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Complex Patterns in Construction of Entrepreneurial Identity Among Youth in Estonia

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Complex Patterns in Construction of Entrepreneurial Identity Among Youth in Estonia

Aksel Kirch, Tarmo Tuisk

Tallinn University of Technology, Akadeemia tee 3, 12618 Tallinn, Estonia



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Abstract

The goal of the study was to assess entrepreneurial identity focusing on the beliefs and values such as individualism, risk-taking, innovativeness, opportunity recognition and tolerance.

Methods: An Identity Structure Analysis (ISA) (Weinreich, 2003/2012) was applied as a meta-theoretical framework to conceptualize entrepreneurial identity and identification patterns among students with the image of an entrepreneur. A Bayesian dependency-modelling (Myllymäki et al, 2002) was applied to validate the cohesiveness of the research instrument.

Results: This empirical study, carried out among the students of Tallinn University of Technology (n=45), shows similarities on shared dimensions across groups with varying entrepreneurial experience and differences on specific identity processes, particular to each group. These findings are evidenced when using 'significant others' as 'a successful entrepreneur', 'co-students', 'business circles', 'the government', 'family members' and 'ethno-cultural groupings' as reference points within one's identity structure. The results also demonstrate that dominant and increasing role of identifications with 'father' significantly contributes to one's personal entrepreneurial development while simultaneous distancing from 'co-students' seems inevitable. At the same time, those who are tightly bound with their peers in their identifications are less likely to become successful entrepreneurs and their positive identifications with all family members have decreased continuously during their life span. Those who are and aspire to become entrepreneurs have much higher overall self-evaluation and tolerance, individualism and innovativeness form their core identity dimensions when compared to those who are less entrepreneurial and reveal collectivistic values. The results are consistent with earlier studies (MacNabb 2003/2012; Nabi et al 2010) and the application of ISA together with its methodological possibilities has been justified despite the small number participants. In the future, cross-cultural assessments of entrepreneurial orientation and identity should help to verify if the findings have universal validity or remain only applicable to the Estonian socio-cultural context.

KEYWORDS: Entrepreneurial identity; identification patterns; values and beliefs; Identity Structure Analysis; Estonia.

Introduction



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This article focuses on socio-psychological aspects of the personality, values and skills associated to entrepreneurship. Information about nascent entrepreneur's behaviour conditioned by the cultural and educational background can help to understand socio-psychological dilemmas of entrepreneurs, aspiring entrepreneurs and even those whose attitude is neutral or negative about this activity. Enterprising identities have been studied earlier (e.g. Essers & Benschop, 2007), with emphasis put on skills, socialization and societal influences within the development of entrepreneurial 'traits,' accompanied also by the culture-specific influences of location. Identity Structure Analysis (ISA), developed by Weinreich (2003), is the meta-theoretical framework applied for the assessment of these characteristics among university students who have passed

an introductory course on entrepreneurship. It attempts to classify the participants according to their personalities and prior entrepreneurship experience. Then the entrepreneurial identity of all the participants is evaluated using their perceptions of expected entrepreneurial 'imperatives' within their own identity structure. The results can be used to assess different groups' entrepreneurial identity where through their perceptions each group will provide the reader with in-depth insight about entrepreneurship and entrepreneurship teaching related issues of the country, in spite that the analysis is based on self-appraisals of the students. The outcome will contribute to entrepreneurship literature with a valuable tool and a methodological approach that may also involve (Davidsson, 2004; Landström, 2005) business management, psychology and sociology. Identity structure analysis uses unorthodox techniques, and adds a much needed methodological diversity to this field (Neergaard & Ulhøi, 2007 p.2; Kyrö *et al*, 2013).

Research on entrepreneurship is popular and abundant (e.g. Schumpeter, 1934; Gartner, 1990; Davidsson, 2004; Hoang & Gimeno, 2010); much of it concentrates on what motivates an individual to become an entrepreneur. These studies try to take into account the conditions and institutions that affect entrepreneurial intentions (Parker, 2004). Falck *et al* (2012) have analysed entrepreneurial identity from a social identity perspective, claiming that peers of schoolchildren have a decisive influence on whether a person becomes an entrepreneur or not. According to Weinreich (2003, p. 2) socio-developmental and biographical aspects in one's personality development should be taken into account as well. Falck *et al* (2012) noticed that some values facilitate an overall propensity towards entrepreneurship. For instance, individualism prevails and it is in fact the strongest value that suggests this activity.

Entrepreneurial identity has been studied and constructed by Navis & Glynn (2011) from an investor's viewpoint. They found entrepreneurial identity paradoxical as it embeds conformity and deviance. This ambiguity in personality and tolerance for it has been considered a common feature among entrepreneurs, often leading to the capacity to recognize and exploit opportunities (Shane & Venkataraman, 2000). Entrepreneurship has been studied from the organisational studies perspective, too. For instance, Weick (1995, p. 61) puts an accent on people with "multiple shifting identities." Within the framework of his sense-making theory, he claims that contextual identity and identification and interpretation of events are essential.

This study aims at establishing the features that describe a person aspiring to become an entrepreneur, but not only. It assesses the overall features (among groups with different entrepreneurial background) that could help to predict enterprising capacity. This does not require management or ownership status. MacNabb *et al* (1993) have studied female entrepreneurial identity (using ISA) and found that, despite aspirational attempts, these women did not display all of the expected entrepreneurial values: they rejected *risk-taking* and *profit motivation*. Similarly, Falk and others (2012, p. 39) have noticed a strayed pattern on that „entrepreneurs are willing to accept a lower expected income than what standard occupational models would imply." This could possibly refer to a non-pecuniary value of entrepreneur's identity. As shown by the study of MacNabb (2003) – 'entrepreneurs' do not form any homogeneous group (Hornaday, 1990), but it is still possible to find certain common characteristics that have been considered essential by scholars in the field. Schumpeter (1934) sees "the will of conquer" and "the joy of creating" as attracting pull factors – common for entrepreneurs. Baumol (1968) has underlined *innovativeness* and *opportunity recognition*. But, the values and beliefs of an entrepreneur concerning *individualism*, *risk-taking*, *profit motivation*, *innovativeness* and *opportunity recognition* need yet to be studied together with influential affects. These are not merely peers, but also 'significant others' of the broader environment (representing society), identified using the individual's identifications in the past, presence and future (Weinreich, 2003). In addition to the five already mentioned, an

Theoretical Background

additional value is *tolerance*. Being an indicator of acceptance of different people and groups (e.g. ethnic and racial minorities), and facilitating overall openness of society to new innovative ideas (Florida, 2003), it becomes a substantial precondition of innovativeness and creativity.

The overall purpose of this article is to present the assessment performed, in regard to the individual socio-biographical development (i.e. via interaction with 'significant others' – persons or social institutions having either intimate or remote impact on one's well-being (Weinreich, 2003/2012, p. 54)), and to propose conclusions on how to evaluate professional competences among potential entrepreneurs. The Identity Structure Analysis enables participants to use a self-appraisal instrument, where bipolar constructs representing entrepreneurial identity dimensions are evaluated from a viewpoint of each 'significant other' by the study participants. This evaluation of qualitative discourses was implemented by using quantitative identity parameters, operationalised and analysed by freely available *Ipseus* computer software (Weinreich & Ewart, 2007).

The aims and specific objectives were formulated to be empirically tested on study participants with different entrepreneurial background. Broader aims and more specific objectives were set up for the study.

Aims and objectives

The aims of the study are:

1 to apply the ISA conceptual framework, operationalized by the *Ipseus* software, for assessing the identity processes of persons related to entrepreneurship in respect of their values and beliefs about business world, risk-taking, innovativeness and tolerance as dimensions of their identity;

2 to ascertain the psychological consequences for individuals of disjunctions between

Specific objectives are:

1 to measure the extents of the participants' aspirational and empathetic identification with salient influential societal agencies and agents (business circles, creative people, the government, ethno-cultural groupings, a businessman's role model), and people of personal significance (a successful entrepreneur, an unsuccessful business person, family members);

2 to assess the extents to which identification with these entities is conflicted;

expected entrepreneurial and individuals' values and beliefs;

3 to demonstrate the efficacy of ISA for elucidating the complex identity processes of the person in relation to the perceived expected entrepreneurial 'imperatives' as these are judged by these persons.

3 to provide evidence of developmental processes in identification with others (change or resistance to change);

4 to establish the core and conflicted values of the individuals in respect of risk-taking, opportunity recognition, innovation and tolerance;

5 to determine the individuals' appraisal (via evaluation of others) of entrepreneurship in society.

Synopsis of the Identity Structure Analysis conceptual and methodological tools

Identity Structure Analysis as an open-ended framework was chosen to provide empirical evidence on how entrepreneurs and enterprising individuals construe their identity in the different contexts they encounter. The ISA was considered as suitable because it helps the researcher to examine individuals' construals of themselves and others – based on, and anchored in, their *own* value and

The study of entrepreneurial identity processes

belief systems. This approach recognizes that identity is not fixed and thus allows for entrepreneurship to be viewed as a developmental process rather than a given or fixed state. Hence, ISA enables the analysis of the processes of identity formulation and reformulation in the case of aspiring and existing business owners, as they adopt, adapt, consolidate, and redefine their entrepreneurial identity over time. Further, entrepreneurial identity can be examined as part of the totality of identity (MacNabb, 2003, p. 278). This article focuses on the entrepreneurial part of a person's identity which has been adapted from Weinreich (2003, pp. 26-34) and defined as follows:

One's entrepreneurial identity is defined as that part of the totality of one's self-construal made up of those dimensions that express the continuity between one's construal of past entrepreneurial experience and one's future aspirations in relation to entrepreneurship.

Method

The entrepreneurial identity was assessed on a student group majoring in logistics after completing a course in business planning in November 2013. To specify the discourses and entities for ISA an instrument – common for all participants – was formulated. It was constructed on the basis of earlier research and the theoretical contributions of various authors (MacNabb et al, 1993; MacNabb, 2003; Kirch & Tuisk, 2008; Tuisk, 2012). During 2012-2013 three pilot studies were carried out in order to specify and tune the final research instrument (Tuisk, 2013a; Tuisk 2013b). Themes were transformed into bipolar constructs and domains of the self and others into entities in order to tackle the aforementioned research objectives.

Identity Instrument

Themes

Risk-taking. One of the noted entrepreneurial features has been the acceptance of a certain degree of risk (Baumol, 1968). It has been considered almost as self-evident among entrepreneurs and enterprising persons. Risk-taking can be related to challenges that entrepreneurship offers for those who have the “will to conquer” (Schumpeter, 1934, p. 93) and is related to the need for achievement (McClelland, 1961).

Individualism. As found by Falck et al (2012) ‘individualism’ is a significant indicator of an entrepreneurial spirit. In addition, ‘leadership’ referred to personal initiative has been characterised as a predictor of entrepreneurial success (Baumol, 1968).

Tolerance. According to Richard Florida (2009) ‘tolerance’ about different people (e.g. ethno-cultural groups) may be an indicator that demonstrates openness to ideas, displaying the overall creativity of a person. The macro-level effect of ‘tolerance’ has been noted by Florida (2002) earlier when he exemplified Berlin as a city where creative economies attract and give space for immigrants who make up 1/7 of the city's population. New York and Montreal serve as successful examples with even higher share of immigrant population.

Opportunity recognition. Opportunity recognition is essential as it opens a path towards opportunity realization and value creation. This last is a basic outcome where entrepreneurship and innovation find their meaning. While innovation usually refers to the generation of new products, processes and services, entrepreneurship is associated with the identification of opportunity in society for these (Mitra, 2012, p. 2). The research instrument includes an evaluation of network marketing – on one hand influencing freedom of decisions, but on the other, expressing entrepreneurial spirit that at the same time evidences the enterprising culture of a given society (Smith & Neergaard, 2008) while at the same time entrepreneurial orientation inherited from the family can influence also several aspects in one's entrepreneurial behaviour (e.g. in risk-taking, innovation and proactiveness) (see Craig et al 2014, p. 206).

Innovativeness. While 'innovation' itself is strongly related to entrepreneurship in the personal level also the context should be taken into account to determine innovativeness (e.g. perception of the country's innovation potential).

Leadership. A transformational leadership model has been linked to both innovativeness and entrepreneurship. The theory has persuasively explained innovation processes and good management patterns (Crawford, 2001). The tests that Crawford performed on the patterns of transformational, transactional and *laissez-faire* leadership models confirmed that transformational individuals are likely to be also highly innovative. Inspiring 'others towards new ways of thinking' demonstrates efficient leadership characteristics among entrepreneurs.

Ethics, satisfaction with work and **flexibility** have been tested in entrepreneurial identity studies. Table 1 presents the bipolar constructs that were used on the research instrument.

Domains

Within the ISA, domains demarcate arenas of interaction. The dominant ones are those considering the self in a series of contexts, such as past, current, and anticipated future, but also the ones which present other people and groups and social institutions are included.

Domain of selves. According to the ISA the use of the self-images like 'me as I would like to be' for ideal self, 'me as I am now' for the current state; 'me as I was in gymnasium' for the past; and 'me as I would not like to be' for a contra-ideal self, is mandatory. These facets are called 'mandatory entities' and are required by the ISA. Still, it is essential that the exact wordings of these entities can effectively capture the study context and correspond to the participants' socio-biographical background. Since 'me' in different situations is very explanatory about one's identity, 'me at a business meeting' and 'me when travelling abroad' are included as alternative facets of the self.

Domain of family. Parental influence on entrepreneurship aptitudes has been highlighted in the literature (cf. Aldrich et al 1998; Hout & Rosen, 2000), thus, entities like 'my mother' and 'my father' were included. Additionally, wife/husband/partner of the participant, were added.

Domain of significant circles, groups and role models. These are the entities a person uses for identification, including for instance 'creative people', 'business circles', 'government of Estonia', 'my fellow students' (corresponding to the peer group influence argued by Falck et al in their 2012 study), 'a successful entrepreneur' and 'an unsuccessful business person'. Significant others affect the individual's propensities towards entrepreneurship. Urmas Sõõrumaa – a well-known Estonian businessman – is one of the role models included on the test.

Domain of ethno-cultural groupings. Finally, based on the ethnic division of Estonia's society, 'Estonians' and 'Russians' categories were included. In the past, ISA studies have demonstrated the strong explanatory power of this division (Tuisk, 2012).

Participants

The ISA instrument was administered to 45 participants who were students majoring logistics at Tallinn University of Technology during the autumn semester of 2013. All students had passed a course on business planning recently. The instrument consisted of 18 entities and 20 constructs. During the assessment, the bipolar constructs appeared in each page together with a list of entities (360 combinations) on the left side of the page. Each participant had to evaluate each combination at the bi-directional centre-zero rating scale (4-3-2-1-0-1-2-3-4) and no *a priori* assumptions of favourable or unfavourable connotations associated with either end of the scale were provided. Gender, age, ethnicity and year of (gymnasium) graduation composed the demographic data collected. In addition, the students had to report whether they had experience as an

| Construct number | Risk-taking & "willingness to sacrifice in order to conquer" | |
|--------------------------------------|---|---|
| 1 | <i>...think/s people become entrepreneurs because it is challenging</i> | ...think/s people become entrepreneurs because they are forced to |
| 2 | <i>...find/s solving new problems challenging</i> | ...prefer/s working at problems within proven abilities |
| 15 | ...would first of all prefer to study and work in abroad as an experience in order to return later to Estonia | <i>...would first of all prefer to leave Estonia in order to continue educational and work career in abroad</i> |
| 20 | <i>...am/is/are limited by lack of resources and time to follow through a mission</i> | ...give/s up other interests in order to provide resources and time for the mission |
| <i>Individualism / Team-building</i> | | |
| 3 | ...think/s the state is responsible for well-being of a common person | <i>...think/s that each person has to manage by her/himself</i> |
| 4 | <i>...think/s it is easier for an entrepreneur to manage alone</i> | ...thinks that it is easier for an entrepreneur to share responsibility |
| 6 | ...am/is/are more likely to wait for the orders | <i>...am/is/are more likely to take initiative and decide by him/herself</i> |
| <i>Tolerance</i> | | |
| 9 | <i>...am/is/are tolerant about different people and views</i> | ...do/does not accept other people and views |
| 10 | <i>...believe/s that ethno-cultural diversity of the staff contributes positively to the firm's performance</i> | ...believe/s that ethno-cultural diversity of employees has negative impact into the firm's performance |
| <i>Opportunity recognition</i> | | |
| 5 | <i>...celebrating birthdays with a business partner will contribute to mutual trust</i> | ... celebration of birthdays and other informal events can be dangerous to the company future |
| 11 | <i>Network marketing will be a good way to start to become an entrepreneur</i> | Network marketing does not facilitate a person to become an entrepreneur |
| 12 | <i>...those whose parents are entrepreneurs are more likely to become entrepreneurs as well</i> | Activities or occupation of one's parents do not influence entrepreneurial spirit of descendants |
| 13 | <i>...education and training in business and innovation management are a key to become an entrepreneur</i> | ... educational background is not the most important when becoming a successful entrepreneur |
| 14 | Entrepreneurs behave according to their heritage | <i>Entrepreneurs demonstrate diverse forms of behaviour according to the situations they encounter</i> |
| <i>Innovativeness/creativity</i> | | |
| 7 | <i>...think/s that Estonia's potential for innovation is pretty good</i> | ...think/s that situation in Estonia is hopeless in regard of innovation potential |
| 19 | ...make/s effective use of existing processes | <i>...am/is/are good at inventing new processes</i> |
| <i>Ethics vs. profit motivation</i> | | |
| 8 | ...only work/s to make a profit | <i>...would not make/sell tasteless good to make a profit</i> |
| <i>Satisfaction with work</i> | | |
| 16 | ...would not mind doing routine unchallenging work just if the pay was good | <i>...think/s work has to be motivated by self-satisfaction</i> |
| <i>Leadership & flexibility</i> | | |
| 17 | ...support/s others in their own ways of thinking | <i>..am/is/are able to inspire others to new ways of thinking</i> |
| 18 | <i>...will move onto new arenas of investigation when progress is blocked</i> | ...will try and try again in the current arena of investigation to find solutions |

Table 1

Translation of themes into 'bipolar constructs' (criterion poles representing entrepreneurialism are given in *italic*)

entrepreneur, intend to become one, are unsure about becoming or are definitely sure that they will never become an entrepreneur.

38% were males and 62% females. Their age varied between 19 and 23, (with a mean of 21.2, s.d.2.27). 87% were Estonians and 13 % Russians. 11% were entrepreneurs or had some experience, 27% were intending to become, 51% were undecided and 11 % believed they will never be entrepreneurs.

Validation of the research instrument

In order to validate the cohesiveness of the research instrument about the existing dependencies, between all 20 variables, a Bayesian dependency-modeling was applied. Evaluations of the entity „me as I am now“ (scaled from 1..9) were used within the model, testing data from 45 participants. The B-Course web-based Bayesian data processing environment, and the modeling of joint probability distribution (Myllymäki et al, 2002, p. 371), were the techniques of choice. The

resulting model consists of 17 variables out of 20 (see Figure 3.1) i.e. 3 bipolar constructs were not included in the model. Still it can be considered fit for application within the ISA, but the interpretation of results concerning constructs no. 4, 5 and

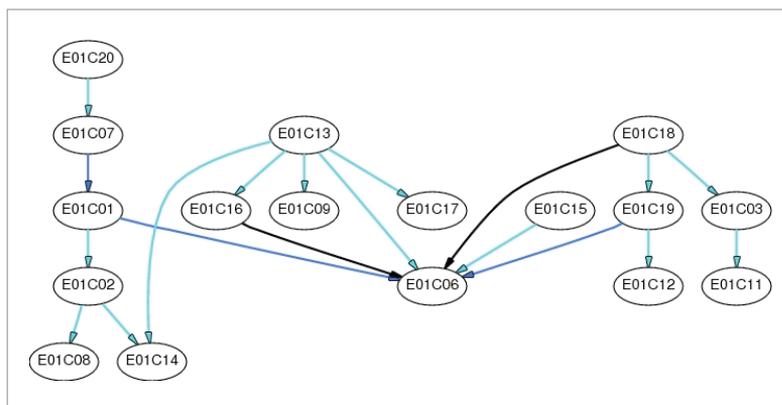


Figure 1
Bayesian dependency modeling's results

All participants were grouped by their self-reported relation to entrepreneurship. Thereby four categories were formed for comparison. The four columns for each calculated identity parameter were labelled according to the nominations as 'Entrepreneurs' (E), 'those who Intend to become' (I), 'those who have not decided – so-called Doubters' (D) and finally those who reported that they are sure about Never becoming' one (N).

The analysis of the results has been presented according to the research objectives.

Objective 1. Extents of aspirational and empathetic identifications of the participant groups (Table 2)

All participants were grouped by their self-reported relation to entrepreneurship. Thereby four categories were formed for comparison. The four columns for each calculated identity parameter were labelled according to the nominations as 'Entrepreneurs' (E), 'those who Intend to become' (I), 'those who have not decided – so-called Doubters' (D) and finally those who reported that they are sure about Never becoming' one (N).

In Table 2 the first two columns include *aspirational identification* that is defined through two opposite propensities – in respect of desired characteristics (*idealistic identification*) and rejected or not desired characteristics (*contra-identification*). The degree of idealistic identification indicates the perceived similarity between the desired characteristics ascribed to the entities and the contra-identification corresponds to an opposite process (Kenig & Spasovski, 2014, p. 460). The level of *empathetic identification* with an entity refers to the current state of identification with that entity. *Conflicted identification* with entities takes place when one empathetically identifies with

Results

these entities while simultaneously wants to dissociate from certain qualities (i.e. contra-identifies with them when assessing other bipolar constructs).

The values of these parameters show that the E group demonstrates the highest idealistic identifications with image of a 'successful entrepreneur,' and with the real-life role model proposed: Urmas Sõõrumaa. At the same time their identification with ethnic groupings (Estonians and Russians) is the lowest – these entities are considered as disturbing 'significant others' at the creation of one's entrepreneurial identity. For Group E a high positive identification with the 'family domain' demonstrates the necessities and aspirations of participants in their idealizations to become more similar to their closest people (mother, father, husband/ wife). 'Co-students' positions as a much less desired entity to idealise with. Family members were reported as desired role models for Group I also, and the data shows that to a very similar degree when compared to the entrepreneurs who participated in the study. In general – according to their aspirations – Group I seems rather close to the entrepreneurs although their idealization of 'co-students' remains higher. Doubters' group idealizes most 'fellow students' and 'a successful entrepreneur', but all other identifications remain lower, except with ethnic groupings where their identification with Estonians and Russians are the highest across all the groups. Group N shows the highest identification with 'co-students', but the lowest with a 'successful entrepreneur', Urmas Sõõrumaa and also with their family members. When compared to all other groups they have highest negative aspirational identification with 'an unsuccessful business person', with their father and also 'a successful entrepreneur'.

Objective 2. Extents to which the participant groups' identifications are conflicted (Table 2)

Overall conflict levels among Participant groups are considered high when exceeding the index value .54 and moderately high when exceeding .43. Thereby it is evident that highest conflicted identifications are reported by the Group N. It is possible to notice that although their empathetic identification with 'father' and 'mother' does not differ from other groups, still high levels of conflicted identifications with both parents, 'the government' and 'Estonians' demonstrate that this group has a large number essential entities with whom similarity and dissimilarity exist at the same time, causing instability and tensions when constructing their entrepreneurial identity in respect to their surrounding world. Entrepreneurs have moderately high conflicts with 'co-students', 'the government' and both ethno-cultural groups only. Groups I and D merely with entities like 'Estonians' and 'the government'.

To sum up, it is evident that the entrepreneurial identity is highly related to identifications with the respective (entrepreneurial) role models while aspired and current identifications with family members have a significant role as well (father even being more dominant when compared to mother). The role of peers (co-students) is less essential for those who have become entrepreneurs while for the group that 'intends to become' proximity to their peers continues being important. The identity structure of students that are negative about entrepreneurship shows the highest affiliation with their peers and moderately high idealistic identification with both ethno-cultural groupings while expressing high conflict with 'the government', 'Estonians' and both parents. It is possible to notice that their only stable and low-conflict entity – 'co-students' – does not grant any perspective on entrepreneurial aspirations. Instead the role of fathers has to be respected and idealized as the essence of entrepreneurship is based on masculine traits. Accordingly, the affiliation and idealization of co-students (i.e. group mentality) carrying attributes of behaviouristic school system (see Toomela & Kikas, 2012:ix) does not develop one's personality towards becoming an entrepreneur.

Objective 3. Evidence of developmental processes in identification with others (change or resistance to change)

The Table 3 presents past and current identifications across the groups (E, I, D and N). In addition, the third column gives the reader a possibility to estimate perceived changes in percentage

Table 2

Aspirational, empathetic and conflicted identifications

| Entity | Positive aspirational identification (idealistic identification) ¹ | | | | Negative aspirational identification (contra-identification) ² | | | | Empathetic identification with respect to current self (Me, as I am now) ³ | | | | Conflicted identification with respect to current self (Me, as I am now) ⁴ | | | |
|---------------------------------|---|-----|-----|-----|---|-----|-----|-----|---|-----|-----|-----|---|-----|-----|-----|
| | E | I | D | N | E | I | D | N | E | I | D | N | E | I | D | N |
| My fellow students | .55 | .71 | .71 | .77 | .41 | .18 | .23 | .21 | .59 | .75 | .81 | .73 | .47 | .34 | .41 | .39 |
| Government of Estonia today | .48 | .49 | .42 | .41 | .47 | .41 | .47 | .53 | .50 | .53 | .47 | .50 | .48 | .45 | .45 | .51 |
| A successful entrepreneur | .87 | .88 | .83 | .72 | .11 | .08 | .11 | .28 | .79 | .81 | .68 | .50 | .21 | .21 | .22 | .36 |
| An unsuccessful business person | .10 | .21 | .13 | .18 | .75 | .67 | .72 | .79 | .21 | .32 | .24 | .43 | .38 | .40 | .39 | .57 |
| Business circles in Estonia | .76 | .76 | .69 | .70 | .22 | .15 | .21 | .29 | .73 | .73 | .61 | .51 | .35 | .28 | .31 | .37 |
| Creative people in Estonia | .67 | .67 | .63 | .71 | .31 | .21 | .25 | .27 | .63 | .60 | .54 | .52 | .42 | .31 | .35 | .36 |
| Urmas Sõorumaa | .82 | .74 | .66 | .62 | .15 | .10 | .11 | .24 | .73 | .72 | .55 | .42 | .25 | .22 | .20 | .31 |
| Estonians | .26 | .33 | .41 | .35 | .69 | .54 | .54 | .63 | .32 | .42 | .51 | .50 | .46 | .46 | .48 | .55 |
| Russians | .27 | .35 | .45 | .42 | .68 | .38 | .40 | .49 | .37 | .40 | .52 | .44 | .48 | .38 | .43 | .46 |
| My mother | .68 | .69 | .63 | .59 | .29 | .26 | .29 | .41 | .65 | .74 | .65 | .67 | .39 | .38 | .39 | .52 |
| My father | .75 | .71 | .56 | .48 | .24 | .25 | .37 | .52 | .72 | .72 | .64 | .64 | .38 | .33 | .43 | .57 |
| My husband/wife/partner | .75 | .70 | .67 | .59 | .15 | .17 | .21 | .39 | .73 | .75 | .72 | .58 | .23 | .32 | .35 | .45 |

* Scale range 0.00 to 1.00.

1 The highest aspirational identifications are with 'a successful entrepreneur' (.87-.88) among entrepreneurs and the group of those who intend to become entrepreneurs, also entrepreneurs demonstrate very high identification with 'Urmas Sõorumaa'. The same groups E and I have noticeably higher identifications with their parents and spouse (.68-.75) when to compare with groups D and N where the same identification vary from .48-.67.

2 Entrepreneurs most negative aspirational identifications (desiring not to be like) are with ethnic grouping ('Estonians' and 'Russians' (.68-.69), these entities are appraised as those which have attributes from which entrepreneurs wish to dissociate. Also, for all groups an 'unsuccessful business person' has been negatively evaluated, the index varies from .67-.79

3 Empathetic identifications for groups E and I are with 'a successful entrepreneur' (.79-.81) and 'Urmas Sõorumaa' and 'my father' (.72-.73). For I-group also with 'husband/wife' and 'my mother' (.74-.75)

4 The highest conflicts in identification are among the N-group with 'an unsuccessful business person', 'mother', 'father' and 'Estonians' – all varying from .51-.57.

| Entity | Empathetic identification with respect to past self (Me, when I was a gymnasium student) | | | | Empathetic identification with respect to current self (Me, as I am now) | | | | Difference, % | | | |
|---------------------------------|--|-----|-----|-----|--|-----|-----|-----|---------------|-------|-------|-------|
| | E | I | D | N | E | I | D | N | E | I | D | N |
| My fellow students | .65 | .66 | .61 | .60 | .59 | .75 | .81 | .73 | -9.2 | +12.0 | +24.7 | +17.8 |
| Government of Estonia today | .57 | .63 | .56 | .53 | .50 | .53 | .47 | .50 | -12.3 | -15.9 | -16.1 | -5.6 |
| A successful entrepreneur | .52 | .59 | .54 | .45 | .79 | .81 | .68 | .50 | +35.4 | +27.2 | +20.6 | +10.0 |
| An unsuccessful business person | .40 | .46 | .40 | .49 | .21 | .32 | .24 | .43 | -47.5 | -30.4 | -40.0 | -12.2 |
| Business circles in Estonia | .57 | .57 | .52 | .48 | .73 | .73 | .61 | .51 | +21.9 | +21.9 | +14.7 | +5.9 |
| Creative people in Estonia | .56 | .45 | .44 | .52 | .63 | .60 | .54 | .52 | +11.1 | +18.6 | +16.7 | 0.0 |
| Urmas Sõõrumaa | .52 | .53 | .44 | .34 | .73 | .72 | .55 | .42 | +26.0 | +26.4 | +20.0 | +19.0 |
| Estonians | .42 | .58 | .61 | .55 | .32 | .42 | .51 | .50 | -23.8 | -27.5 | -16.4 | -9.1 |
| Russians | .46 | .44 | .53 | .49 | .37 | .40 | .52 | .44 | -19.6 | -9.1 | -1.9 | -10.2 |
| My mother | .64 | .62 | .60 | .62 | .65 | .74 | .65 | .67 | +1.5 | +16.2 | +7.7 | +7.5 |
| My father | .59 | .67 | .57 | .61 | .72 | .72 | .64 | .64 | +18.1 | +6.9 | +10.9 | +4.7 |
| My husband/wife/ partner | .62 | .57 | .60 | .55 | .73 | .75 | .72 | .58 | +15.1 | +24.0 | +16.7 | +5.2 |

* Scale range 0.00 to 1.00.

points. Positive scores demonstrate increases in modulation with the corresponding entities. It is easy to notice that the entrepreneurs are the only group whose identification decreased (-9%) with co-students. All groups demonstrate distancing in their identifications from the government, unsuccessful business person, Estonians and Russians. While Groups E and I show largest gap in identification with these ethno-cultural groupings, then smallest identification change with the government takes place among Group N. As one might expect the highest positive modulation with 'a successful entrepreneur' is demonstrated by groups E (+35%) and I (+27%), the same finding is valid also in regard to the increasing identification with Urmas Sõõrumaa (for both groups around +26%). At the same time, it is possible to notice that according to the participants' projection of the past similarities, the carriers of masculinity – 'father' has increased his position significantly more when compared to other groups (+19%). An explanation would be the socio-biographical development during life and through experiences. Ethno-national identifications of entrepreneurs have become less important, in contrast with the increased relevance of the support from fathers and wives-husbands to their entrepreneurial endeavours. Fathers' role especially, appears to be dominant in competitive (masculine) and business spheres of their everyday life (Hofstede, 1998).

Objective 4. The core and conflicted values and beliefs as dimensions of identity (Table 4).

Core dimensions of identity are the most stable (least likely to change in time) and reference values and beliefs that are used pre-eminently by the person to evaluate the worth of other people and agencies, and also of oneself. Tolerance and a liberal worldview are the two strongest aspirations across all polarities of bipolar constructs for the entrepreneurs. Belief in the Estonian innovation potential and presence of inspiration accompanied by entrepreneurial invention prosperities follow. Also taking responsibility and deciding by oneself is an important discourse. Conflicted dimensions are troublesome for the individual, these are likely to be sources of stress, and prone to vacillation from one moment to the next (that is, switching to thinking and behav-

Table 3

The Participant groups and their socio-developmental and biographical processes

Table 4

Core dimensions of identity: High structural pressures on constructs

| The strongest core dimensions of identity: constructs with high structural pressures | |
|--|---|
| Entrepreneurs (Group E) | |
| Construct no (polarity*, struct. pressure**) | Text of endorsed aspiration |
| 09 (-1, 73.96) | ... is tolerant about different people and views |
| 03 (1, 71.65) | ... each person has to manage by him/herself |
| 07 (-1, 67.83) | ... Estonia's potential for innovation is pretty good |
| 17 (1, 66.76) | ... rather inspires others in to the new ways of thinking |
| 19 (1, 64.98) | ... am/is/are good at inventing new processes |
| 02 (-1, 63.63) | ... find/s solving new problems challenging |
| 06 (1, 62.58) | ... is more likely to take initiative and make necessary decisions by him/herself |

* Polarity is -1 when left-hand pole of the construct is the endorsed aspiration, 1 when this is the right-hand pole. The endorsed aspiration is given here (which may be that one aspires to accept an unpalatable 'reality') – see the Table of Constructs (Table 1) for both poles.

** Scale range -100 to +100.

Table 5

Conflicted dimensions of identity: Low (net) structural pressures on constructs

| Most conflicted dimensions of identity: constructs with net low structural pressures | |
|--|--|
| Entrepreneurs (Group E) | |
| Construct no (polarity*, struct. pressure) | Text of endorsed aspiration |
| 04 (-1, -3.78) | ...think/s that it is easier for an entrepreneur to manage alone |
| 09 (-1, -3.72) | ... education and training in business and innovation management are a key to become an entrepreneur |

* Polarity is -1 when left-hand pole of the construct is the endorsed aspiration, 1 when this is the right-hand pole. The endorsed aspiration is given here (which may be that one aspires to accept an unpalatable 'reality') – see the Table of Constructs for both poles.

**Scale range -100 to +100.

ing according to the one pole of the construct to doing so according to the other pole). These conflicted dimensions represent dilemmas. One of the dimensions concerns leadership and responsibility – while in most cases 'managing alone' can be considered reasonable – in other cases entrepreneurs tend to base their decisions and activities on shared responsibility i.e. they also aspire to become team builders. As might be expected, being an entrepreneur or having an experience in entrepreneurship implies conflicting attitudes and behaviour about their studies majoring on logistics.

Seven cores and merely two conflicting dimensions demonstrate a pattern of a well-formed entrepreneurial identity structure. These findings correspond to high identifications with masculine carriers of entrepreneurial identity (e.g. 'a successful entrepreneur', 'father') and low conflicted identifications despite higher contra-identifications exist (e.g. ethno-cultural groupings, co-students etc.)

The group of students that claimed they would never become entrepreneurs (see Table 6) have the strongest identity core linked to 'informal events which contribute to mutual trust,' together with 'each person as manage by him/herself' and 'entrepreneurs behave according to the situations they encounter.' The Bayesian dependency modelling (see Fig.1) demonstrated that the first core is unrelated to others, which may mean that the members of this group by choosing an unrelated core as the strongest, construct their identity on marginal evidences (elementary identifications) and they would like to associate to entrepreneurial values and beliefs. The core 'Tolerance' was placed fourth when compared to Group E for which it was the strongest. Finally, 'entrepreneurship as a challenge' has formed their fifth core.

| The strongest core mensions of identity: constructs with high structural pressures | |
|--|---|
| Those who claimed they will never become entrepreneurs (Group N) | |
| Construct no (polarity*, struct, pressure**) | Text of endorsed aspiration |
| 05 (-1, 60.13) | ... celebrating birthdays with a business partner will contribute to mutual trust |
| 03 (1, 58.85) | ... each person has to manage by him/herself |
| 14 (1, 58.61) | ... entrepreneurs demonstrate diverse forms of behaviour according to the situations they encounter |
| 09 (-1, 57.24) | ... am/is tolerant about different people and views |
| 01 (-1, 54.61) | ... people become entrepreneurs because it is challenging |

* Polarity is -1 when left-hand pole of the construct is the endorsed aspiration, 1 when this is the right-hand pole. The endorsed aspiration is given here (which may be that one aspires to accept an unpalatable 'reality') – see the Table of Constructs (Table 1) for both poles.

** Scale range -100 to +100.

| Most conflicted dimensions of identity: constructs with net low structural pressures | |
|--|---|
| Those who claimed they will never become entrepreneurs (Group N) | |
| Construct no (polarity*, struct. pressure) | Text of endorsed aspiration |
| 04 (1, -15.15) | ... think/s that it is easier for an entrepreneur to share responsibility |
| 12 (1, -1.50) | ... activities or example of one's parents do not influence entrepreneurial spirit of descendants |
| 11 (-1, 1.10) | ... network marketing will be a good way to start to become an entrepreneur |

* Polarity is -1 when left-hand pole of the construct is the endorsed aspiration, 1 when this is the right-hand pole. The endorsed aspiration is given here (which may be that one aspires to accept an unpalatable 'reality') – see the Table of Constructs for both poles.

** Scale range -100 to +100.

The conflicted dimensions of Group N identity are presented in Table 7. Here as well as for Group E an aspect of 'individualism vs. shared responsibility' is causing the highest stress levels among the participants, while 'shared responsibility' as the endorsed polarity carries the strongest incompatibility within their entrepreneurial identity structure. This is in accordance with their affinity of (co-students) group as demonstrated with the high identifications levels with this group, whereas for Group E the same identification was among the lowest. High overall conflicted identifications with their parents (Table 2) also explain Group N's distress when evaluating parents' influence to their descendants about becoming an entrepreneur. The 'possibilities offered by network marketing' as a conflicting dimension is an evidence about one avoiding uncertainty when accepting challenges which demand some personal activity, but causing controversy with existing group collectivism.

Objective 5. Participants' appraisal (construal and evaluation) of society.

Within the ISA 'evaluation of another' is an appropriate parameter for designating the extent to which another is favoured or disfavoured. Table 8 presents 'a successful entrepreneur' as the highest evaluated entity across of all four groups of the participants. Very low and negative evaluations occur for ethno-cultural groupings and for the government of Estonia. When comparing the groups by their evaluation of family, it is noticeable that for Group N the lowest evaluations of family members indicate weak intergenerational heritage in regard of entrepreneurship and negative evaluation of the Government, emphasised by a lack of trust in the state. The high-

Table 6

Core dimensions of identity: High structural pressures on constructs

Table 7

Conflicted dimensions of identity: Low (net) structural pressures on constructs

Table 8

The Participants' evaluation of society by groups

| Entity | Gr. E | Gr. I | Gr. D | Gr. N |
|---------------------------------|-------|-------|-------|-------|
| My fellow students | 0.06 | 0.36 | 0.35 | 0.52 |
| Government of Estonia today | -0.01 | 0.09 | -0.03 | -0.16 |
| A successful entrepreneur | 0.64 | 0.74 | 0.73 | 0.54 |
| An unsuccessful business person | -0.67 | -0.43 | -0.68 | -0.64 |
| Business circles in Estonia | 0.40 | 0.49 | 0.41 | 0.37 |
| Creative people in Estonia | 0.31 | 0.43 | 0.37 | 0.51 |
| Urmas Sõõrumaa | 0.59 | 0.60 | 0.57 | 0.41 |
| Estonians | -0.32 | -0.06 | -0.11 | -0.22 |
| Russians | -0.32 | 0.04 | 0.08 | -0.04 |
| My mother | 0.30 | 0.31 | 0.26 | 0.12 |
| My father | 0.28 | 0.33 | 0.19 | -0.04 |
| My husband/wife/ partner | 0.39 | 0.49 | 0.38 | 0.12 |

* Scale -1.00 to +1.00.

est evaluation was assigned to co-students followed by 'creative people'. The latter evaluation can indicate about N group's desire towards non-materialistic values as a protest against success-oriented society where all entrepreneurs inevitably belong.

Conclusions and discussion

This study applied Identity Structure Analysis to evaluate entrepreneurial identity development allowing the participant groups to assess their own identity structure. The findings demonstrate various patterns in identifications with 'significant others', as follows:

- 1 Entrepreneurs highly identify themselves with their role models (a successful entrepreneur, Urmas Sõõrumaa, father, business circles). Their identifications with ethno-cultural groups and the government of Estonia are low, and evaluations of these are even negative. Entrepreneurs and 'those who intend to become' demonstrate high modulations (via increasing identifications) in their identity structure towards entrepreneurial 'significant others'.
- 2 Participants who are negative about becoming an entrepreneur tend to keep close to their peers (co-students) while having conflicting identifications with their family and the government. At the same time, identifications with a successful entrepreneur and business circles are lowest all across within the current study. These have the smallest modulation (change in identifications) in empathetic identification as well, when compared between the gymnasium period and present, indicating their resistance to the changes despite the acquisition of new knowledge during the course of business planning.
- 3 The role of fellow students cannot be underestimated within development of one's entrepreneurial identity. Attachment to this group can be opposed to the attachment of family members, especially to the father as a role model of an entrepreneur or as supporter of entrepreneurial activities. When comparing the entrepreneurs to those who aspire to become entrepreneurs, the biggest disparity between these groups is expressed with higher attachment of the latter group to their fellow students. Once this "connection" to their peers is broken, their identity structure will correspond more to that of the entrepreneurs.
- 4 The government as a representation of the state (Republic of Estonia) plays a rather controversial role in one's entrepreneurial aspirations, despite its official declarations and policies about facilitating business and entrepreneurship. Only those who intend to become entrepreneurs have expressed their slight sympathy with a minimal positive evaluation, while all groups demonstrated

decreasing identifications. As can be expected, the lowest idealistic identification with the government has been expressed by participants with no intention whatsoever to become entrepreneurs. While investigating current and potential entrepreneurs' behaviour with the use of Identity Structure Analysis, the necessity of positioning their entrepreneurial orientation related issues within the context of family has been justified (being consistent with results of MacNabb, (2003) and Nabi *et al*, (2010)) as the importance of paying attention to the relations with parents and one's spouse or partner cannot be underestimated. It is evident from the study that family's and namely father's support has an essential role when one aspires to advance in entrepreneurial orientation. This advances the results of Global Entrepreneurship Monitor on Estonia (GEM 2012, p.40) where the authors found that the participation of parents in business even reduces the likelihood of being a new entrepreneur while the support of parents (independently of their social status or job) to their children remained unexplored. The current study showed, based on the group that expressed the most negative propensities in regard of becoming an entrepreneur that their attachment to a study group values serves as a compensatory mechanism. Respondents whose individual achievements have not been supported or encouraged at home try to preserve their self-confidence in this way. The study showed also that this group has the highest conflicts in identification with most of the 'significant others' including both of their parents and 'Estonians' while this parameter was the lowest only with their peers.

Entrepreneurs' have demonstrated lowest conflicts with their parents and entity 'wife/husband/partner', thereby also expressing continuous supporting role of family in their entrepreneurial activities. Entrepreneurs increasing identification with these 'significant others' also coincides with a result of a recent study that claims entrepreneurs see themselves as growing personally and contributing to the well-being of others (André, 2013).

To sum up the findings – individuals with strongest entrepreneurial aspirations have shown their growing personal development by demonstrating the lowest conflicts and uncertainties in their entrepreneurial identity construction while highly identifying with their fathers. At the same time those with weakest entrepreneurial orientation display uncertainties in their behaviour and highest level of similarities to their peers and this tendency is even deepening over time. Despite a small sample size of the study the ISA as enabled to map these socio-psychological patterns among university students in one particular cultural context – Estonia. Similar studies among mature entrepreneurs and in different cultural settings will be necessary to validate the results of the current quasi-experimental exploratory study.

The results also identify the aspects that need to be taken into account when teaching entrepreneurship. Earlier personality development studies at the university level could affect entrepreneurship instruction and learning. Ideally, a different andragogic approach should be applied to those who already have entrepreneurial experience and that would benefit from more specialized skills. Furthermore, the studies have already shown the gap between what is taught in the classes and what the entrepreneurs do in reality (see Edelman *et al*, 2008). The latter finding is essential in teaching, but to overcome these various gaps in entrepreneurship education it should be kept in mind that this education "should be ... «factory» designed to produce (future) entrepreneurs capable of thinking, acting and making decisions in a wide range of situations and contexts" (Fayolle, 2014). In order to tackle these challenges we also need to know and learn much more about the individual's socio-biographical development of that who aspires to become an entrepreneur.

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KIRCH AKSEL

Doctor's degree (sociology)

From 1979 in Moscow Academy of Science, Institute of Sociology; Tallinn University of Technology

Address

Akadeemia tee 3, 12618 Tallinn, Estonia
Tel. +372 6204118
E-mail: aksel.kirch@ttu.ee

TUISK TARMO

MA in Social Sciences (sociology)

From 2012 in Tallinn University, Institute of International and Social Studies; Tallinn University of Technology

Address

Akadeemia tee 3, 12618 Tallinn, Estonia
Tel. +372 6204118
E-mail: tarmo.tuisk@ttu.ee

About the authors