

Students' Work Values and Entrepreneurial Intention: An Empirical Study

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Abstract: - Work value has long been considered as one of critical reasons for the youngsters' career choices. Nevertheless, how work values change in a specific context and their impact on entrepreneurial intention has not been fully examined. This study investigates the relationship between Vietnamese students' work values and their entrepreneurial intention. Based on a survey of 805 students in Business Administration, E-Commerce, Human Resource Management and Marketing, the study identified the 8 most important work values of Vietnamese students, in which "*Social status*" is a very unique value of the Vietnamese collectivist culture and prominence to self-respect. The research findings also show that students who appreciate *Autonomy and Authority* and *Challenge* have the tendency to be an entrepreneur; on the contrary, students with work values including *Work load* or *Security* will choose to be a wage employee. Based on these results, various recommendations have been proposed for improving entrepreneurship education in Vietnamese universities.

Key-Words: Work values, Entrepreneurial intention, students, Vietnam

1. Introduction

Work values have long been known as psychological factors to explain and understand the individual differences in organizational behavior. Many researchers have applied work values to explain the reasons for choosing a vocational and career choices [1] or to understand employee motivation and commitment [2].

For youth people (i.e., graduate students) facing the career choice, the start-up decision is a choice between two options including paid employment and self-employment [3]. In this case, it is clear that career values will be good explanations for this choice [4]. Moreover, if we know which values explain the choice of paid employment, which values explains the choice to start a business, this will be valuable information to help youngsters and educators have a specific direction for learners as well as the selection of good candidates for a specific course.

In entrepreneurship studies, various authors have pointed out that personal values play relevant roles in corporate social entrepreneurship [5] or may have a role in explaining the formation of intention antecedents and also moderate their effect on the entrepreneurial intention [6]. Researchers argue that values and motivations are closely related, since both of them are linked to the notion of goals. More

important goals induce a stronger motivation to plan thoroughly. The higher the priority given to a value, the more likely people will form action plans that can lead to its expression in behavior [7].

Although work values have been identified as an important role, research on the specific role of values and motivation in entrepreneurship is still relatively scarce" and "there are a number of relevant gaps in knowledge concerning the role which they play in entrepreneurship. In particular, the articulation of values and motivations within the entrepreneurial process perspective and the widely-used entrepreneurial intention models could be very promising [6].

To narrow the research gap in understanding the role of work values and explaining entrepreneurial intention or entrepreneurship behavior, this study examines the relationship between work values and the intention to start a business in the context of collectivist values in Vietnam. Our study is expected to have two major contributions. Firstly, the objective of the study is to identify specific work value factors in the context of emerging economies with their own culture like Vietnam. The second is to determine the relationship between the factors of work value and the intention to start a business and answer the question on what values encourage the choice of starting a business and what value does not

encourage the choice of starting a business.

The paper is organized as follows: after Introduction, Section 2 presents literature review. Section 3 is devoted to methodology. The obtained results are in Section 4. Section 5 provides discussion and recommendations. Finally, conclusions, limitations and future research directions are given in Section 6.

2. Literature review

Work values

Schwartz [8] defined values as abstract beliefs about the desirable goals - ordered according to relative importance, which guide individuals as they evaluate events, people and actions. Values are distinct from some psychological concepts as attitudes, which apply to more concrete objects [9], and needs and motives [2], which are “energetic” concepts directly connected to action.

In this study, we apply the interpretation of [10] about career value: “work values as expressions of broad personal values in the organizational context” and “they are goals or conditions that individuals seek to reach in their job”.

Identify and measure work values

There exist various theoretical views on work values. Consiglio et al. [10] identified that “wide variety of taxonomies about measurement of individual work values” and “Some scales emphasize personal preferences, whereas others take the moral aspect of values into account”. For example, Schwartz’s model [8] on basic personal values has been applied to many studies including [10, 11]. Schwartz’s [8] model identifies ten basic personal values presumably recognized by and motivating for individuals across cultures. However, Schwartz (1992) suggested that this is only universal aspects of value content researchers’ next task is to find values associated with culture-specific aspects. According to Fischer [12], personal values are influenced by socialization processes and are, therefore, partly determined by the predominant cultural values in society. This study also showed that “there is substantial variability of values across individuals and as a result the level of congruence between personal and cultural values may also be relevant [13].

In this study, the authors expect to identify specific career values associated with the own Vietnam cultural context and to find work values that support or do not support the propensity of starting a business. The work values proposed by Kolvereid [4]

may be appropriate for the research direction [14]. Based on a study on master students in business, Kolvereid has identified 11 values in which 5 values have connection with the tendency to be a self-employment, including *economic opportunity, authority, autonomy, challenge, self-realization, and participate in the whole process*; 6 values related to the tendency to be a wage employment including *security, social environment, work load, avoid responsibility, and career*. The values emphasizing personal preferences have been utilized in various studies [14, 15]. Therefore, the authors use this scale of work values and adapt it in the context of our research.

The role of work values in explaining entrepreneurial intention and orientation

Entrepreneurial intention is the quality that leads an individual to pursue a career in self-employment or establish his or her own business [6]. The role of work values or personal values in predicting entrepreneurial intention and behavior have been mentioned in several studies. Hayton et al. ([16] emphasized that individualist values have been repeatedly associated with entrepreneurial intentions and behavior. In nations with a similar level of development, a more individualistic culture is linked to a higher entrepreneurial activity [17, 18]. Similarly, Jaén et al. [19] pointed out that at the personal level, people prioritizing individualist values tend to exhibit higher entrepreneurial intentions. Since Vietnam is a country with collectivist culture, the research finding by Siu and Lo [20] may be useful when the authors indicated that the relationship between subjective norms and entrepreneurial intention is significantly stronger when the interdependent self-construal (collectivist values) is high. However, the research also identified that cultural values affect entrepreneurial activity differently, depending on the country’s income level [17, 18, 21]. The conflicting results about values and entrepreneurial behavior need to be explained in the future research.

Regarding the relationship between work values and entrepreneurial intention, the empirical study does not provide the consistent and solid result. Espiritu-Olmos and Sastre-Castillo [11] investigated the influence of both personality traits and work values on entrepreneurial intention. The authors have showed that personality traits affect entrepreneurial intention more than work values do and only self-enhancement (one dimension of work value

according to Schwartz [8] is significant on affecting entrepreneurial intention. However, the influence of work values on entrepreneurial intention has not been fully explained and this relationship needs to be investigated, especially in a specific context of Vietnam.

3. Methodology

3.1. The scale

3.1.1. Student work values

Kolvereid [22] proposed 11 work values of student including Security; Work Load; Social environment; Avoid Responsibility; Career opportunity; Economic opportunity; Challenge; Autonomy; Authority (power); Self-realization; Participate in the whole process. In an empirical study on student in Vietnam context, Tran [14] indicated that "Participate in the whole process" can be excluded and "Social status" should be included. The questionnaire items related to each value are

based on the works of Kolvereid [4] and Tran Van Trang [14]. For example, "Security" value has questionnaire items including fixed income, stability and security. In total, there are 33 questionnaire items which are equivalent to 11 work values.

Then, 20 students in forth year were interviewed to identify the most suitable work values in the Vietnam context. Each student was personally interviewed in estimated 30 minutes in two rounds. In the first round of interview, students were requested to think about their expected future jobs and identify the most 5 important values to them. In the second round, the students were provided 11 work values and then requested to give their opinions on the suitability of questionnaire items.

The items with more than 60% of students agreeing to be kept were included in the final questionnaire. Finally, 35 items of 11 work values were included in the survey.

Table 1: Items on the student's work value

Value	Code	Items
1. Security (SEC)	SEC01	Stability
	SEC02	Fixed income
	SEC03	Safety (unemployment insurance, Social Insurance, health insurance, ...)
2. Work Load (WOR)	WOR01	Not require too much effort
	WOR02	Family/leisure
	WOR03	Less stressful
	WOR04	Simpler, low complexity
3. Social environment (ENV)	ENV01	Dynamic working environment
	ENV02	Larger social environment (colleagues, mutuality)
	ENV03	Social membership
4. Responsibility (RES)	RES01	Take the responsibility
	RES02	Have recognized positions in the organization
5. Career opportunity (CAR)	CAR01	Career opportunity, promotion
6. Economic opportunity (ECO)	ECO01	Good wages
	ECO02	Wages dependent effort
7. Challenge (CHA)	CHA01	Challenging
	CHA02	Interesting
	CHA03	Require multiple skills
	CHA04	Give feeling of success
	CHA05	Do not face risks" and difficult decisions
8. Autonomy (AUT)	AUT01	Freedom, independence
	AUT02	Be your own boss
	AUT03	Choose own work tasks
9. Authority (power) (POU)	POU01	Authority
	POU02	Control the others
10. Self-realization =	SEL01	Realize the own dream

Value	Code	Items
SELF	SEL02	Creative need, create something
	SEL03	Have the opportunity to develop and improve ability and skills
	SEL04	Have the opportunity to be self-assertive
	SEL05	Have the opportunity of further education and training
	SEL06	The job is suitable for the ability and quality.
11. Social status (SOC)	SOC01	Have a high social status
	SOC02	Be highly appreciated by family, friends and the others
	SOC03	Bring benefits to the community and nation
	SOC04	Be proud of the work

3.1.2. Entrepreneurial intention

The study utilized the scale of measuring entrepreneurial intention proposed by Linan and

Chen [23]. This scale has been widely used in the research on the intention to start a business. It has 6 items as shown in Table 2.

Table 2: The scale for measuring the entrepreneurial intention

Entrepreneurial intention (INT)	INT01	I am ready to do anything to be an entrepreneur
	INT02	My professional goal is to become an entrepreneur
	INT03	I will make every effort to start and run my own firm
	INT04	I am determined to create a firm in the future
	INT05	I have very seriously thought of starting a firm
	INT06	I have the firm intention to start a firm some day

3.2. Data collection

The questionnaire consists of two parts: the first part of the questionnaire includes 35 question items related to work values and 6 question items related to Entrepreneurial intentions. The questions were asked on a 7-point Likert scale from “Strongly disagree” to “Strongly agree”. The second part collects student basic information: major, gender, academic year (3rd year or 4th year), cumulative GPA, working experience, Have being trained on entrepreneurship (Yes/No), Have participated in any extracurricular activity (Yes/No). In order to get the high response rate, the survey was conducted in class before the lecture started. The paper questionnaires were delivered by hand (manually) to every respondent. The survey took no more than 30 minutes to

complete.

3.3. Data analysis

Data were analyzed using SPSS statistical software. The used quantitative data analysis techniques include descriptive statistics, exploratory factor analysis, reliability analysis and multiple regression. The exploratory factor analysis and multiple regression are two main techniques to identify students’ work values and explore the relationship between the work value and students’ entrepreneurial intention.

4. Results

4.1. Descriptive statistics analysis

The descriptive statistics analysis is presented in Table 3.

Table 3: Descriptive statistic analysis

	Name of category	Frequency (number of students)	Percentage (%)
Major	Business Administration	385	47.80%
	E-Commerce	183	22.70%
	Human resource management	128	15.90%
	Marketing	109	13.60%
Gender	Male	127	15.8%

	Name of category	Frequency (number of students)	Percentage (%)
Student year	Female	677	84.2%
	3 rd year	555	68.9%
	4 th year	250	31.1%
Cumulative GPA (on a 4.0 scale)	Less than 2.0	6	0.7%
	2.0 to less than 2.5	123	15.3%
	2.5 to less than 3.2	531	66.0%
	3.2 to less than 3.6	132	16.4%
	3.6 or above	13	1.6%
Working experience	No	83	10.3%
	Part-time working	299	37.1%
	Temporary working (short period)	321	39.9%
	Working at home	77	9.6%
	Other	25	3.1%
Have been trained on entrepreneurship?	Yes	660	82%
	No	145	18%
Have participated in any extracurricular activity?	Yes	427	53%
	No	378	47%
Total		N=805	100%

The samples are from 805 third year and fourth year students at Thuongmai University of Commerce, Vietnam. The student majors, including Business Administration, Electronic Commerce, Human resource management and Marketing, are likely to be directly related to business and entrepreneurial activities. The time of conducting survey is at the end of the academic year. The group of 3rd year and 4th year students have a clear understanding of work values and career orientation after graduation. Most students have cumulative GPA from 2.0 to 3.6 on a 4.0 scale. Only 10.3% of students do not have any working experience. The majority of students (82%) have been trained on entrepreneurship (most of them took an extra short course or curriculum sessions on start-ups). More than half of students (53%) have participated in extracurricular activities.

4.2. Students’ work values

Regarding students’ work values, the factor analysis has been carried out on 35 initial question items. The result of factor analysis presented that 8

factors (Extraction Method: Principal Component Analysis; Rotation Method: Promax with Kaiser Normalization; KMO =.906; Bartlett's Test with sig. = .000) with Total Variance Explained = 61.72% (Table 4). The factors were then renamed as Wages and career opportunity (F1); Self-realization (F2); Social status (F3); Work load (F4); Organizational membership (F5); Autonomy and authority (F6); Security (F7); and Challenge (F8). The factors are sorted in decreasing order based on the Eigenvalues (>1). This order reflects the degree of importance of work values that students expect from the future career.

Among work values, it should be noted that “Social status” ranked third, after “Wages” and “Self-realization”. The “Social status” value reflects social status; being highly appreciated by family, friends and the others; and being proud of the work. This finding show that “Social status” is a very unique value, suitable to the Vietnamese collectivist culture that give prominence to self-respect.

Table 4: Students’ work values

Factor	Items and factor loadings		Cronbach’s Alpha
Wages and career opportunity (F1)	Wages dependent effort	.902	.853
	Good wages	.847	
	Career opportunity, promotion	.647	
Self-realization	Creative need, create something	.784	.887

Factor	Items and factor loadings		Cronbach's Alpha
(F2),	Realize ones dreams	.777	
	Have the opportunity to be self-assertive	.767	
	Have the opportunity to develop and improve ability and skills	.766	
	Have the opportunity of further education and training	.557	
Social status (F3)	Be highly appreciated by family, friends and the others	.858	.810
	Have a high social status	.789	
	Be proud of the work	.751	
	Bring benefits to the community and nation	.649	
Work Load (F4)	Not require too much effort	.778	.816
	Less stressful	.836	
	Simpler, low complexity	.795	
Organizational membership (F5)	Social membership	.874	.811
	Take the responsibility	.847	
	Have recognized positions in the organization	.718	
Autonomy and authority (F6)	Be your own boss	.836	.805
	Choose own work tasks	.824	
	Authority	.701	
	Control the others	.640	
Security (F7)	Stability	.723	.853
	Fixed income	.755	
	Safety (unemployment insurance, Social Insurance, health insurance, ...)	.787	
Challenge (F8)	Challenging	.599	.654
	Require multiple skills	.787	
	Give feeling of success	.530	

Each factor consists of from 3 to 5 question items. The reliability statistic was used to measure the reliability of the scale. The Cronbach's alpha values for each scale are shown in Table 4. The Cronbach's alpha values of 7 scales (F1-F7) fall in the reliability level (0.8 -0.9). Only F8 has Cronbach's Alpha value of .654 which is acceptable [24]. The new factors (F1, F2, F3, F4, F5, F6, F7, F8 – each presents for a factor) were formed by the average calculation of all items in the scale. These factors were then used for multiple regression analysis.

4.3. Regression analysis

Multiple regression analysis is used to investigate the relationship between 8 work values and students' entrepreneurial intention.

4.3.1. Scale reliability and validity of entrepreneurial intention

Before conducting regression analysis, scale reliability and validity of entrepreneurial intention is examined. The output of exploratory factor analysis (EFA) and Reliability analysis is shown in Table 5. The exploratory factor analysis provides loading factors as shown in Table 3. The Cronbach's Alpha value of .896 is within a high reliability range.

Table 5: The results of reliability and validity test

Items and factor loadings		Cronbach's Alpha
I am ready to do anything to be an entrepreneur	.700	.896
My professional goal is to become an entrepreneur	.847	
I will make every effort to start and run my own firm	.801	
I am determined to create a firm in the future	.851	
I have very seriously thought of starting a firm	.822	
I have the firm intention to start a firm some day	.845	
<i>EFA:</i>		
KMO = .888		
Bartlett's Test, Sig.= .000		
Extraction Method: Principal Component Analysis;		
1 components extracted		

4.3.2. The Relationship between Work Values and Entrepreneurial Intention

The regression analysis with 8 independent

variables (F1, F2, F3, F4, F5, F6, F7, F8) and a dependent variable (Entrepreneurial Intention) was carried out and the results are shown in Table 6.

Table 6: The regression analysis results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.902	.372		7.793	.000		
F1	-.057	.064	-.039	-0.876	.381	.533	1.875
F2	.093	.066	.064	1.413	.158	.523	1.913
F3	-.042	.062	-.030	-0.680	.497	.539	1.854
1 F4	-.126	.034	-.138	-3.732	.000	.796	1.257
F5	-.026	.049	-.021	-.516	.606	.645	1.550
F6	.295	.050	.240	5.883	.000	.653	1.533
F7	-.114	.046	-.098	-2.469	.014	.691	1.448
F8	.277	.056	.201	4.914	.000	.647	1.545

Dependent Variable: Entrepreneurial Intention
 Predictors: (Constant), F8, F4, F7, F6, F5, F1, F3, F2
 Adjusted R Square = .134
 F = 16.467, Sig. = .000

Based the obtained results, it can be concluded that only 4 factors with statistical significance (i.e., These 4 work values have impact on Entrepreneurial Intention) are F4 - Work Load (sig=.000), F6 - Autonomy and authority (sig=.000), F7 - Security (sig=.014,) và F8 - Challenge (sig=.000). In which, F6 - Autonomy and authority (Standardized Beta = .240) and F8 - Challenge (Standardized Beta = .201) have have positive effect on Entrepreneurial Intention; whereas, F4 - Work Load (Standardized Beta = -.138) và F7 - Security (Standardized Beta = -.098) have negative effect on Entrepreneurial

Intention. With adjusted R - Squared value of .134, the percentage of variation explained by work values that actually affect Entrepreneurial Intention is 13.4%.

5. Discussion and Recommendations
5.1. Discussion

It is affirmed that there are 8 work values; however only 4 work values, including Work Load; Security, Autonomy and authority and Challenge, have effect on students' Entrepreneurial Intention. "Social status" is considered as a characteristic of the Vietnamese culture; however, it does not have

statistically significant effect on Entrepreneurial Intention.

Two values, including F6 - Autonomy and authority (Standardized Beta = .240) and F8 - Challenge (Standardized Beta = .201), have positive effect on Entrepreneurial Intention. It is showed that more students want to be self-controlled and have rights in the workplace (Authority, Control the others) and these students have the tendency to choose to become entrepreneurs. Moreover, students who accept challenges (challenging jobs, jobs with multiple skills, and give them feeling of success) also want to involve entrepreneurship activities.

Work Load (Beta = -0.138) and Security (Beta = -0.098) have negative effect on Entrepreneurial Intention. It can be understood that students who prefer light duty works (Not require too much effort, Less stressful, Simpler, low complexity) and security (Safety, Fixed income) are more likely to be a wage employee.

These findings, partially confirming the Kolvereid's work [22], indicated that 2 out of 6 factors proposed by Kolvereid have positive effect on Entrepreneurial Intention; and similarly, 2 in 5 factors related to wage employment were also consolidated. The study is consistent with Espiritu-Olmos and Sastre-Castillo's work [11] when it revealed that "self-enhancement" including "achievement" and "authority" have statistically significant effect on Entrepreneurial Intention.

The two most important work values derived by exploratory factor analysis are "F1: Wages and career opportunity" and "F2: Self-realization". In which the beta value show that "Wages and career opportunity" and "Self-realization" have respectively negative and positive effect on Entrepreneurial Intention. However, these factors do not have statistically significant effect on Entrepreneurial Intention. Our study has demonstrated the specific characteristics of Vietnamese culture.

5.2. Recommendations

The findings may suggest several recommendations for entrepreneurship education and training. Firstly, regarding entrepreneurship education in university, if graduated student is expected to be an entrepreneur, curriculum developers and lectures should focus on how to enhance positive attitude and develop entrepreneurial values including authority, challenges and power.

In addition, entrepreneurial values needs time to develop, therefore it should be done at young age.

This means that if Vietnam wants to spread nation's start-up spirit and movement, entrepreneurship education should be integrated at high school level, not just at higher education level.

The work value is different for each individual. If youngsters expect to have a light duty, less challenging and stable job, they are not suitable for being an entrepreneur. It is not necessary to encourage all young people to start a business. Vietnamese youngsters can self-evaluate based on the 8 work values proposed in this study to know whether they are suitable for engaging entrepreneurship activities. Educators should use an entry test on work values to select the most suitable students for start-up courses.

6. Conclusions, Limitations and Future Research Directions

A contribution of this study is that it identified 8 work values for Vietnamese students, in which 7 values can be found in the literature, the "social status" value reflect the particularity of research context and the participants.

The study also indicate that students who expect to have job with light duty assignments and stability do not want to be an entrepreneur. "Good wages" and "Self-realization" were considered as the two most important values; however, do not have statistically significant effect on Entrepreneurial Intention.

Our study is not without limitations, our sample is not fully representative of Vietnamese students and youngsters, so generalisation and extrapolation of study results are limited. This study suggests that future studies on investigating the work values should be continued and fully explained for Vietnam's higher education context. The research question on why "Self-realization" and "social status" do not have effect on Entrepreneurial Intention needs to be focussed and answered.

References:

- [1] Judge TA, Bretz RD. Effects of Work Values on Job Choice Decisions. *J Appl Psychol*. Epub ahead of print 1992. DOI: 10.1037/0021-9010.77.3.261.
- [2] Kooij DTAM, Jansen PGW, Dijkers JSE, et al. The influence of age on the associations between HR practices and both affective commitment and job satisfaction: A meta-analysis. *J Organ Behav*. Epub ahead of print 2010. DOI: 10.1002/job.666.

- [3] Katz JA. A Psychosocial Cognitive Model of Employment Status Choice. *Entrep Theory Pract*. Epub ahead of print 2018. DOI: 10.1177/104225879201700104.
- [4] Kolvereid L. Organizational employment versus self-employment: Reasons for career choice intentions. *Entrep Theory Pract* 1996; 20: 23–31.
- [5] Hemingway CA. Personal values as a catalyst for corporate social entrepreneurship. *Journal of Business Ethics*. Epub ahead of print 2005. DOI: 10.1007/s10551-005-0132-5.
- [6] Fayolle A, Liñán F, Moriano JA. Beyond entrepreneurial intentions: values and motivations in entrepreneurship. *Int Entrep Manag J*. Epub ahead of print 2014. DOI: 10.1007/s11365-014-0306-7.
- [7] Gollwitzer PM. The volitional benefits of planning. In: *The psychology of action*. 1996.
- [8] Schwartz SH. Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Adv Exp Soc Psychol*. Epub ahead of print 1992. DOI: 10.1016/S0065-2601(08)60281-6.
- [9] Hitlin S, Piliavin JA. Values: Reviving a dormant concept. *Annu Rev Sociol* 2004; 30: 359–393.
- [10] Consiglio C, Cenciotti R, Borgogni L, et al. The WVal: A New Measure of Work Values. *J Career Assess*. Epub ahead of print 2017. DOI: 10.1177/1069072716639691.
- [11] Espíritu-Olmos R, Sastre-Castillo MA. Personality traits versus work values: Comparing psychological theories on entrepreneurial intention. *J Bus Res*. Epub ahead of print 2015. DOI: 10.1016/j.jbusres.2015.02.001.
- [12] Fischer R. Congruence and functions of personal and cultural values: Do my values reflect my culture's values? *Personal Soc Psychol Bull*. Epub ahead of print 2006. DOI: 10.1177/0146167206291425.
- [13] Fischer R, Schwartz S. Whence differences in value priorities?: Individual, cultural, or artifactual sources. *J Cross Cult Psychol*. Epub ahead of print 2011. DOI: 10.1177/0022022110381429.
- [14] Tran VT. La perception de la carrière entrepreneuriale des étudiants vietnamiens.
- [15] Tkachev A, Kolvereid L. Self-employment intentions among russian students. *Entrep Reg Dev*. Epub ahead of print 1999. DOI: 10.1080/089856299283209.
- [16] Hayton JC, George G, Zahra SA. National Culture and Entrepreneurship: A Review of Behavioral Research. *Entrep Theory Pract*. Epub ahead of print 2018. DOI: 10.1177/104225870202600403.
- [17] Liñán F, Fernández-Serrano J, Romero I. Necessity and Opportunity Entrepreneurship: the mediating role of culture. *Rev Cconomia Mund*. Epub ahead of print 2013. DOI: 10.1128/JB.00184-13.
- [18] Pinillos MJ, Reyes L. Relationship between individualist-collectivist culture and entrepreneurial activity: Evidence from Global Entrepreneurship Monitor data. *Small Bus Econ*. Epub ahead of print 2011. DOI: 10.1007/s11187-009-9230-6.
- [19] Fayolle A, Kyrö P, Mets T, et al. Personal values and entrepreneurial intention: an empirical study. In: *Conceptual Richness and Methodological Diversity in Entrepreneurship Research*. 2013. Epub ahead of print 2013. DOI: 10.4337/9781782547310.00008.
- [20] Siu W sum, Lo ES chung. Cultural contingency in the cognitive model of entrepreneurial intention. *Entrep Theory Pract*. Epub ahead of print 2013. DOI: 10.1111/j.1540-6520.2011.00462.x.
- [21] Fernández-Serrano J, Romero I. About the interactive influence of culture and regulatory barriers on entrepreneurial activity. *Int Entrep Manag J*. Epub ahead of print 2014. DOI: 10.1007/s11365-014-0296-5.
- [22] Kolvereid L. Prediction of employment status choice intentions. *Entrep Theory Pract* 1996; 21: 47–58.
- [23] Liñán F, Chen YW. Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrep Theory Pract*. Epub ahead of print 2009. DOI: 10.1111/j.1540-6520.2009.00318.x.
- [24] Nunnally JC, Bernstein IH. Psychometric theory (3rd Ed.). New York: McGraw-Hill. *Journal of Psychoeducational Assessment*. Epub ahead of print 1999. DOI: 10.1037/018882.