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Transforming European Women's Entrepreneurship: The Education and Training for Success Programme

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Abstract

The women entrepreneurs projects' main objective is to get a better understanding of the fundamental entrepreneurial competences of early stage women entrepreneurs and to increase their performance by developing an education and training programme. We assume entrepreneurial competences are influenced by the entrepreneurs' identity. If the entrepreneurial identity is highly centralized and complex, the capability to perform as a successful entrepreneur increases. Such abilities supporting the entrepreneurial performance, as goal setting or risk taking, are matching main entrepreneurial competences. In the first reporting period a research model showing the relation between entrepreneurial identity, competences and entrepreneurial success was designed. Finally the further steps to be undertaken in the next three months are pointed out.

Technical Report – Work package 2

Identification and Assessment of Fundamental Entrepreneurial Competences and Development of a Competence Matrix and Policy Goals

The main objective of this work package is to develop a model of the fundamental competences of early-stage women entrepreneurs in Germany and Ireland, including individual and the environmental factors affecting the entrepreneurial success. In the first three months of the project the actions of the following tasks took place. In cooperation with Universidad del Desarrollo, UDD, secondments from 3s (1,25 person-months) and FSU (4 person-months) were involved for this period.

1 Work Progress

1.1 Task 2.1: Contextualize entrepreneurial success of early stage women and education for Europe, Germany and Ireland

In Germany, the total early stage female entrepreneurial activity had a little increase since 2012 to 2014. However, still the total early-stage entrepreneurial activity (TEA) of women is below the male activity. Last year, 3.97% of the female population between 18-64 years claimed to be an entrepreneur in early stage¹.

Since 2009 to 2014 there were sampled 558 women involved in TEA. The average age of these women is 39.6 years. Only the 25.2% claimed to be involved in necessity-driven early stage entrepreneurial activity and 69.5% claimed to have an opportunity driven motive. If we look inside the opportunity type 62.3% did it for greater independence, 19% to increase personal income and 12.1% just to maintain the income.

20.9% of these women have a lower secondary or second stage of basic education, 36.5% have an upper secondary education, 25.7% have a post-secondary non-tertiary education and 16.3% have a first stage of tertiary education.

¹ The data are taken from the Global Entrepreneurship Monitor (GEM) database.

59.4% is consumer oriented, 26.7% business services oriented and only 12.1% is oriented to the transforming sector. 45.3% expect to create 1-5 jobs in the next five years, while 9.6% expect to create 6-19 positions and 9.1% expect to create more than 20 jobs in the same horizon of time. As income levels 34% declares lowest 33% tile and 28.6% middle 33% tile. 34.1% declare themselves as self-employed, 8% declare to be not working, 5.3% are students, 4.9% homemaker, 20.7% declare to work part time only and finally 24% declare to be in a job full or part time.

In relation to their perceptions 55.9% of early-stage women entrepreneurs declare to know someone personally who started a business in the past two years, 50.3% believe that in the next six months there will be good opportunities for starting a business in the area where they live. 78.7% answer to have the knowledge, skills and experience required to start a new business and only a 23.2% says felt fear of failure would prevent them from starting a business.

In addition to that 47.5% women entrepreneurs in early-stage believe that in Germany most people consider starting a new business is a desirable career choice. 73.2% think that people being successful in starting a new business have a high level of status and respect.

In the case of Ireland the TEA rate of women is also lower compared to male TEA rate. In 2014 only 4.23% of the population between 18-64 years declared to be a woman involved in entrepreneurial activity in early-stages. From 2009 to 2014 there were 226 women involved in early-stage entrepreneurship, 26.9% were necessity driven and 68.7% declare to be involved in opportunity-driven early-stage entrepreneurial activity. 40.6% of early-stage women entrepreneurs started a business to increase independence, 27.5% to increase their personal income and 26.4% just to maintain the income.

The average age of these women is 37.3 years and 53.1% declare to be self-employed, also 19.2% say that they are in a full/ part time job, 14.1% part time only, 0.5% retired, disabled, 4.2% student, a 3.4% homemaker and 4.4% not working or other.

Regarding the educational level of these women only 0.4% have a primary education or first stage of basic education, 3.2% lower secondary, 17.2% upper secondary education, 29.5% a post-secondary education, non-tertiary education and 48.1% have first stage of tertiary education.

The economic sector where these women get involved is 56.3% customer oriented and only a 22.6% business services.

48.5% expect to hire between 1-5 persons in the next five years, 17.6% expect to create 6-19 jobs and 9.5% expect to offer more than 20 jobs positions in the

next five years. Also only 14.6% of customers believe that the product they offer is new to the market.

About their perceptions 57.2% of early-stage women entrepreneurs declare to know someone personally who started a business in the past two years, 45.2% believe that in the next six months there will be good opportunities for starting a business in the area where they live, 81.2% declare to have the knowledge, skills and experience required to start a new business and only 29.4% say felt fear of failure would prevent them from starting a business. In Ireland, 61.2% believe that they often see stories in the public media about successful new business.

1.2 Task 2.2: Develop the theoretical framework of the fundamental competences and the entrepreneurial success of women entrepreneurs in Germany and Ireland and operationalize the constructs

The objective of the first phase in the project is to identify and assess fundamental competences of early stage women entrepreneurs for a successful performance entrepreneurship.

As described above the participation of women from Germany and Ireland in early stage entrepreneurial activity of the last year is only about 4%, although about 80% of the women in Ireland and Germany declare to have the skills and the experience required to start a new business. Also the perception of entrepreneurship is very positive: Approximately half of the women in Germany and Ireland believe there are good opportunities to start a business in the area they are living.

Comparing the low rates of TEA and the perceptions of the respondents, it is very likely, that there are several other factors, next to the perceived capability and opportunity, influencing the women's TEA in Germany and Ireland.

Environmental factors

Of course, the TEA as well as the entrepreneurial success can be influenced by environmental factors. The geographical location might be a significant factor, as the location can provide access to valuable, knowledge contacts and resources. Due to agglomeration effects (determining founding activities), urbanized areas might be more feasible for founding activities (Bosma, 2008).

Also the business sectors, as well as the regional development are determining entrepreneurial activities. Furthermore, cultural influences are important factors for TEA and entrepreneurial performance (Singer et al., 2015).

Personal factors

The objective of this project is to develop a learning model for early stage women entrepreneurs. As the environmental factors can hardly be influenced, the theoretical framework of the research design focuses on individual factors (Kwon & Arenius, 2010). The psychological constructs of meaning making, identity centrality and identity complexity will be measured and assessed in the context of entrepreneurship.

Meaning making

Meaning Making describes the way in which individuals make sense of themselves, others and the world. In dependency on the development of the meaning making capacity, the understanding of a person's self and world is more differentiated and marked by different degrees of complexity (Hy & Loevinger, 1996). Regarding the entrepreneurial success it is assumed, that the level of meaning development (ego development) can also influence the performance of entrepreneurs.

Identity centrality and complexity

It can be theoretically shown that entrepreneurial identity centrality and complexity influence the entrepreneurial success by enhancing different skills, which are needed to perform as an entrepreneur.

In the concept of identity centrality, entrepreneurial identities are "cognitive schemas of interpretations and behavioral prescriptions, that allow individuals to understand what it means to be an entrepreneur" (Murnieks et al, 2014). With a high centrality the individuals internalize and centralize the role of being an entrepreneur. They are strongly attached to their role as a founder, which increases the motivation to realize challenging entrepreneurial activities (Hoang & Gimeno, 2010). Murnieks et al. (2014) also declare a need to feel competent, which can be satisfied by a centralized role. In interaction with their environment the individuals confirm behaviors and perceptions about themselves, motivated by their entrepreneurial identity. Hence, it is assumed that general aspects of entrepreneurial behavior, like competences, are supported by a highly centralized entrepreneurial identity.

Next to this in the concept of identity centrality, the different internalized roles are observed by focusing their diversity. A founder's identity might be broad in scope, related to other roles and defined by a specific content (Hoang &

Gimeno, 2010). The identity complexity of an entrepreneur could be defined by only few homogenous and redundant dimensions (low complexity), or by many different dimensions (high complexity). Individuals with a high complexity of their self-concept can deal better with uncertainties and negative predictions concerning the likelihood of success or failure in their profession. Due to this the assumption was made, that high complexity regarding the entrepreneurial identity also has positive influence on entrepreneurial skills.

Model

Based on this, a model was designed to show the relation between the dimensions of Identity, Competence and Performance (see Figure 1) and to describe these coherences in order to develop a learning solution based on different levels of Identity centrality and complexity and the explored competency needs.

The positive influence of managerial skills on entrepreneurial success is mediated by entrepreneurial skills, which are defined by an entrepreneurial orientation, including the dimensions of risk taking, innovation and proactiveness, as well as further soft skills like persistence, self confidence and opportunity seeking. Without the mediation by the entrepreneurial skills it is likely that an individual is a high performer, but not on an entrepreneurial level. Further the model includes the assumption that these entrepreneurial skills are influenced in a positive manner by high levels of entrepreneurial identity centrality and complexity.

The Identity centrality can be measured with a four-item scale, used and validated by Murnieks et al. (2014). The used scale, based on Callero's (1985) five-item scale, was modified to measure entrepreneurial identity. Respondents are asked about their level of agreement on four distinctive statements concerning their entrepreneurial Identity by using a five-point likert scale.

The assortment of the variables and the methods of measurement regarding the latent constructs of managerial and entrepreneurial skills, as well as entrepreneurial performance are described in section 1.3 and 1.4.

The measurement of identity complexity is not defined by now. As identity complexity is measured by a card-sorting task, there are problems to survey the data with the given resources and to integrate the findings in the SEM. Further thoughts to the measurement of the identity complexity can be found in section 2.

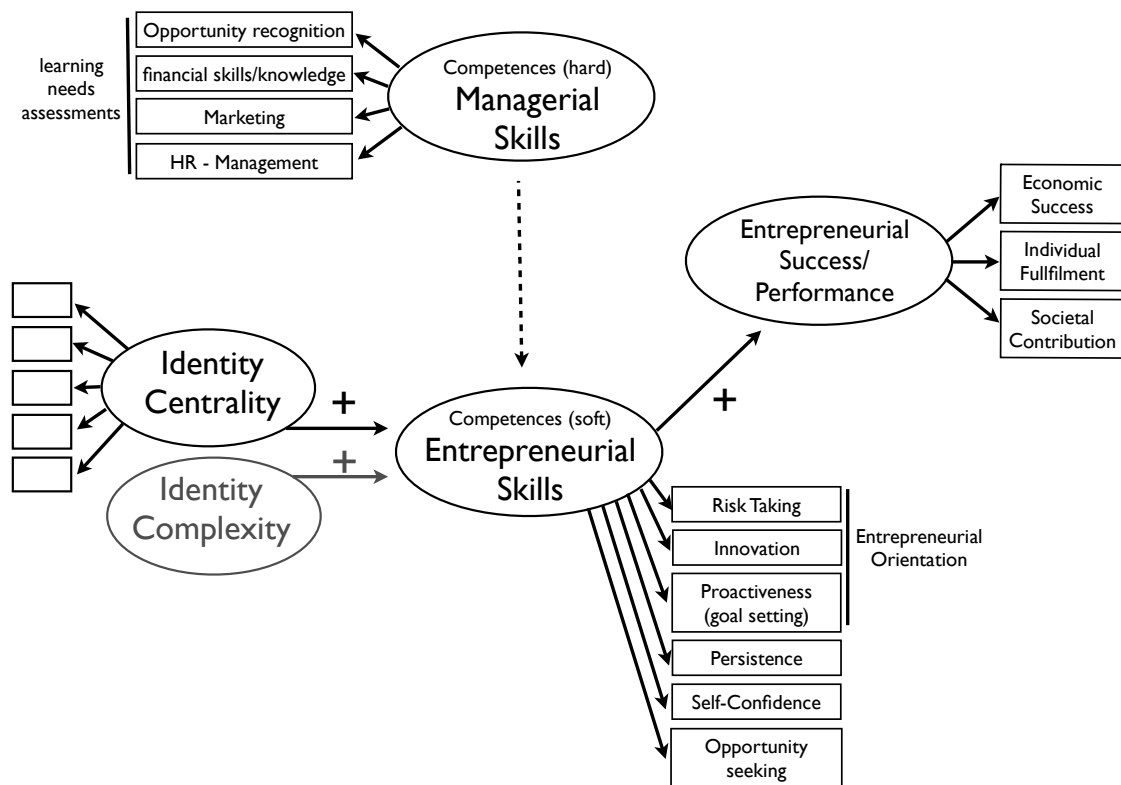


Figure 1: Developed model for entrepreneurial performance

As described above there are several other influences on the competences and the performance. Due to this the latent variables „Managerial skills“ and „Entrepreneurial skills“ will be controlled by variables on an individual and environmental level in order to examine the relation between entrepreneurial identity and competences as exact as possible.

The controlling factors are as follows:

- Individual factors
 - o Sociodemographic data
 - Age
 - Education
 - Social position
 - o Personal factors
 - Work experience
 - Individual entrepreneurship - motives
- Environmental Factors
 - o Location – urban areas
 - o Sector
 - o Regional economic Development
 - o Cultural Dimension (uncertainty avoidance)

To measure the regional economic development the primary data will be combined with secondary data from the Global Entrepreneurship Monitor. The sector will be ascertained with the international standard industrial classification. The cultural dimension will be measured with the Uncertainty Avoidance Practices scores from the GLOBE study (House et al., 2004). The individual levels of the perception what the culture is like, will be aggregated to the country level.

The meaning making - which is supposed to deliver findings for the education unit with the goal to further mental complexity - is not meant to be transformed into a likert scale and can't be included in the SEM. Also the findings of the survey are going to be used for the development of an educational programme. Due to this an inductive approach as well as a deductive modeling are integrated to get a broader understanding.

Hence, the different stages of ego development could be used as groups to be compared. With an Anova analysis next to other statistical operations we can identify differences in the performance and in the competence scores across the different stages of ego development.

Also multiple regressions to identify differences in the influence of competences on the entrepreneurial performance could be used in an inductive approach to get a more detailed insight on the coherences between hard managerial and soft entrepreneurial skills.

Besides, interviews – especially with regard to the planned edutainment approach – will be a good supplement to examine factors of entrepreneurial success as well as failure in depth.

In the following sections the construct of success, the competences and their measuring are described more in detail.

1.3 Task 2.3: Select the research methods including pre-tests for testing the model of entrepreneurial success

In order to study the characteristics of successful women entrepreneurs the sample will include established women entrepreneurs and women in their early stage.

To assess the performance or success of an entrepreneur it has to be defined which factors describe the construct of success. Some authors consider the measurement of economic performance for example, in terms of sales or

benefits to be insufficient (Ahl, 2006). They take into account that the reasons for creating the company can be of a nature other than economic.

Therefore, they suggest that in order to measure performance, other variables – not necessarily economic ones – need to be considered. The inference is that perhaps greater economic benefits are not the main goal for female entrepreneurs, but rather one of many goals (Morris et al., 2006). Some studies have suggested that women entrepreneurs show a preference for social goals while men entrepreneurs prefer for economic goals (Valencia et al., 2014)

A company's performance is related to perceptions and motivations of the entrepreneur. Unger and Crawford (1992) mention that women perceive success in a different way and consequently they orient themselves towards qualitative and social criteria.

According to the vision of the project to increase the number of fulfilled women entrepreneurs not only the economic values are defining the performance of an entrepreneur (Valencia et al., 2014). In this survey three dimensions define the performance:

- An economic dimension
- A dimension of individual fulfillment
- A societal dimension

Next to financial achievements there will be items asking for the personal work-life-balance and fulfilment as well as for contributions to the society.

1.4 Task 2.4: Select the methods for analyzing the competency needs including pre-tests

In order to choose the measurement methods for the competency needs analyses, a literature review on entrepreneurial competences was conducted. The possibilities of measurement and the definition of the different competences being associated to entrepreneurship were matched against the theoretical assumptions, which skills are related to and can be increased by an entrepreneurial identity.

As pointed out above it is theoretically shown that a high level of entrepreneurial identity centrality and complexity increases the capability to perform better in the context of entrepreneurship.

With highly centralized and complex entrepreneurial identities the motivation to set up a new business and to focus on this goal at the expense of other alternatives increases. Individuals might be more self-confident and persistent against negative feedback on their schemes. Also being more committed to their role as a founder the likelihood to avoid risky actions after negative outcomes might be lower (Hoang & Gimeno, 2010) compared to persons being less committed.

The measurement instrument found in the literature review, including these assumptions is the Personal Entrepreneurship Competence self-rating questionnaire (PEC). The PEC questionnaire was developed by the UP Institute of Small-Scale Industries (UP-ISSI) and adapted from the Management Systems International (MSI) and McBer. This questionnaire is used in the EMPRETEC training programme in order to identify competency needs.

The advantages of a high entrepreneurial identity centrality and its influence on performance are related to the following Competences also named in the PEC:

- Opportunity seeking
- Persistence
- Risk Taking
- Goal Setting
- Self-Confidence

As the questionnaire isn't validated by factor analyses with a sample of a size with a minimum of 200 respondents, it is proposed to measure these competences with other validated variables. To cover the selected competences the entrepreneurial orientation including the dimensions of innovativeness, proactiveness (comparable to goal setting) and risk taking will be measured (Engelen et al., 2015) next to single validated variables concerning persistence, self-confidence and opportunity seeking.

As these competences are only covering "soft" skills it is proposed to integrate learning needs assessments to identify the capabilities of the women entrepreneurs regarding their managerial skills. To avoid the typical bias in surveys examining competency needs by using self-rating questionnaires, it is planned to create assessments to be solved in order to measure the real knowledge instead of measuring the respondent's perceptions of skills. As mentioned before the GEM data shows the perception to have the skills to start a business, is declared by many women in Ireland and Germany. While it is not possible to measure soft skills without self-assessments (by using a questionnaire), the managerial skills can be scaled on the base of tasks to be solved. According to the needs in entrepreneurship the tasks will be in the fields of:

- Opportunity Recognition
- Financial Skills/Knowledge

- Marketing
- Human Resource Management

2 Further Steps

The further steps to be taken are concerning the learning needs assessments to measure the real existing managerial skills, the measurement of identity complexity, the design of the questionnaire and finally the recruitment of the sample.

Learning needs assessments

For the learning needs assessments the tasks will be chosen and tested with a group of students at UDD.

Measurement of Identity complexity

As identity complexity is measured by a card-sorting task that is difficult to realize within the online survey, problems to integrate the construct in the research model came up. Furthermore it is a challenge to extend the model of identity complexity to the entrepreneurial context (Hoang & Gimeno, 2010).

Regarding the possibilities and resources of our project a decision has to be made either on how to conduct this card-sorting task within the online-survey or to accept more crude measurements to integrate the construct of identity complexity in our model or maybe to focus on the construct of identity centrality in the structural equation model.

Design of the questionnaire

When the final decisions about the learning needs assessments and the measurement of identity complexity are taken, the questionnaire has to be designed. The software to create the questionnaire and to realize the online survey has to be selected. Further a short and attractive phrasing to invite the respondents to take part in the blended-learning programme or to be the control group has to be framed and included.

Recruitment of the sample

The sample of the first survey, in which the individual and the environmental factors affecting the entrepreneurial success and the needs of competences are analyzed, should consist of women entrepreneurs in the early stage as well as established women entrepreneurs. To recruit the sample we have gained Enterprise Ireland as an associated partner in our network. As the number of female early stage entrepreneurs with more than ten employees is very low it is proposed that the selection criterium for defining the sample are female

businesses with one to ten employees. We have got in contact with similar associations in Germany in order to enlarge our network and to find a partner to support us in concerns of the sample recruitment.

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