικό σχέδιο και τους/τις βοηθάει να καταλάβουν αν η ιδέα που έχουν τους ταιριάζει, αν ζητείται από την αγορά και αν μπορούν οι ίδιοι/ες να την υλοποιήσουν. Αν οι απαντήσεις είναι αρνητικές κατανοούν τι πρέπει να βελτιώσουν και αν και σε αυτό δεν υπάρχει θετική κατάληξη, ίσως να την εγκαταλείψουν ή να την αναθεωρήσουν/

Η κατάρτιση αυτή βοηθάει τα άτομα που δεν είναι πραγματικά έτοιμα να προχωρήσουν και μετά να ξεκινήσουν την συμβουλευτική που περιγράψαμε παραπάνω. Η κατάρτιση αυτή πραγματοποιείται σε ομάδες των 10-15 ατόμων και πραγματοποιείται σχεδόν κάθε μήνα.

Ειδικό πρόγραμμα ομαδικής συμβουλευτικής για ομαδικά σχήματα

Αποτελεί μια υπηρεσία συμβουλευτικής που παρέχεται σε ομαδικό επίπεδο και αφορά ομάδες που θέλουν από κοινού να ξεκινήσουν μια επιχειρηματική δραστηριότητα: κυρίως κοινωνικό συνεταιρισμό, αλλά επίσης και γυναικείο συνεταιρισμό ή άλλο εγχείρημα της κοινωνικής και αλληλέγγυας οικονομίας ή μια μη κυβερνητική οργάνωση που έχει όμως οικονομική δραστηριότητα.

Η συμβουλευτική αυτή γίνεται με το σύνολο της συγκεκριμένης ομάδας. Διαρκεί από 6 έως 12 συνεδρίες. Μπορεί να υλοποιηθεί είτε στους χώρους του Κέντρου, είτε στον χώρο δράσης της ομάδας. Τα πεδία ακολουθούν τις ανάγκες της κάθε ομάδας και μπορεί να είναι: δέσιμο ομάδας, κατανομή αρμοδιοτήτων, λήψη απόφασης, διαχείρισης διαφωνιών και κρίσεων. Στα προαναφερόμενα πεδία μπορούν να προστεθούν και άλλα που είτε αιτούνται τα μέλη της ομάδας, είτε προκύπτουν από τη διάγνωση των συμβούλων μας.

Δ. Επίλογος: Ένα ολιστικό μοντέλο υποστήριξης των επιχειρηματιών γυναικών

Οι υπηρεσίες που παρέχονται στις επιχειρηματίες γυναίκες αφορούν τις επιχειρηματίες σε όλα τα στάδια ανάπτυξης της επιχείρησης – υποψήφιας, νέας και καθιερωμένες επιχειρηματίες και όλες τις μορφές ανάπτυξης της επιχειρηματικότητας – συμβατική, συνεταιριστική, κοινωνική. Σε συντομία ποσοστό οι υπηρεσίες είναι συμβουλευτικές και εξατομικευμένες και βασίζονται στην κινητοποίηση των ίδιων των ωφελουμένων, ώστε να κατανοήσουν και να σχεδιάσουν ένα επαγγελματικό/επιχειρηματικό πλάνο, να θέσουν τις δικές τους προτεραιότητες και στόχους, να διεκδικήσουν την επίτευξη των αποφάσεων τους.

Επίκεντρο των παρεχόμενων συμβουλευτικών υπηρεσιών είναι η προσωπική ανάπτυξη των ωφελουμένων μέσα από την απόκτηση γνώσεων και δεξιοτήτων αλλά και η ψυχολογική στήριξη και ενθάρρυνση που είναι απαραίτητα ώστε να επιτύχουν τους στόχους τους. Η συμβουλευτική στην επιχειρηματικότητα αφορά στην ανάπτυξη των δεξιοτήτων και γνώσεων της υποψήφιας, νέας ή καθιερωμένης επιχειρηματία ώστε να είναι σε θέση να καταστρώσει και να υλοποιήσει ένα επιχειρηματικό σχέδιο, σε αντίθεση με τους συμβούλους επιχειρήσεων που σχεδιάζουν ένα 'αποτελεσματικό' επιχειρηματικό σχέδιο και αφήνουν τους επιχειρηματίες να το υλοποιήσουν.

Οι δύο κεντρικοί άξονες του μοντέλου του Κέντρου Εργάνη είναι η ενδυνάμωση και η ολιστική προσέγγιση (Πίνακας).

ΠΙΝΑΚΑΣ: Οι κεντρικοί άξονες του μοντέλου

Ενδυνάμωση	Ολιστική προσέγγιση
Η ενίσχυση της αυτοεκτίμησης των γυναικών ώστε να μπορέσουν να αναλάβουν την ευθύνη της προσωπικής, επαγγελματικής και οικογενειακής τους ζωής και να πάρουν οι ίδιες τις καλύτερες αποφάσεις για το μέλλον τους.	Η ολιστική προσέγγιση είναι η συμβουλευτική που αντιμετωπίζει τη γυναίκα ως ολότητα και λαμβάνει υπόψη όλους τους ρόλους που αυτή έχει αναλάβει , καθώς αυτοί εμπλέκονται και συχνά συγκρούονται στην επαγγελματική της σταδιοδρομία.

Τα βασικά χαρακτηριστικά του μοντέλου, στο οποίο βασίζονται οι υπηρεσίες του Κέντρου Εργάνη καταγράφονται στον Πίνακα 20.3.

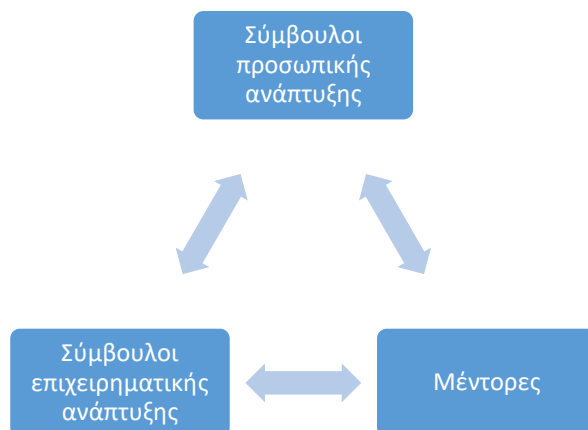
Πίνακας: Τα χαρακτηριστικά του μοντέλου των υπηρεσιών του Εργάνη

1	βιωματική προσέγγιση
2	γνώση μέσα από την εμπειρία
3	αναγνώριση και αξιοποίηση προϋπάρχουσας γνώσης και εμπειρίας που δεν προέρχεται μέσα από τα επίσημα εκπαιδευτικά κανάλια
4	γνωριμία με τον εαυτό, κατανόηση θετικών και αρνητικών στοιχείων
5	είσοδο στον κόσμο της δια βίου μάθησης μέσα από την κατανόηση ελλείψεων στις απαραίτητες γνώσεις ή στη βελτίωση δεξιοτήτων απαραίτητων για να στηθεί και να λειτουργήσει επιτυχημένα μια επιχείρηση

Οι υπηρεσίες υποστήριξης των γυναικών επιχειρηματιών αλληλοσυμπληρώνονται. Εκτός από την ατομική συμβουλευτική επιχειρηματικότητας (Σχήμα 20-4), που είναι ο κύριος κορμός,

παρέχεται ευέλικτη και εντατική κατάρτιση στην αξιολόγηση της επιχειρηματικής ιδέας και στη δημιουργία επιχειρηματικού σχεδίου, υπηρεσία αναδοχής από μέντορα (mentoring), εκπαίδευση ομοτίμων, εκπαιδευτικά προγράμματα και δικτύωση με φορείς και άλλες επιχειρηματίες.

Σχήμα: Ατομική επιχειρηματική συμβουλευτική



Β. Τα βήματα συμβουλευτικής επιχειρηματικότητας στο Κέντρο Εργάνη

Για όλες τις ωφελούμενες του Κέντρου, ανεξάρτητα αν στοχεύουν στην απασχόληση ή την επιχειρηματικότητα, η αρχική επαφή με το Κέντρο αλλά και τα πρώτα βήματα στη συμβουλευτική είναι κοινά (Σχήμα 20-5).

Σχήμα: Τα βήματα ατομικής συμβουλευτικής



Τα τέσσερα πρώτα βήματα της συμβουλευτικής διαδικασίας

Πρώτο βήμα: ενημέρωση για τις υπηρεσίες του Κέντρου και καταγραφή του αρχικού αιτήματος.

Δεύτερο βήμα: διερεύνηση του προσωπικού και επαγγελματικού προφίλ και αναλυτική καταγραφή όλων των πιθανών αιτημάτων που πολλές φορές διαφοροποιούνται από το αρχικό.

Τρίτο βήμα: καταγραφή δεξιοτήτων και απαραίτητων επαγγελματικών χαρακτηριστικών, η κατανόηση του εαυτού, των δυνατών και αδύνατων σημείων, των αξιών και των κινήτρων αλλά και των γνώσεων, εμπειριών ή εμποδίων που υπάρχουν και σχετίζονται με την επιθυμητή επιχειρηματική δραστηριότητα (αυτογνωσία). Στόχος είναι η κατανόηση της ύπαρξης σημείων προς βελτίωση, προβλημάτων που χρειάζονται λύση, εμποδίων που πρέπει να ξεπεραστούν, δυνατοτήτων, γνώσεων ή εμπειριών που πρέπει να αξιοποιηθούν.

Τέταρτο βήμα: Σε πλείστες περιπτώσεις, το αμέσως επόμενο βήμα είναι η εμφύχωση και η ενδυνάμωση. Το βήμα αυτό είναι απαραίτητο για όσες γυναίκες αντιμετωπίζουν χαμηλή αυτοεκτίμηση, έχουν σοβαρά εμπόδια στην προσωπική τους ζωή ή αντιμετωπίζουν οποιουδήποτε λόγους κοινωνικού αποκλεισμού, καταστάσεις που αφορούν συχνά μεγάλο αριθμό από τις ωφελούμενες του Κέντρου Εργάνη. Στο στάδιο αυτό η κάθε ωφελούμενη είναι σε θέση να αποφασίσει αν μπορεί και αν θέλει να κάνει το βήμα προς τη δημιουργία μιας επιχείρησης οπότε και η συμβουλευτική επικεντρώνεται στην επιχειρηματική ιδέα της ωφελούμενης και στην αξιολόγησή της.

Πέμπτο βήμα: Η επιχειρηματική συμβουλευτική

Στην περίπτωση των δυνητικών επιχειρηματιών το Κέντρο υποστηρίζει την ωφελούμενη να αξιολογήσει ή ίδια την επιχειρηματική της ιδέα, μέσα από έρευνα και αναζήτηση. Τα στάδια που ακολουθούνται είναι:

- Βασική έρευνα αγοράς: ανταγωνισμός, καινοτομία και ανταγωνιστικό πλεονέκτημα, κατανόηση της έννοιας της αγοράς, καταγραφή πιθανών πελατών (χαρακτηριστικά και ανάγκες), αναζήτηση προμηθευτών
- Οργάνωση της επιχείρησης: φιλοσοφία, αγορά στόχος, μείγμα μάρκετινγκ, επιλογή έδρας, επιλογή συνεργατών και τέλος στοχοθέτηση (μετρήσιμοι και ρεαλιστικοί στόχοι)
- Οικονομική οργάνωση της νέας επιχείρησης: προϋπολογισμός, επενδυτικό σχέδιο, χρηματοδότηση, προβλέψεις, οργάνωση της παρακολούθησης
- Πρακτικά ζητήματα (έναρξη δραστηριότητας, άδειες λειτουργίας, φορολογικές και ασφαλιστικές υποχρεώσεις, νομικά ζητήματα κ.α.) ανάλογα με τις ανάγκες, εμβόλιμα στα παραπάνω στάδια.

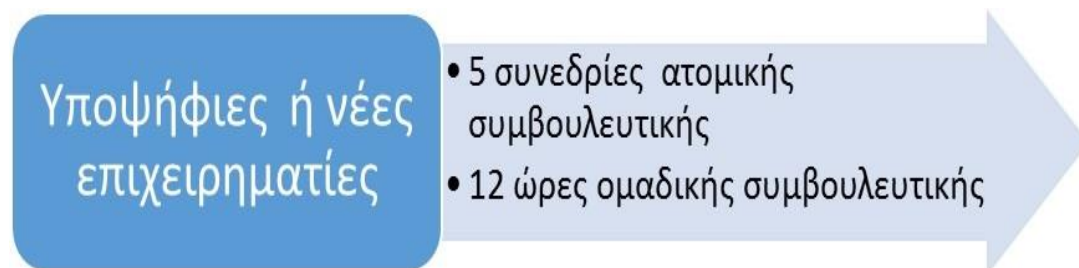
Η συμβουλευτική των δυνητικών, νέων ή καθιερωμένων επιχειρηματιών περιλαμβάνει ατομικές ή/και ομαδικές συναντήσεις με συμβούλους, κατά τις οποίες αναλύονται θέματα με συγκεκριμένη μεθοδολογία, με στόχο να μπορέσει η ωφελούμενη να ανταποκριθεί αυτόνομα και αποτελεσματικά στις επιχειρηματικές προκλήσεις. Οι ομαδικές συναντήσεις γίνονται σε μικρές ομοειδείς ομάδες, με θετικά αποτελέσματα, αφού δίνεται η δυνατότητα να αλληλοεπιδρούν τα μέλη της ομάδας μεταξύ τους και να αναπτύσσουν μεγαλύτερη ευχέρεια στην αφομοίωση γνώσεων και στην ανταλλαγή εμπειριών.

Λεπτομερής ανάλυση των πεδίων συμβουλευτικής και των υπηρεσιών αναλύονται στο προηγούμενο κεφάλαιο.

Επισημαίνεται ότι, το μοντέλο του Κέντρου είναι ευέλικτο και δυναμικό και προσαρμόζεται στις ανάγκες και τα ιδιαίτερα χαρακτηριστικά της κάθε μιας ωφελούμενης χωριστά. Αυτό πρακτικά σημαίνει ότι η ωφελούμενη δεν είναι υποχρεωμένη να ακολουθήσει όλα τα προαναφερόμενα βήματα, αλλά μπορεί να επικεντρωθεί στα θέματα, τα οποία η ίδια πρέπει ή θέλει να αναλύσει και να λύσει. Κατά μέσο όρο σε κάθε ωφελούμενη δυνητική ή νέα επιχειρηματία αντιστοιχούν

12 συνεδρίες ομαδικής συμβουλευτικής και 5 ώρες ατομικής συμβουλευτικής, ενώ στην περίπτωση των καθιερωμένων επιχειρηματιών ο μέσος όρος ανέρχεται σε 5-7 συνεδρίες.

Σχήμα: Κατανομή συνεδριών ανά ωφελούμενη της υπηρεσίας επιχειρηματικότητας, όταν πρόκειται για υποψήφια επιχειρηματία.

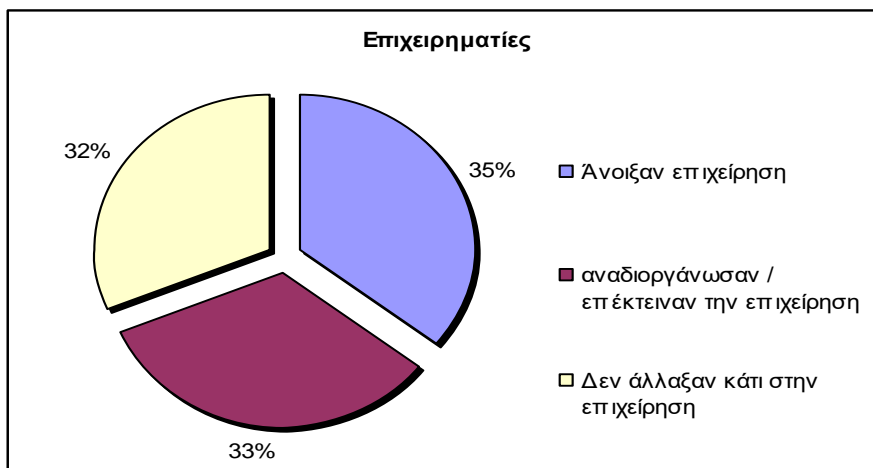


Από τα στοιχεία των δύο τελευταίων ετών προκύπτει σταθερό και σχετικά μικρό ποσοστό των ωφελούμενων (15% περίπου) που δεν ολοκληρώνει τη συμβουλευτική διαδικασία.

Αποτελέσματα της επιχειρηματικής συμβουλευτικής

Από την ανάλυση του διαγράμματος για τις γυναίκες που στο follow up καταγράφονται ως επιχειρηματίες, διαπιστώνεται ότι το 35% είναι νέες επιχειρηματίες, δηλαδή άνοιξαν επιχείρηση, είτε κατά τη διάρκεια, είτε μετά την ολοκλήρωση της συμβουλευτικής. Τα υπόλοιπα ποσοστά αφορούν τις υφιστάμενες επιχειρήσεις και ισοκατανέμονται. Το ποσοστό γυναικών που πραγματοποίησαν κάποιες αλλαγές στην επιχείρησή τους, μετά τη συνεργασία τους με το Κέντρο, είναι ίδιο με το ποσοστό των γυναικών που τελικά αποφάσισαν να μην αλλάξουν κάτι στην επιχείρησή τους.

Διάγραμμα: Αποτελέσματα follow-up, 2008-2012



ΒΙΒΛΙΟΓΡΑΦΙΑ

- Έκθεση αξιολόγησης του Κέντρου Εργάνη

2008-2009

- Έκθεση αξιολόγησης του Κέντρου Εργάνη 2010-2012
- Τριχοπούλου, Α. και Σουρμαΐδου, Π. (2012)., Προσεγγίσεις για την ανάπτυξη της γυναικείας επιχειρηματικότητας μέσω Εκπαίδευσης, Κατάρτισης και Συμβουλευτικής, κεφ. 17 στο βιβλίο των Κ. Σαρρή, Α. Τριχοπούλου. Γυναικεία επιχειρηματικότητα Προσέγγιση της Ελληνικής Πραγματικότητας, εκδ. Rosili.

- Swedish National Federation of Resource Centres for Women (2011). Women Resource Centres. A Quattro Helix Innovation System on the European Danilda, Lindberg & Britt-Marie Torstensson.

Ιστοσελίδες

- <http://winnet.europe.org>
- www.ergani.gr

ANNEX V

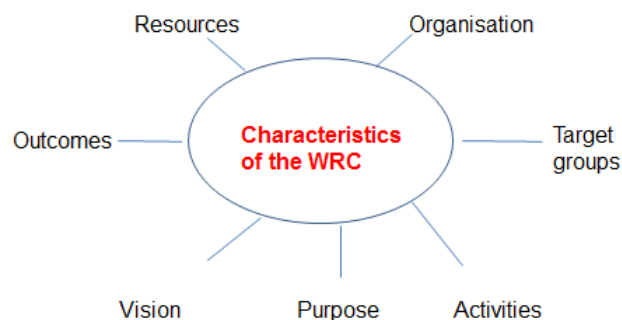
WP2.3 Mapping the implemented support model for female entrepreneurs of ERGANI Center (in Greek)

ΟΛΙΣΤΙΚΗ ΠΡΟΣΕΓΓΙΣΗ ΣΤΗ ΣΤΗΡΙΞΗ ΤΗΣ ΕΠΙΧΕΙΡΗΜΑΤΙΚΟΤΗΤΑΣ ΜΕ ΤΗΝ ΟΠΤΙΚΗ ΤΟΥ ΦΥΛΟΥ: Το μοντέλο του Κέντρου Εργάνη στην υποστήριξη Γυναικών Επιχειρηματιών

A. Εισαγωγή - Ιστορικό

Το Κέντρο στήριξης της απασχόλησης και της επιχειρηματικότητας γυναικών Εργάνη δημιουργήθηκε το 1991 με τη μορφή της κοινοπραξίας τεσσάρων (4) φορέων της Θεσσαλονίκης (Εθνικός Οργανισμός Πρόνοιας, Δήμος Συκεών, Αριστοτέλειο Πανεπιστήμιο Θεσσαλονίκης, Σύνδεσμος Βιομηχανιών Βόρειας Ελλάδας), με στόχο την αξιοποίηση της κοινοτικής πρωτοβουλίας NOW (νέες ευκαιρίες για γυναίκες). Μετά από μια συνεχή σειρά αντίστοιχων έργων (Κοινοτική Πρωτοβουλία Απασχόλησης, ECOs OUVERTURE κ.α), στα οποία συνέπραξαν και άλλοι φορείς (π.χ. Σύνδεσμος Εξαγωγέων Βόρειας Ελλάδας, ΚΕΚ ΣΕΒΕ ΣΒΒΕ ΔΕΘ, Ανατολική Α.Ε, Επαγγελματικό Επιμελητήριο Θεσσαλονίκης Γενική Γραμματεία Νέας Γενιάς Ιδιωτικές Επιχειρήσεις Γυναικών κ.α) που κάλυψαν 10 έτη αδιάλειπτης λειτουργίας, οι φορείς που μέχρι εκείνη τη στιγμή το συναποτελούσαν αποφάσισαν να συμπράξουν σε πιο μόνιμη βάση. Το 2001 συστάθηκε η ανεξάρτητη νομική προσωπικότητα του Κέντρου Εργάνη, αυτή της αστικής μη κερδοσκοπικής Εταιρίας. Οι φορείς που συνέστησαν τη νομική μορφή του Κέντρου Εργάνη ήταν έξι (6): Δήμος Συκεών, ΑΠΘ, Σύνδεσμος Εξαγωγέων Βόρειας Ελλάδας, ΚΕΚ ΣΕΒΕ- ΣΒΒΕ- ΔΕΘ, Ανατολική Α.Ε, Δίκτυο Γυναικών Εργάνη Το Εργάνη, πηγαίνοντας ένα βήμα μπροστά από τους φορείς που το δημιούργησαν και παρά την αποσπασματικότητα των προγραμμάτων χρηματοδότησης, κατάφερε να αντέξει στο χρόνο και να ξεπεράσει σήμερα τα 25 χρόνια παρουσίας, μέσα από μια διαρκή προσαρμογή στις συνθήκες και αλλάζοντας συνεχώς έτσι ώστε να μπορεί να ανταποκρίνεται στις σύγχρονες ανάγκες και στα αιτήματα των ωφελουμένων του. Στο παρόν κεφάλαιο επιχειρείται η παρουσίαση του μοντέλου του Κέντρου Εργάνη και η διεξαγωγή των σχετικών συμπερασμάτων.

Το Κέντρο Εργάνη σήμερα λειτουργεί με βάση το ευρωπαϊκό μοντέλο των Κέντρων Στήριξης Γυναικών (Women Resources Centers) που επικράτησε κυρίως στη Σουηδία.



Σχήμα: Τα χαρακτηριστικά ενός ΚΣΓ

Μια από τις καινοτομίες του Κέντρου, αφορά στο γεγονός ότι είναι η μοναδική δομή σε εθνικό επίπεδο που παρέμεινε και αναπτύχθηκε από τη στιγμή της ίδρυσής της, το 1991, μέσα από τα αποτελέσματα συγχρηματοδοτούμενων προγραμμάτων. Από της ιδρύσεώς του, υποστηρίζει τις γυναίκες επιχειρηματίες και υποψήφιες επιχειρηματίες με ένα συστηματικό τρόπο, χρησιμοποιώντας κατάλληλα εκπαιδευτικά εργαλεία και μεθοδολογικά εργαλεία συμβουλευτικής στην επιχειρηματικότητα των γυναικών.

Το Κέντρο Εργάνη αρχικά υλοποιούσε εκπαιδευτικά προγράμματα για γυναίκες που αναζητούσαν εργασία ή ήθελαν να ξεκινήσουν τη δική τους επιχείρηση, ενώ παρείχε συμβουλευτική υποστήριξη επαγγελματικής σταδιοδρομίας και επιχειρηματικότητας. Με την πάροδο των ετών, το Κέντρο Εργάνη ανέπτυξε και προσάρμοσε τις υπηρεσίες του, διεύρυνε τις ομάδες στόχου, δημιούργησε εκπαιδευτικά εργαλεία επαγγελματικής σταδιοδρομίας και ανάπτυξης της επιχειρηματικότητας των γυναικών, συμμετείχε σε δίκτυα περιφερειακά, εθνικά και διακρατικά μεταφέροντας την εμπειρία του και κερδίζοντας από την εμπειρία αντίστοιχων κέντρων στην Ευρώπη.

Η επιτυχής πορεία και τα αποτελέσματα των παρεχόμενων υπηρεσιών του Κέντρου Εργάνη, το μοντέλο οργάνωσης και λειτουργίας του και η εφαρμοζόμενη μεθοδολογία της συμβουλευτικής επιχειρηματικότητας γυναικών και δικτύωσης, συνιστούν το Κέντρο Εργάνη ως **μοντέλο ολιστικής στήριξης της επιχειρηματικότητας** των γυναικών. Το μοντέλο αυτό μπορεί να αξιοποιηθεί σε μελλοντικές παρεμβάσεις στους τομείς της επιχειρηματικότητας, της κοινωνικής οικονομίας και της απασχόλησης που θα εστιάζουν στη διάσταση του φύλου και θα συμβάλλουν στην αξιοποίηση των γυναικών στην αγορά εργασίας μέσω της επιχειρηματικότητας.

Όραμα και στόχοι

Το όραμα του Κέντρου Εργάνη είναι η ισότιμη ένταξη των γυναικών στο χώρο εργασίας, των επιχειρήσεων και της κοινωνικής επιχειρηματικότητας καθώς και η ένταξη του φύλου στις πολιτικές απασχόλησης και ενίσχυσης της επιχειρηματικότητας.

Οι στόχοι των δράσεων του είναι:

- Η κατανόηση του γεγονότος ότι οι γυναίκες έχουν αυξημένες ανάγκες και χρειάζονται υποστήριξη καθώς και η καταγραφή των εμποδίων, των ιδιαιτεροτήτων και των πραγματικών δεδομένων.
- Η διαμόρφωση ευνοϊκών συνθηκών που θα επιτρέψουν στις γυναίκες και τις υπόλοιπες ομάδες στόχου να αξιοποιήσουν τις ευκαιρίες που δικαιούνται στην εργασία, την οικογένεια, την κοινωνία και τη ζωή γενικότερα.
- Η πολύπλευρη υποστήριξη των γυναικών μέσα από δράσεις συμβουλευτικής, επιχειρηματικής εκπαίδευσης, μέντορινγκ και δικτύωσης.
- Η ευρύτερη συμβολή στην προώθηση της διάστασης του φύλου στον κόσμο της εργασίας και της επιχειρηματικότητας μέσα από έρευνες, εκπαιδευτικά εργαλεία και πρωτοβουλίες δικτύωσης σε περιφερειακό, εθνικό και ευρωπαϊκό επίπεδο.
- Η προώθηση της δικτύωσης, σε όλα τα επίπεδα, των ευπαθών ομάδων και των ομάδων που αντιμετωπίζουν εμπόδια στη δημιουργία μιας επιχείρησης. Το Εργάνη υποστηρίζει συνεργατικά εγχειρήματα και δίκτυα, ως απάντηση στην έλλειψη πηγών ή κεφαλαίου

B Ομάδες στόχου - Επιχειρηματίες

Οι υπηρεσίες που παρέχει καλύπτουν όλο το επαγγελματικό φάσμα των γυναικών και καταλήγει στην αναζήτηση εξαρτημένης εργασίας ή στη δημιουργία μιας μικρής ή κοινωνικής συνεταιριστικής επιχείρησης.

Το Κέντρο Εργάνη υποστηρίζει γυναίκες που θέλουν:

- Να ενταχθούν ή να επανενταχθούν στην αγορά εργασίας.
- Να βελτιώσουν την εργασιακή τους θέση.
- Να δημιουργήσουν ή να βελτιώσουν τη δική τους επιχείρηση.
- Να συνεταιριστούν ή να αναπτύξουν τον ήδη υπάρχοντα συνεταιρισμό τους.
- Να δημιουργήσουν ή να βελτιώσουν την κοινωνική τους επιχείρηση.
- Να εξοικειωθούν με τη σύγχρονη τεχνολογία και να την αξιοποιήσουν.

Η υποστήριξη γίνεται στις προσερχόμενες γυναίκες στην έδρα του Κέντρου Εργάνη στη Θεσσαλονίκη, στο παράρτημά του στην Κοζάνη ή σε γυναίκες άλλων περιοχών της χώρας, μέσω των αντενών του Εργάνη και των συμπράξεών του με τους τοπικούς φορείς. Μέρος των υπηρεσιών (μετά την διερεύνηση αναγκών και το πλάνο στήριξης) μπορεί να γίνει και από απόσταση με τη χρήση τηλεφωνικής επικοινωνίας και ιντερνετ (σύγχρονα ή ασύγχρονα).

Από τις Υπηρεσίες συμβουλευτικής του Κέντρου Εργάνη, κατά την περίοδο 2008-2015, ωφελήθηκαν συνολικά 1980 άτομα

Η τρίτη μεγαλύτερη ομάδα που προσέρχεται στο Κέντρο είναι οι υπάρχουσες επιχειρηματίες που, όπως φαίνεται και από τον πίνακα που ακολουθεί αποτελούν το 18,23% του συνόλου των εισερχομένων. Η κατάστασή τους μπορεί να είναι οποιαδήποτε και με την σειρά μεγέθους είναι: άνεργες, εργαζόμενες, επιχειρηματίες (που θέλουν να αλλάξουν δραστηριότητα) ή ακόμη και μικρός αριθμός δημοσίων υπαλλήλων και ακόμη μικρότερος συνταξιούχων.

Πίνακας: Αριθμός ωφελούμενων, 2008-2015

2008	2009	2010	2011	2012	2013	2014	2015	Σύνολο
221	336	189	111	221	267	347	288	1980

Πίνακας: Αριθμός ωφελούμενων - υπαρχουσών επιχειρηματιών -κοινωνικών επιχειρηματιών

2008	2009	2010	2011	2012	2013	2014	2015	Σύνολο
48	55	37	22	40	50	61	48	361

Πηγή: Βάση δεδομένων ωφελούμενων Κέντρου Εργάνη

Σημείωση: Τα άτομα στους πίνακες αυτούς, υπολογίζονται μόνο μία φορά, ανεξάρτητα εάν προσέρχονται περισσότερες φορές κατά τη διάρκεια του ίδιου έτους ή περισσότερων ετών.

Κατά την τελευταία τριετία, στη συμβουλευτική της επιχειρηματικότητας για τις κοινωνικές επιχειρήσεις συμμετείχαν και άνδρες (ποσοστό 14% των συμμετεχόντων), λόγω της μικτής

σύνθεσης, ως προς το φύλο, των κοινωνικών επιχειρήσεων και κάποιων ειδικών προγραμμάτων του Εργάνη που απευθύνονταν και στα δύο φύλα.

Το Εργάνη παραμένει το Κέντρο που παρέχει υπηρεσίες σε γυναίκες που εντάσσονται σε ευπαθείς κοινωνικά ομάδες. Σχεδόν το 50% των ωφελουμένων γυναικών του Εργάνη ανήκουν σε ειδική κοινωνική κατηγορία (μονογονεϊκές οικογένειες, άνεργες άνω των 45, γυναίκες της υπαίθρου με χαμηλά προσόντα, μετανάστριες και πρόσφυγες).

Γ. Υπηρεσίες και δραστηριότητες που αφορούν στις επιχειρηματίες

Η βασική υπηρεσία που παρέχεται στις υπάρχουσες επιχειρηματίες είναι αυτή της ατομικής συμβουλευτικής σε επιχειρηματικά θέματα, ενώ συμπληρωματικά παρέχεται νομική συμβουλευτική, ψυχοκοινωνική στήριξη και δικτύωση.

i. Ατομική συμβουλευτική:

Πρόκειται για ατομικά ραντεβού των γυναικών που αναζητούν στήριξη σε θέματα επιχειρηματικότητας, με τις εξειδικευμένες συμβούλους του Κέντρου. Στο πρώτο ραντεβού γίνεται η διερεύνηση των αναγκών κάθε επιχειρηματία, ώστε μέσα από τη συζήτηση και την ανάλυση των υπηρεσιών του Κέντρου να επιλεγούν οι υπηρεσίες που αρμόζουν στην κάθε περίπτωση. Η πρακτική αποδεικνύει ότι η συντριπτική πλειοψηφία των γυναικών που προσέρχονται στο Κέντρο επιλέγει άμεσα την συνέχιση της ατομικής συμβουλευτικής και προσανατολίζεται στις λοιπές υπηρεσίες επιχειρηματικότητας, ανάλογα με τις ανάγκες της.

Στην περίπτωση των επιχειρηματιών η συμβουλευτική κυρίως επικεντρώνεται είτε σε τομείς που οι ίδιες ή οι επιχειρήσεις τους δείχνουν να χωλαίνουν ή σε τομείς που θέλουν ανάπτυξη.

Οι τομείς που καλύπτονται από την ατομικής συμβουλευτικής είναι οι εξής:

- Γενικές κατευθύνσεις – Οργάνωση – Διοίκηση επιχείρησης
- Αυτογνωσία, Ψυχολογική Ενδυνάμωση, Διαχείριση Άγχους
- Αξιολόγηση επενδύσεων– Τιμολογιακή Πολιτική
- Νομική μορφή - Λογιστικά & Φοροτεχνικά Θέματα
- Θέματα Προώθησης - Προβολής – Διαφήμισης
- Χρηματοδότηση – Προγράμματα
- Νομικά Θέματα
- Εισαγωγή νέων τεχνολογιών
- Δικτύωση και προβολή στο Διαδίκτυο

Στόχος της ατομικής συμβουλευτικής είναι η παροχή πληροφόρησης και κατευθύνσεων στις γυναίκες επιχειρηματίες. Σε κάθε συνάντηση επιχειρείται σε βάθος ανάλυση των θεμάτων που ενδιαφέρουν τη γυναίκα, χωρίς να υποκαθιστούν οι σύμβουλοι τη δουλειά που θα πρέπει να γίνει από την ίδια την ενδιαφερόμενη.

Κάθε συνάντηση με σύμβουλο διαρκεί 40'-45' και καθορίζεται με τη βοήθεια της γραμματείας, εφόσον και όταν προκύπτει ανάγκη από την πλευρά της γυναίκας.

Τηλε-συμβουλευτική:

Η τηλε-συμβουλευτική, όπως και στην περίπτωση των υποψηφίων επιχειρηματιών, αποτελεί μια προέκταση της υπηρεσίας της ατομικής συμβουλευτικής. Δίνει τη δυνατότητα στις γυναίκες που

έχουν χρησιμοποιήσει ατομική συμβουλευτική και κατά συνέπεια γνωρίζουν τον τρόπο λειτουργίας της, να την χρησιμοποιήσουν από απόσταση. Κάτι τέτοιο προτείνεται σε ιδιαίτερες συνθήκες, διότι η συμβουλευτική από απόσταση δεν μπορεί στην πραγματικότητα να υποκαταστήσει τις προσωπικές συναντήσεις. Ενδεικτικά αναφέρεται ότι η τηλε-συμβουλευτική ενδείκνυται να χρησιμοποιηθεί στις περιπτώσεις που η ενδιαφερόμενη θέλει να χρησιμοποιήσει τη συμβουλευτική αλλά:

- δεν μένει στη Θεσσαλονίκη,
- δεν έχει ευχέρεια χρόνου (λόγω εργασίας, παιδιών, κλπ.),
- έχει ήδη κάνει ατομική συμβουλευτική και χρειάζεται εξειδικευμένη στήριξη σε κάποιο συγκεκριμένο θέμα.

Κατάστρωση συνολικού Επιχειρηματικού Σχεδίου (business plan) η επιμέρους βημάτων:

Με βάση τη μακροχρόνια εμπειρία του Κέντρου Εργάνη στην υποστήριξη των γυναικών, που ενώ έχουν επιχείρηση αγνοούν το τι θα πει επιχειρηματικό σχέδιο, ή θέλουν να αναπτύξουν ένα νέο προϊόν ή τμήμα της επιχείρησής τους, κρίνεται απαραίτητο κάποιες φορές για έναν αριθμό επιχειρηματιών να μπου στη διαδικασία να καταστρώσουν το επιχειρηματικό σχέδιο (business plan) που θα τους επιτρέψει να αναπτύξουν τη επιχείρησή τους, ή να βελτιώσουν διαδικασίες και τμήματά αυτής. Η βάση της υπηρεσίας αυτής είναι ένα εξειδικευμένο εκπαιδευτικό υλικό, ένα σύστημα αυτοεκπαίδευσης, που επιτρέπει στην ενδιαφερόμενη να προχωρήσει βήμα προς βήμα στη διαδικασία δημιουργίας και οργάνωσης μίας επιχείρησης και σύνταξης ενός επιχειρηματικού σχεδίου, χωρίς να απαιτεί εξειδικευμένες γνώσεις. Είναι παρόμοιο με αυτό για τις υποψήφιες επιχειρηματίες αλλά προσαρμοσμένο σχετικά.

Το εκπαιδευτικό υλικό υπάρχει σε έντυπη και ηλεκτρονική μορφή και αποτελείται από δύο μέρη: το θεωρητικό μέρος που είναι χωρισμένο σε κεφάλαια - βήματα για τη δημιουργία της επιχείρησης και το πρακτικό μέρος που περιέχει φύλλα εργασίας (πρακτικής) για κάθε κεφάλαιο.

Η ομάδα πραγματοποιεί δύο συναντήσεις την εβδομάδα σε απογευματινές ώρες, για χρονικό διάστημα 4-6 εβδομάδων. Κάθε βήμα - κεφάλαιο παρουσιάζεται από εξειδικευμένο στο θέμα εισηγητή. Ανάλογα με την έκταση της ενότητας η παρουσίαση γίνεται σε μία ή περισσότερες συναντήσεις παρουσίασης του θεωρητικού μέρους και αντίστοιχες συναντήσεις επεξεργασίας των φύλλων εργασίας. Η συνάντηση για την επεξεργασία των φύλλων εργασίας προϋποθέτει ότι οι συμμετέχουσες έχουν ήδη επεξεργαστεί μία σειρά ασκήσεων, με στόχο την εφαρμογή της θεωρίας στα δεδομένα της επιχείρησης που προσπαθεί να δημιουργήσει η κάθε μία. Αυτό έχει ως αποτέλεσμα την παρουσίαση διαφορετικών τρόπων αντιμετώπισης και τον εντοπισμό των καλύτερων πρακτικών, που τελικά γίνεται μέσα από τη συζήτηση από τις ίδιες τις επωφελούμενες, με την καθοδήγηση του εισηγητή.

Σημείωση: στις υπάρχουσες επιχειρηματίες δίνεται η δυνατότητα να επιλέξουν μαζί με τη σύμβουλό τους να παρακολουθήσουν τμήμα της εκπαίδευσης και όχι το σύνολο.

Δ. Επίλογος: Ένα ολιστικό μοντέλο υποστήριξης των επιχειρηματιών γυναικών

Οι υπηρεσίες που παρέχονται στις επιχειρηματίες γυναίκες αφορούν τις επιχειρηματίες σε όλα τα στάδια ανάπτυξης της επιχείρησης – υποψήφιες, νέες και καθιερωμένες επιχειρηματίες και όλες τις μορφές ανάπτυξης της επιχειρηματικότητας – συμβατική, συνεταιριστική, κοινωνική. Σε συντριπτικό ποσοστό οι υπηρεσίες είναι συμβουλευτικές και εξατομικευμένες και βασίζονται

στην κινητοποίηση των ίδιων των ωφελουμένων, ώστε να κατανοήσουν και να σχεδιάσουν ένα επαγγελματικό/επιχειρηματικό πλάνο, να θέσουν τις δικές τους προτεραιότητες και στόχους, να διεκδικήσουν την επίτευξη των αποφάσεων τους.

Επίκεντρο των παρεχόμενων συμβουλευτικών υπηρεσιών είναι η προσωπική ανάπτυξη των ωφελουμένων μέσα από την απόκτηση γνώσεων και δεξιοτήτων αλλά και η ψυχολογική στήριξη και ενημέρωση που είναι απαραίτητα ώστε να επιτύχουν τους στόχους τους. Η συμβουλευτική στην επιχειρηματικότητα αφορά στην ανάπτυξη των δεξιοτήτων και γνώσεων της υποψήφιας, νέας ή καθιερωμένης επιχειρηματία ώστε να είναι σε θέση να καταστρώσει και να υλοποιήσει ένα επιχειρηματικό σχέδιο, σε αντίθεση με τους συμβούλους επιχειρήσεων που σχεδιάζουν ένα 'αποτελεσματικό' επιχειρηματικό σχέδιο και αφήνουν τους επιχειρηματίες να το υλοποιήσουν. Οι δύο κεντρικοί άξονες του μοντέλου του Κέντρου Εργάνη είναι η ενδυνάμωση και η ολιστική προσέγγιση (Πίνακας).

ΠΙΝΑΚΑΣ: Οι κεντρικοί άξονες του μοντέλου

Ενδυνάμωση	Ολιστική προσέγγιση
Η ενίσχυση της αυτοεκτίμησης των γυναικών ώστε να μπορέσουν να αναλάβουν την ευθύνη της προσωπικής, επαγγελματικής και οικογενειακής τους ζωής και να πάρουν οι ίδιες τις καλύτερες αποφάσεις για το μέλλον τους.	Η ολιστική προσέγγιση είναι η συμβουλευτική που αντιμετωπίζει τη γυναίκα ως ολότητα και λαμβάνει υπόψη όλους τους ρόλους που αυτή έχει αναλάβει , καθώς αυτοί εμπλέκονται και συχνά συγκρούονται στην επαγγελματική της σταδιοδρομία.

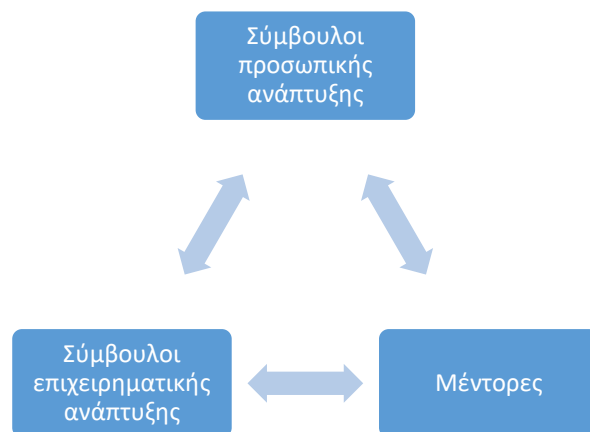
Τα βασικά χαρακτηριστικά του μοντέλου, στο οποίο βασίζονται οι υπηρεσίες του Κέντρου Εργάνη καταγράφονται στον Πίνακα 20.3.

Πίνακας: Τα χαρακτηριστικά του μοντέλου των υπηρεσιών του Εργάνη

1	βιωματική προσέγγιση
2	γνώση μέσα από την εμπειρία
3	αναγνώριση και αξιοποίηση προϋπάρχουσας γνώσης και εμπειρίας που δεν προέρχεται μέσα από τα επίσημα εκπαιδευτικά κανάλια
4	γνωριμία με τον εαυτό, κατανόηση θετικών και αρνητικών στοιχείων
5	είσοδο στον κόσμο της δια βίου μάθησης μέσα από την κατανόηση ελλείψεων στις απαραίτητες γνώσεις ή στη βελτίωση δεξιοτήτων απαραίτητων για να στηθεί και να λειτουργήσει επιτυχημένα μια επιχείρηση

Οι υπηρεσίες υποστήριξης των γυναικών επιχειρηματιών αλληλοσυμπληρώνονται. Εκτός από την ατομική συμβουλευτική επιχειρηματικότητας (Σχήμα 20-4), που είναι ο κύριος κορμός, παρέχεται ευέλικτη και εντατική κατάρτιση στην αξιολόγηση της επιχειρηματικής ιδέας και στη δημιουργία επιχειρηματικού σχεδίου, υπηρεσία αναδοχής από μέντορα (mentoring), εκπαίδευση ομοτίμων, εκπαιδευτικά προγράμματα και δικτύωση με φορείς και άλλες επιχειρηματίες.

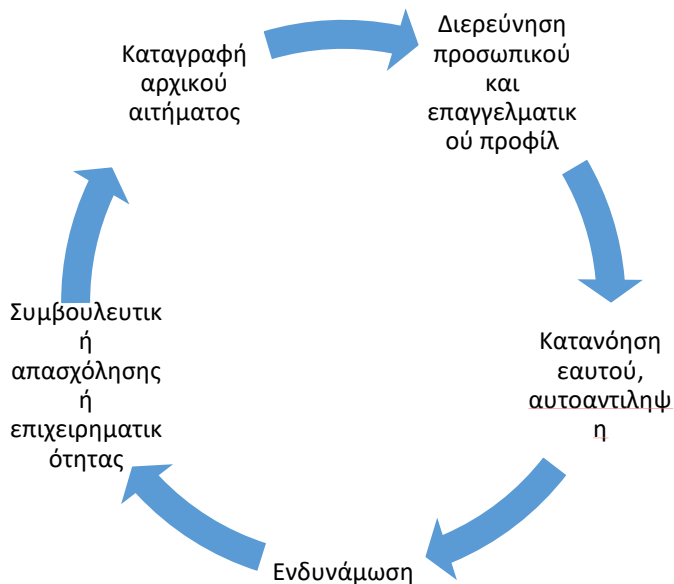
Σχήμα: Ατομική επιχειρηματική συμβουλευτική



Β. Τα βήματα συμβουλευτικής επιχειρηματικότητας στο Κέντρο Εργάνη

Για όλες τις ωφελούμενες του Κέντρου, ανεξάρτητα αν στοχεύουν στην απασχόληση ή την επιχειρηματικότητα, η αρχική επαφή με το Κέντρο αλλά και τα πρώτα βήματα στη συμβουλευτική είναι κοινά (Σχήμα 20-5).

Σχήμα: Τα βήματα ατομικής συμβουλευτικής



Τα τέσσερα πρώτα βήματα της συμβουλευτικής διαδικασίας

Πρώτο βήμα: ενημέρωση για τις υπηρεσίες του Κέντρου και καταγραφή του αρχικού αιτήματος.

Δεύτερο βήμα: διερεύνηση του προσωπικού και επαγγελματικού προφίλ και αναλυτική καταγραφή όλων των πιθανών αιτημάτων που πολλές φορές διαφοροποιούνται από το αρχικό.

Τρίτο βήμα: καταγραφή δεξιοτήτων και απαραίτητων επαγγελματικών χαρακτηριστικών, η κατανόηση του εαυτού, των δυνατών και αδύνατων σημείων, των αξιών και των κινήτρων αλλά και των γνώσεων, εμπειριών ή εμποδίων που υπάρχουν και σχετίζονται με την επιθυμητή επιχειρηματική δραστηριότητα (αυτογνωσία). Στόχος είναι η κατανόηση της ύπαρξης σημείων προς βελτίωση, προβλημάτων που χρειάζονται λύση, εμποδίων που πρέπει να ξεπεραστούν, δυνατοτήτων, γνώσεων ή εμπειριών που πρέπει να αξιοποιηθούν.

Τέταρτο βήμα: Σε πλείστες περιπτώσεις, το αμέσως επόμενο βήμα είναι η εμφύχωση και η ενδυνάμωση. Το βήμα αυτό είναι απαραίτητο για όσες γυναίκες αντιμετωπίζουν χαμηλή αυτοεκτίμηση, έχουν σοβαρά εμπόδια στην προσωπική τους ζωή ή αντιμετωπίζουν οποιουδήποτε λόγους κοινωνικού αποκλεισμού, καταστάσεις που αφορούν συχνά μεγάλο αριθμό από τις ωφελούμενες του Κέντρου Εργάνη. Στο στάδιο αυτό η κάθε ωφελούμενη είναι σε θέση να αποφασίσει αν μπορεί και αν θέλει να κάνει το βήμα προς τη δημιουργία μιας επιχείρησης οπότε και η συμβουλευτική επικεντρώνεται στην επιχειρηματική ιδέα της ωφελούμενης και στην αξιολόγησή της.

Πέμπτο βήμα: Η επιχειρηματική συμβουλευτική

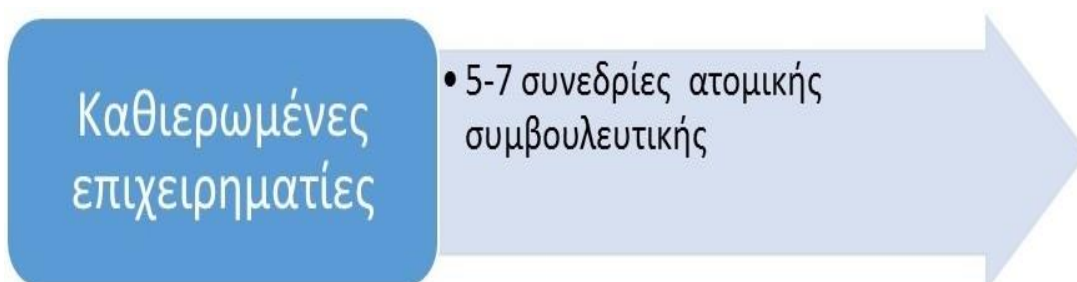
Στην περίπτωση των καθιερωμένων επιχειρηματιών προσφέρεται στήριξη ώστε:

- Να κάνουν συμβουλευτική με ειδικούς σε θέματα αιχμής για επιχειρηματίες (ενδεικτικά αναφέρονται: διαφήμιση, κοστολόγηση, ανάπτυξη πελατολογίου)
- Να εντοπίσουν και να επιλύσουν τυχόν προβλήματα στην οργάνωση και τη διοίκηση της επιχείρησης
- Να δρομολογήσουν σχέδια ανάπτυξης της επιχείρησης
- Να ενημερωθούν για δυνατότητες χρηματοδότησης

Λεπτομέρειες για τα πεδία της συμβουλευτικής αναλύθηκαν παραπάνω.

Επισημαίνεται ότι, το μοντέλο του Κέντρου είναι ευέλικτο και δυναμικό και προσαρμόζεται στις ανάγκες και τα ιδιαίτερα χαρακτηριστικά της κάθε μιας ωφελούμενης χωριστά. Αυτό πρακτικά σημαίνει ότι η ωφελούμενη δεν είναι υποχρεωμένη να ακολουθήσει όλα τα προαναφερόμενα βήματα αλλά μπορεί να επικεντρωθεί στα θέματα, τα οποία η ίδια πρέπει ή θέλει να αναλύσει και να λύσει. Κατά μέσο όρο σε κάθε ωφελούμενη δυνητική ή νέα επιχειρηματία αντιστοιχούν 12 συνεδρίες ομαδικής συμβουλευτικής και 5 ώρες ατομικής συμβουλευτικής, ενώ στην περίπτωση των καθιερωμένων επιχειρηματιών ο μέσος όρος ανέρχεται σε 5-7 συνεδρίες.

Σχήμα: Κατανομή συνεδριών ανά ωφελούμενη της υπηρεσίας επιχειρηματικότητας, όταν πρόκειται για επιχειρηματία.



Από τα στοιχεία των δύο τελευταίων ετών προκύπτει σταθερό και σχετικά μικρό ποσοστό των ωφελούμενων (15% περίπου) που δεν ολοκληρώνει τη συμβουλευτική διαδικασία.

ΒΙΒΛΙΟΓΡΑΦΙΑ

- Έκθεση αξιολόγησης του Κέντρου Εργάνη 2008-2009
- Έκθεση αξιολόγησης του Κέντρου Εργάνη 2010-2012
- Τριχοπούλου,Α. και Σουρμαΐδου,Π. (2012)., Προσεγγίσεις για την ανάπτυξη της γυναικείας επιχειρηματικότητας μέσω Εκπαίδευσης, Κατάρτισης και Συμβουλευτικής, κεφ. 17 στο βιβλίο των Κ. Σαρρή, Α. Τριχοπούλου. Γυναικεία επιχειρηματικότητα Προσέγγιση της Ελληνικής Πραγματικότητας, εκδ. Rosili.
- Swedish National Federation of Resource Centres for Women (2011). Women Resource Centres. A Quattro Helix Innovation System on the European Danilda, Lindberg & Britt-Marie Torstensson.

Ιστοσελίδες

- <http://winnet.europe.org>
- www.ergani.gr