ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES ISSN 2345-0282 (online) <u>http://jssidoi.org/jesi/</u> 2022 Volume 9 Number 3 (March) <u>http://doi.org/10.9770/jesi.2022.9.3(23)</u>







UNDERSTANDING THE PREDICTORS OF ENTREPRENEURIAL INTENTIONS OF YOUNG PEOPLE FROM ARGENTINA, BELGIUM, BULGARIA, CHINA, AND ROMANIA*

Daniel Vankov^{1,2}, David Kozma³, Martin Galanternik⁴, Johan Chiers⁵, Borislav Vankov⁶, Lin Wang⁷

¹ Michiel de Ruyter Scientific Organization from Partium, Oradea, Romania
² Queensland University of Technology, Brisbane, Australia
³ Asociatia Krebelsberg Kuno, Oradea, Romania
⁴ MiNU Associacion Civil, Buenos Aires, Argentina
⁵ TOP-25 Europe, Ternat, Belgium
⁶ Narodno Chitalishte Svetal Den – 2009, Vidin, Bulgaria
⁷ Shanghai Jin Sheng Creative Service, Shanghai, China

E-mails:^{1, 2} <u>*d.vankov@qut.edu.au*</u> (Corresponding author); ³<u>*klebelsberg.ong@gmail.com*</u>; ⁴<u>*mgalanternik@minu.org*; ⁵<u>*info@top-25.eu*</u>; ⁶<u>*brightday@abv.bg*</u>; ⁷<u>*fwang@jsint.org*</sub></u></u>

Received 10 January 2022; accepted 3 March 2022; published 30 March 2022

* This article is an output of project "Youth Employment Social Entrepreneurship" (YES, project number: 617207-EPP-1-2020-1-RO-EPPKA2-CBY-ACPALA), implemented with the support of the Erasmus+ programme of the European Union, Grant decision (agreement number: 2020-617207) of the European Commission Education, Audiovisual and Culture Executive Agency (EACEA). The article reflects the views only of its authors and the European Commission cannot be held responsible for any use which may be made of the information contained therein.



Co-funded by the European Union

ISSN 2345-0282 (online) <u>http://jssidoi.org/jesi/</u> 2022 Volume 9 Number 3 (March)

http://doi.org/10.9770/jesi.2022.9.3(23)

Abstract. Entrepreneurship helps grow economies. Thus, under comprehensive competence frameworks, such as European Entrepreneurship Competence Framework (EntreComp), entrepreneurial skills development is a global priority. However, under no guarantee, newly developed skills will be utilised in entrepreneurial activity. The question of which entrepreneurial skills predict entrepreneurial intentions remains with no definite answer. Our study examines the extent to which entrepreneurial intentions can be predicted in young people (aged 18 to 25, n=203) by a model grounded in the Self-Efficacy Theory. Our model tested the contribution of demographics, Big Five personality characteristics and entrepreneurial self-efficacy (ESE). Through a hierarchical multiple regression, we reveal that our participants' entrepreneurial intentions are predicted by two variables: developing new product and market opportunities and conscientiousness. As a result, we found that participants are likely to think of becoming entrepreneurs when confident in their ability to innovate and leverage the market. Interestingly, those same people tended to be somewhat less conscientious. The results showed a significant influence of neither nationality nor age or gender on entrepreneurial intentions. The novelty of our findings is three-fold. First, underlying data is derived from a multicultural sample of young people from three continents. Second, contrary to common sense, they reveal no influence of demographics on entrepreneurial intentions. Third, when ESE is explored as sub-dimensions, not all of them predict entrepreneurial intentions variation. Those results show a path to help develop better-targeted entrepreneurship education or more impactful initiatives for young people. They can be found helpful by policymakers, researchers and practitioners alike.

Keywords: Big Five personality items; entrepreneurial intentions; entrepreneurial self-efficacy; Self-Efficacy Theory; young people

Reference to this paper should be made as follows: Vankov, D., Kozma, D., Galanternik, M., Chiers, J., Vankov, B., Wang, L. 2022. Understanding the predictors of entrepreneurial intentions of young people from Argentina, Belgium, Bulgaria, China, and Romania. *Entrepreneurship and Sustainability Issues* 9(3), 384-398. <u>http://doi.org/10.9770/jesi.2022.9.3(23)</u>

JEL Classifications: J24, M54

Additional disciplines: psychology

1. Introduction

Entrepreneurial activities play a significant role in growing economies by creating jobs (Valliere & Peterson, 2009). Thus, the development of entrepreneurial skills is a global priority (European Commission, 2017; Kinner, 2015). Education systems around the globe have developed a strategic approach to foster entrepreneurial learning in various settings and contexts, including formal and informal entrepreneurship and enterprising education (Quality Assurance Agency for Higher Education, 2018). Despite the increased focus on entrepreneurship, research seems to predominantly explore two particular groups of countries. Those countries may be considered sitting on the two extremes of the entrepreneurial spectrum.

The largest number of entrepreneurial studies comes from North American (e.g. Ferguson, 2018; Pepin & St-Jean, 2019; Rodriguez & Lieber, 2020) and European (e.g. Grewe & Brahm, 2020; Heinrichs, 2016; Pinho, Fernandes, Serrão, & Mascarenhas, 2019) industrialised countries. African countries also feature a considerable amount of research. Studies can be identified in Botswana (Assan, 2012), Lesotho (Berry et al., 2013), Nigeria (Bano, 2018), Uganda (Alzua et al., 2020) and Tanzania (Bjorvatn, Cappelen, Sekei, Sørensen, & Tungodden, 2020). This representation leaves middle-income countries largely underrepresented. Furthermore, cross-cultural studies are much less common. To provide a more comprehensive understanding of entrepreneurship, our study involved participants from Argentina, Belgium, Bulgaria, China and Romania.

Regardless of country, comprehensive competence frameworks, such as EntreComp (McCallum, Weicht, McMullan, & Price, 2018), provide guidelines for practitioners and policymakers on how to foster the development of entrepreneurial skills. Those frameworks claim to incorporate the latest research evidence.

ISSN 2345-0282 (online) <u>http://jssidoi.org/jesi/</u> 2022 Volume 9 Number 3 (March) <u>http://doi.org/10.9770/jesi.2022.9.3(23)</u>

Over the last decade, academic research has been devoting growing attention to concepts and empirical evidence targeting the development of entrepreneurial skills in various age groups and contexts, including relevant skill growth in the early formative years (childhood and adolescence) (Brüne & Lutz, 2020; Lerner & Damon, 2012; Obschonka, 2016; Obschonka, Hakkarainen, Lonka, & Salmela-Aro, 2017). This research involves, rigorously designed evaluation studies of skill development programs (Huber, Sloof, & Van Praag, 2014; Oosterbeek, Van Praag, & Ijsselstein, 2010; Schroder & Schmitt-Rodermund, 2006), often with a focus on cognitive vs. non-cognitive skills. As a result, there is a growing understanding about the influence of education on entrepreneurial skills development.

Regardless of that increased knowledge, there is no guarantee that newly developed skills will be utilised in entrepreneurial activity. Thus, which entrepreneurial skills predict entrepreneurial intentions remains a question with no definite answer. In the light of this ambiguity, we aimed to help close this research gap by investigating what determines entrepreneurial intentions in our target group of young people aged 18 to 25.

2. Theoretical background

Understanding what determines entrepreneurial intentions can help promote entrepreneurship when integrated into programmes and policies development. Krueger, Reilly, and Carsrud (2000) argue entrepreneurship to be best predicted by entrepreneurial intentions. Bird (1989) sees them as a starting point of new value and business creation. As such, they can be perceived as the beginning of starting a new venture (Veciana, Aponte, & Urbano, 2005).

Some researchers believe entrepreneurship is cognitive in nature, leading to a deliberate career choice (Bacq, Ofstein, Kickul, & Gundry, 2017). As noted above, it is predicted best by one's intentions to establish a new enterprise instead of work for others (Krueger et al., 2000). The Self-Efficacy Theory (SET) (Bandura, 1977) provides a useful model for understanding entrepreneurial intentions and behaviour. SET is focused on entrepreneurial self-efficacy (ESE), i.e., how much an individual believes they can achieve specific goals. By influencing entrepreneurial intentions, ESE impacts entrepreneurial behaviour (Chen, Greene, & Crick, 1998; Schlaegel & Koenig, 2014). Our study contributes to this discussion by measuring the extent to which ESE predicts entrepreneurial intentions.

In their systematic review, Newman, Obschonka, Schwarz, Cohen, and Nielsen (2019) identified six widely used scales to measure ESE. For the purpose of the current study, we looked at employing domain-specific self-efficacy measures, as per Bandura (1986) recommendation. De Noble, Jung, and Ehrlich (1999)'s 23-item multi-dimensional scale offers insights into six sub-dimensions. Those sub-dimensions are developing new product and market opportunities, building an innovative environment, initiating investor relationships, defining core purpose, coping with unexpected challenges, and developing critical human resources (De Noble et al., 1999). Newman et al. (2019) identified 19 studies, which used De Noble et al. (1999) scale, offering support to applying it in our study.

Regardless that behaviourists (Bird, 1989; Gartner, 1988) focus on measures, such as ESE, and believe that personal characteristics play minor role in becoming an entrepreneur, other researchers see entrepreneurship as a consequence of entrepreneurial individuals' personal characteristics (Atiya & Osman, 2021; Brockhaus Sr, 1980; Carland, Hoy, & Carland, 1988). Some of those researchers even argue there may be genetic predispositions determining whether some people do and some do not become entrepreneurs. Our study contributes to this discussion, too, by exploring the extent to which personality predicts entrepreneurial intentions.

ISSN 2345-0282 (online) <u>http://jssidoi.org/jesi/</u> 2022 Volume 9 Number 3 (March) <u>http://doi.org/10.9770/jesi.2022.9.3(23)</u>

To explore personality, we used the Big Five ten-item personality inventory (Goldberg, 1992). The inventory defines five personality characteristics: extraversion (assertive, dominant, energetic, active, talkative, and enthusiastic), conscientiousness (persistent and hardworking with a strong motivation), intellect (intellectually curious, seeking new experiences, and exploring novel ideas), neuroticism (adjustment and emotional stability), and agreeableness (e.g. self-centred and ruthless, or trustworthy) (Goldberg, 1992). The Big Five have been previously utilised in research on entrepreneurship (Bazkiaei et al., 2020; Mahmoud, Ahmad, & Poespowidjojo, 2020), supporting the inventory application in the current study.

Some venture creation research suggests that other individual differences beyond personality are contributors to some people creating their businesses (Baron, 1998; Krueger et al., 2000; Shinnar, Giacomin, & Janssen, 2012). Studies highlight gender role expectations to explain gender differences in entrepreneurship (Burgess & Borgida, 1999; Eagly, 2013). For example, Thébaud (2015) sees entrepreneurship as a field generally regarded as men's, which leads to entrepreneurship not being so popular career amongst women. Thus, men can potentially have more positive attitudes toward entrepreneurial intentions (Ryu & Kim, 2020). Despite efforts to motivate women, gender differences seem to persist in entrepreneurial activity (Boudreaux & Nikolaev, 2019; Hechavarría, Terjesen, Stenholm, Brännback, & Lång, 2018). For example, women continue to have lower entrepreneurial intentions than men (Westhead & Solesvik, 2016; Zhao, Seibert, & Hills, 2005). Nevertheless, the literature discusses gender similarities and differences and is not conclusive about this matter (Lim & Envick, 2013). Our study expands this discussion by exploring the contribution of gender in predicting entrepreneurial intention.

De Vita, Mari, and Poggesi (2014) believe countries' cultural values generate gender and, more broadly, social roles. This belief leans into another research view which considers socio-cultural and economic environmental aspects to influence individual entrepreneurial intentions (Baubonienė, Hahn, Puksas, & Malinauskienė, 2018). The argument that entrepreneurial psychological attributes can be culturally acquired finds further support in Ajzen (2001) and Gibb and Ritchie (1982).

Previous research has provided evidence in supporting this view that people vary in their entrepreneurial intentions depending on their country of origin. For example, Tomal & Szromnik (2022) explored cross-cultural differences in East European countries. They found that cultural aspects influence entrepreneurial intentions in young people and that this influence varies between the studied countries. Similar country-determined variabilities were confirmed in European countries more broadly (Teixeira et al., 2018). In another cross-cultural study, Iakovleva, Kolvereid, & Stephan (2011) present findings that show differences in entrepreneurial intention between developing and developed countries, in general. In particular, the authors reveal young residents of developed nations as having lower entrepreneurial intentions than those of developing ones. Thus, it can be assumed that country of origin. By involving a culturally diverse sample, we investigated the extent to which culture, i.e. country, might determine some young people to consider becoming entrepreneurs.

In summary, we applied a SET model consisting of demographic variables (gender, age and country), personality (Big Five) and ESE to assess young people's intentions to become entrepreneurs.

3. Research objective and hypotheses

Applying the SET model, this study surveyed 18 to 25 years-old people in Argentina, Belgium, Bulgaria, China, and Romania to identify their predictors of entrepreneurial intentions. It was hypothesised that:

H.1. Country, gender and age (demographic variables) would account for a significant variation in entrepreneurial intentions.

H.2. *Extraversion, conscientiousness, intellect, neuroticism,* and *agreeableness* (Big Five personality variables), applied over and above the demographic variables, would account for a significant variation in *entrepreneurial intentions*.

H.3. Developing new product and market opportunities, building an innovative environment, initiating investor relationships, defining core purpose, coping with unexpected challenges, and developing critical human resources (ESE) (De Noble et al., 1999), applied over and above the personality variables, would account for a significant variation in *entrepreneurial intentions*.

4. Methodology

4.1. Recruitment of participants

Recruitment of participants took place between the 13^{th} and the 18^{th} of October, 2021. It was done face-to-face and through social media. The initial number of 207 completed surveys was reduced by removing partially completed ones. This action left 203 cases (100 male; Mage = 21.03, SD = 2.65). This final dataset was considered sufficient to perform a regression analysis. Tabachnick and Fidell (2007) specify n => 104 + m as the necessary minimum, with *m* being the number of predictors. The distribution amongst the participating countries was balanced: Argentina (41), Belgium (35), Bulgaria (42), China (40) and Romania (45).

4.2. Materials

Data was collected through an online survey. It consisted of four sections in a fixed order. Section One of the survey, demographic data, contained 2 items: *age* (in years) and *gender* (0 = female / 1 = male). *Country* was not included as the survey was administered separately in each participating country. Section Two measured ESE using 5-point scales from "Strongly disagree" (1) to "Strongly agree" (5). It contained six sub-dimensions: *developing new product and market opportunities* (7 items), *building an innovative environment* (4 items), *initiating investor relationships* (3 items), *defining core purpose* (3 items), *coping with unexpected challenges* (3 items), and *developing critical human resources* (3 items) (De Noble et al., 1999). Section Three contained five items, adapted from Ismail (2017), to measure *entrepreneurial intention*. Personality was measured through the Big Five ten-item personality inventory (Goldberg, 1992), using a 5-point Likert scale (1. Very Inaccurate, 2. Moderately Inaccurate, 3. Neither Accurate Nor Inaccurate, 4. Moderately Accurate, and 5. Very Accurate).

4.3. Data transformation

The negatively-keyed Big Five personality inventory items were recoded for the current analysis. Following the recoding, a smaller value, left of the scale, denotes a negatively-loaded answer, while a higher value, right of the scale, denotes a positively-loaded answer. Subsequently, all subscales were examined for internal consistency: *developing new product and market opportunities* ($\alpha = .87$), *building an innovative environment* ($\alpha = .78$), *initiating investor relationships* ($\alpha = .86$), *defining core purpose* ($\alpha = .73$), *coping with unexpected challenges* ($\alpha = .70$), *developing critical human resources* ($\alpha = .83$), *entrepreneurial intentions* ($\alpha = .89$), *extraversion* ($\alpha = .88$),

conscientiousness ($\alpha = .80$), intellect ($\alpha = .82$), neuroticism ($\alpha = .77$), and agreeableness ($\alpha = .83$). The generally acceptable Cronbach's α limit is .70 (DeVellis, 2016), revealing the high internal consistency of the data. Finally, the entrepreneurial intentions and ESE items were averaged, while the personality subscales were summed up to calculate single values for each measure.

4.4. Analysis

Initially, we checked whether our data meets parametric tests assumptions. We looked into the homogeneity of variance, linearity, normality, homoscedasticity and multicollinearity.

We investigated multicollinearity within the regression analysis. Variance inflation factors showed lower than three values. Thus, we did not remove any variable from the analysis.

For the dependent variable (DV), *entrepreneurial intentions*, we inspected skewness (.07, std. error = .17) and kurtosis (-.90, std. error = .34) values, histograms, 95% trimmed means, standardised residual scores, and scatterplots. All inspections confirmed assumptions to be sufficiently met. The Shapiro-Wilk test suggested a non-normal distribution (.97, p < .001). However, it is considered very sensitive and potentially unreliable in samples > 50 (Elliott & Woodward, 2007). Thus, a parametric test was used in the analysis (3-step hierarchical multiple linear regression).

The hierarchical regression helped us identify the variables that are statistically significant in predicting *entrepreneurial intentions*. The strength of each independent variable (IV) on the DV is shown by the standardised beta coefficients (β). A higher value signifies a stronger effect.

5. Results and discussion

5.1. Zero-order correlations

In Table 1, we present Spearman's rho correlations and means with standard deviations for *entrepreneurial intentions*, ESE and Big Five. Those results show consistency with SET (Bandura, 1977) in that *entrepreneurial intentions* was strongly correlated with *developing new product and market opportunities* (*rho*=0.62, p < .001) and moderately correlated with *building an innovative environment* (*rho*=0.46, p < .001), *initiating investor relationships* (*rho*=0.35, p < .001), *defining core purpose* (*rho*=0.33, p < .001), *coping with unexpected challenges* (*rho*=0.23, p < .001), and *developing critical human resources* (*rho*=0.37, p < .001). The separate ESE measures showed strong or moderate correlations between each other, with the strongest ones being between *developing new product and market opportunities* and *building an innovative environment* (*rho*=0.63, p < .001), and between *defining core purpose* and *developing critical human resources* (*rho*=0.60, p < .001).

The results of the Big Five varied. None of the subscales correlated significantly with *entrepreneurial intentions*. The correlations between the different personality characteristics were generally less strong than those within ESE, with many being insignificant. The strongest correlations were moderate between *conscientiousness* and *intellect* (*rho*=0.40, p < .001), and between *extraversion* and *agreeableness* (*rho*=0.37, p < .001). The strongest correlation between an ESE subscale and a personality characteristic was observed between *defining core purpose* and *conscientiousness* (*rho*=0.34, p < .001).

ISSN 2345-0282 (online) http://jssidoi.org/jesi/ 2022 Volume 9 Number 3 (March)

http://doi.org/10.9770/jesi.2022.9.3(23)

Table 1. Means, standard deviations and bivariate Spearman's rho $(n=203)$														
	Scale range (min/max)	Mean (SD)	1	2	3	4	5	6	7	8	9	10	11	12
1. Entrepreneurial	1-5	3.03	-	.62**	.46**	.35**	.33**	.23**	.37**	.10	02	<01	.08	.08
Intentions		(0.98)												
2. Developing	1-5	3.45		-	.63**	.53**	.58**	.29**	.59**	.13	.01	.19**	.23**	.24**
new product and		(0.74)												
market														
opportunities														
3. Building an	1-5	3.84			-	.58**	.57**	.25**	.49**	.23**	.15*	.17*	.27**	.18*
innovative		(0.76)												
environment						-								
4. Initiating	1-5	3.57				-	.56**	.40**	.53**	.17*	.06	.21**	.15*	.19**
investor		(0.91)												
relationships	1.5	2.04						10	COstuli	1.0.4.4	1.5.4	O datati	O O shuth	01.00
5. Defining core	1-5	3.86					-	.42**	.60**	.18**	.15*	.34**	.28**	.31**
purpose	1.5	(0.72)							20**	00	11	21**	1.6*	0.1**
6. Coping with	1-5	3.74						-	.32**	.09	.11	.31**	.16*	.24**
unexpected		(0.79)												
challenges	1-5	3.48								.19**	.03	.20**	.17*	.18*
7. Developing critical human	1-5	(0.86)							-	.19	.05	.20***	.17*	.18**
resources		(0.80)												
8. Extraversion	10-50	33.06								_	.37**	15*	.04	.25**
6. Extraversion	10-50	(8.63)								-	.57	15	.04	.25
9. Agreeableness	10-50	37.07									-	.22**	.07	.39**
y. rigiceusieness	10.50	(6.78)											.07	
10.	10-50	36.04										-	.18**	.40**
Conscientiousness	10 00	(6.40)												
11. Emotional	10-50	32.05			1	1		1	1	1	1	1	-	.04
Stability		(6.08)												
12. Intellect	10-50	36.16			1	1		1	1	1		1	1	-
		(6.58)												

Table 1. Means, standard deviation	ns and bivariate S	Spearman's rho	(n=203)

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

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

5.2. Predictors of entrepreneurial intentions

We assessed which measures (demographics, personality characteristics and ESE) and to what extent they accounted for the participants' self-reported *entrepreneurial intentions* variance through a 3-step hierarchical multiple regression. Table 2 reveals that the demographic variables explained 2% (adj. $R^2 < .01$, p = .375) of the *entrepreneurial intentions* variance. Statistical significance was not reached by any predictor. The results did not provide support for H1, which predicted that the demographic variables would account for a significant variation in *entrepreneurial intentions*.

Our findings suggested that although demographic characteristics may be important for entrepreneurship, in general, in our particular case, they are not significant to determine *entrepreneurial intentions*. We intuitively support De Vita et al.'s (2014) notion that national cultural values generate gender roles. However, we found no evidence of this notion to apply in the case of *entrepreneurial intentions*. Such a result does not support Bauboniene et al. (2018), either, regarding *entrepreneurial intentions* being influenced by socio-cultural and economic environmental aspects. Overall, we found no evidence of country of origin being a determinant of *entrepreneurial intentions*, contrary to previous research (Tomal & Szromnik, 2022; Teixeira et al., 2018; Iakovleva, Kolvereid, & Stephan 2011).

Similarly to *country* and contrary to previous research (Burgess & Borgida, 1999; Eagly, 2013), our data did not reveal significant *gender* effects, either. Thus, *entrepreneurial intentions* seem not reserved for men only, challenging Thébaud (2015) assumptions. In that sense, we found support for Lim and Envick (2013) in that the literature is not conclusive on the topic of gender differences persisting in entrepreneurship, particularly in *entrepreneurial intentions*.

At Step 2 of the regression analysis, adding the Big Five personality characteristics insignificantly increased the explained variance by $\Delta 3\%$, p = .299. Again, no statistical significance was reached by any of the predictors. The results did not provide support for H2, which predicted that the Big Five personality variables, applied over and above the demographic variables, would account for a significant variation in *entrepreneurial intentions*.

These results did not support previous research (Atiya & Osman, 2021; Brockhaus Sr, 1980; Carland et al., 1988), which suggested personal characteristics as significant determinants. It can be argued that such characteristics play a role in any business endeavour, being entrepreneurial or not. However, we did not find evidence that they can determine *entrepreneurial intentions* by themselves.

The explained variance significantly increased by $\Delta 39\%$, over and above the Big Five when the ESE subscales were added at Step 3. *Conscientiousness* (β =-.15, p = .033) and *developing new product and market opportunities* (β =.58, p < .001) emerged as statistically significant predictors of *entrepreneurial intentions*. The results supported H3, which predicted that the ESE subscales, applied over and above the personality variables, would account for a significant variation in *entrepreneurial intentions*.

The Table 2 final column shows the bivariate DV/IV relations. It revealed all ESE subscales as strong individual predictors of *entrepreneurial intentions*, but none of the demographic variables or the personality characteristics. *Developing new product and market opportunities* was the strongest individual predictor, explaining 38% of the variance.

In an overall model with all IVs considered, the highest unique variance was explained by *developing new* product and market opportunities (sr^2 – variance explained, unshared by other variables), 15%. This variable was followed by *age, conscientiousness*, and *coping with unexpected challenges*, which explained 1% of the variance each.

ISSN 2345-0282 (online) <u>http://jssidoi.org/jesi/</u> 2022 Volume 9 Number 3 (March) <u>http://doi.org/10.9770/jesi.2022.9.3(23)</u>

Step	Variables	Step 1	Step 2	Step 3	Step 3	Bivariate	
1		β	β	β	sr ² ^	\mathbb{R}^2	
1. Demographics	Country	-0.10	-0.13	-0.07	<.01	<.01	
	Gender	0.09	0.07	<.01	<.01	<.01	
	Age	-0.03	-0.03	-0.11	0.01	<.01	
2. Big Five	Extraversion		0.11	-0.03	<.01	0.01	
	Agreeableness		-0.14	<.01	<.01	<.01	
	Conscientiousness		-0.02	-0.15*	0.01	<.01	
	Emotional Stability		0.07	-0.07	<.01	<.01	
	Intellect		0.12	<.01	<.01	<.01	
3. ESE	Developing new product			0.58**	0.15	0.38**	
	and market opportunities Building an innovative environment			0.15	<.01	0.21**	
	Initiating investor relationships			0.01	<.01	0.12**	
	Defining core purpose			-0.05	<.01	0.11**	
	Coping with unexpected challenges			0.12	0.01	0.05*	
	Developing critical human resources			-0.02	<.01	0.14**	
	\mathbb{R}^2	0.02	0.05	0.44**			
	R ² change		0.03	0.39**			

Table 2. 3-step hierarchical multiple regression analysis, predicting entrepreneurial intentions with demographic, Big Five and ESE *variables* (n=203).

Standardised beta weights.

* p < .05

** p < .001

 $^{\text{s}}$ sr² – variance explained, unshared by other variables.

These final results support the findings in previous behaviourist work (Bird, 1989; Gartner, 1988). Although not all ESE subscales were significant determinants when taken together, each one of them was a strong individual predictor. This finding means that entrepreneurial education may focus on each separately and expect some influence on *entrepreneurial intentions*. However, it seems that most value in entrepreneurial education might be achieved if the focus falls on *developing new product and market opportunities*. This particular variable consistently emerged as a significant contributor in the regression analysis, the strongest individual predictor and the one explaining the most unique variance.

Those findings support the notion that entrepreneurship is cognitive (Bacq et al., 2017). More importantly, they reveal additional influences when this cognition is present. For example, once ESE is considered in an overall model, demographics (*age*) and personality characteristics (*conscientiousness*) start contributing by explaining unique variance, unshared by other variables. Although some of that information is lost when we look at the overall variance explained, i.e. *age* is not a significant contributor in such an analysis, *conscientiousness* continues to be a significant predictor.

A more interesting consideration is that the relationship between *conscientiousness* and *entrepreneurial intentions* is negative. This counterintuitive finding means that the more persistent, hardworking, and motivated people are not necessarily the ones with the highest intent to start a new venture. However, such people seem to be overall well-aligned with ESE, particularly with *defining core purpose* and *developing new product and market opportunities*. The last, in turn, is the variable most likely to induce *entrepreneurial intentions*.

6. Conclusion

This study research objective was to identify the predictors of entrepreneurial intentions in a sample of young people from Argentina, Belgium, Bulgaria, China, and Romania. We applied a SET-grounded theoretical model. As part of the model, we investigated the contribution of demographics, personality and ESE to our target group's entrepreneurial intentions. Overall, 44% of the variance was explained by the model.

A particular strength of the study was the collected variables diversity. This diversity permitted the establishment of a more complete effects' picture. Another strength was its geographical coverage, i.e. we recruited participants on three continents. A third strength of the study was the depth of the analysis. For example, we explored ESE subscales as separate measures instead of looking at ESE as a single measure.

The study had some notable limitations. For example, the data was collected through online questionnaires. This collection method is known to be susceptible to bias. However, the anonymous nature of the data collection should have minimised bias in the provided data.

Another limitation is the sample size. Despite being sufficient for regression analysis, 203 cases might be considered insufficient to make this study representative. Furthermore, it did not allow regression analyses to be performed for each country separately. The necessary n=>104 + m number of cases (Tabachnick and Fidell, 2007) was collected for neither participating country. As a result, our conclusions and practical implications cannot be referred to a single country but should be regarded as informing a global approach.

A third limitation is that it is highly likely that much more factors than the ones used in our regression analysis influence entrepreneurial intentions. Such factors may include business environment, family traditions or personality traits. We cannot include all potential influencers in a single study for practical reasons, which limits its findings. Nevertheless, such factors can be investigated in future studies to build on the findings presented in this article.

Our data revealed some counterintuitive findings, such as that the country of origin and gender did not matter when predicting entrepreneurial intentions in our population. While we can debate the reasons for such findings, future research should look into why country and gender are significant influencers in one circumstance and not in others. Another unexpected finding was that personality characteristics did not matter by themselves. What ultimately determined our participants' entrepreneurial intentions was their ability to develop new products and market opportunities. Other ESE subscales did not reach statistical significance in the overall model.

Those insights can support the global priority of developing entrepreneurial skills, particularly in young people. They have theoretical implications, such as providing further evidence of the role of ESE towards entrepreneurial intentions, and through it, towards entrepreneurial activities. As a continuation, future research activities may focus on whether initiatives to promote entrepreneurship influence ESE, its subscales or entrepreneurial intentions.

The practical implications of such future knowledge can be immense. While education systems foster entrepreneurial learning in various settings and contexts, our findings provide guidance on where they should focus their efforts. As a result, educational policies can leverage this knowledge to provide opportunities for targeted learning with the potential to enhance the individuals' quality of life. Such learning can be further directed towards solving global challenges. The focus can be on identifying future needs, thus, exploring emerging market opportunities through the development of new products to create new industries (Moyle et al, 2019). For example, people are increasingly working from home, which has its economic and pandemic

ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES ISSN 2345-0282 (online) <u>http://jssidoi.org/jesi/</u> 2022 Volume 9 Number 3 (March)

http://doi.org/10.9770/jesi.2022.9.3(23)

justificataion but can potentially trigger mental health issues. Those issues can be visible, but solving them would require some structure and process, which can be developed through new skills and practical knowledge acquisition, such as entrepreneurship fundamentals. In the current article, we have shown that some skills (developing new product and market opportunities) weigh more than others when it comes to entrepreneurial intentions.

Technological and scientific advancements, as well as the hardships of life in an ever-changing world, can potentially turn such entrepreneurial intentions into motors for sustainable economic development. With the evidence we provide, policymakers and stakeholders can develop better, more targeted initiatives in future to promote such sustainable economic development. Beyond creating employment and career outcomes that matter for young people, entrepreneurial effects may include improved national wellbeing through established pathways from entrepreneurship to employment (Andersen et al, 2017; Dvouletý et al, 2018; Milovic, Jocovic, & Djurisic 2020). Understanding and promoting youth entrepreneurship, which contributes to healthier sustainable communities, supports sustainable economic recovery and growth (Apostolopoulos et al, 2018; Barrett, 2016).

In conclusion, our results can inform more effective entrepreneurship policies. Those policies can extend to inform others on education, health and economy. Such broad implications should be considered when designing practical, research-informed solutions to support willing learners. As a follow-up, future research may investigate to what extent those research-informed solutions generate positive outcomes for learners.

References

Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology*, 52(1), 27-58. https://doi.org/10.1146/annurev.psych.52.1.27

Alzua, M. L., Baez, M. J., Galiwango, S., Joloba, D., Kachero, B., Lopera, M. A., . . . Zigiti, Z. (2020). Beyond technical skills training: The impact of credit counseling on the entrepreneurial behavior of Ugandan youth. *Review of Development Economics*, 24(3), 750-765. http://dx.doi.org/10.1111/rode.12706

Andersen, T., Frohlich Hougaard, K., Sindl, S. & Hill-Dixon, A. (2017). Taking the Future into Their Own Hands. Youth Work and Entrepreneurial Learning. Publications Office of the European Union. <u>https://doi.org/10.2766/83703</u>

Apostolopoulos, N., Al-Dajani, H., Holt, D., Jones, P. & Newbery, R. (2018) Entrepreneurship and the sustainable development goals, in N. Apostolopoulos, H. Al-Dajani, D. Holt, P. Jones & R. Newbery (Eds) *Contemporary Issues in Entrepreneurship Research*, 8(1-7). https://doi.org/10.1108/S2040-72462018000008005

Assan, T. B. (2012). Youth entrepreneurial skills training as a source of employment in the North-Eastern part of Botswana. *Anthropologist*, 14(6), 517-526. <u>https://doi.org/10.1080/09720073.2012.11891277</u>

Atiya, T., & Osman, Z. (2021). The effect of entrepreneurial characteristics on the entrepreneurial intention of university students in Oman and Sudan. *Entrepreneurship and Sustainability Issues*, 8(4), 217-234. <u>https://doi.org/10.9770/jesi.2021.8.4(12)</u>

Bacq, S., Ofstein, L. F., Kickul, J. R., & Gundry, L. K. (2017). Perceived entrepreneurial munificence and entrepreneurial intentions: A social cognitive perspective. *International Small Business Journal*, 35(5), 639-659. <u>https://doi.org/10.1177/0266242616658943</u>

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191. https://doi.org/10.1037/0033-295X.84.2.191

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory: Prentice-Hall, Inc.

Bano, M. (2018). Skills Development and International Development Agenda Setting: Lessons from an Intervention in Northern Nigeria. *European Journal of Development Research*, 30(5), 789-808. <u>https://doi.org/10.1057/s41287-017-0125-0</u>

ISSN 2345-0282 (online) <u>http://jssidoi.org/jesi/</u> 2022 Volume 9 Number 3 (March) <u>http://doi.org/10.9770/jesi.2022.9.3(23)</u>

Baron, R. A. (1998). Cognitive mechanisms in entrepreneurship: Why and when entrepreneurs think differently than other people. *Journal of Business Venturing*, 13(4), 275-294. <u>https://doi.org/10.1016/S0883-9026(97)00031-1</u>

Barrett, R. (2016) Innovation rhetoric and reality: an introduction to the TIM Review's Special Issue on Innovation and Entrepreneurship in Australia, *Technology Innovation Management Review*, 6(6), 5-10. <u>https://doi.org/10.22215/timreview/992</u>

Baubonienė, Ž., Hahn, K. H., Puksas, A., & Malinauskienė, E. (2018). Factors influencing student entrepreneurship intentions: The case of lithuanian and South Korean universities. *Entrepreneurship and Sustainability Issues*, 6(2), 854-871. https://doi.org/10.9770/jesi.2018.6.2(26)

Bazkiaei, H. A., Heng, L. H., Khan, N. U., Saufi, R. B. A., Kasim, R. S. R. J. Do entrepreneurial education and big-five personality traits predict entrepreneurial intention among universities students? (2020). *Cogent Business & Management*, 7(1), 1801217. <u>https://doi.org/10.1080/23311975.2020.1801217</u>

Berry, M. O., Kuriansky, J., Little, M. C., Vistman, B., Mosisili, M. S., Hlothoane, L., . . . Pebane, J. (2013). Entrepreneurial training for girls empowerment in Lesotho: A process evaluation of a model programme. *South African Journal of Psychology*, 43(4), 445-458. https://doi.org/10.1177/0081246313504685

Bird, B. J. (1989). Entrepreneurial behavior. Glenview, Ill: Scott, Foresman.

Bjorvatn, K., Cappelen, A. W., Sekei, L. H., Sørensen, E. Ø., & Tungodden, B. (2020). Teaching through Television: Experimental Evidence on Entrepreneurship Education in Tanzania. *Management Science*, 66(6), 2308. <u>https://doi.org/10.1287/mnsc.2019.3321</u>

Boudreaux, C. J., & Nikolaev, B. (2019). Exploring gender differences in entrepreneurship: how the regulatory environment mitigates differences in early-stage growth aspirations. In High-growth Women's Entrepreneurship: Edward Elgar Publishing. https://doi.org/10.4337/9781788118712.00012

Brockhaus, Sr, R. H. (1980). Risk taking propensity of entrepreneurs. *Academy of Management Journal*, 23(3), 509-520. https://doi.org/10.2307/255515

Brüne, N., & Lutz, E. (2020). The effect of entrepreneurship education in schools on entrepreneurial outcomes: a systematic review. *Management Review Quarterly*, 70(2), 275-305. <u>https://doi.org/10.1007/s11301-019-00168-3</u>

Burgess, D., & Borgida, E. (1999). Who women are, who women should be: Descriptive and prescriptive gender stereotyping in sex discrimination. *Psychology, Public Policy, Law*, 5(3), 665. <u>https://doi.org/10.1037/1076-8971.5.3.665</u>

Carland, J. W., Hoy, F., & Carland, J. A. C. (1988). "Who is an entrepreneur?" is a question worth asking. *American Journal of Small Business*, 12(4), 33-39. <u>https://doi.org/10.1177/104225878801200402</u>

Chen, C. C., Greene, P. G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13(4), 295-316. <u>https://doi.org/10.1016/S0883-9026(97)00029-3</u>

De Noble, A., Jung, D., & Ehrlich, B. (1999). Entrepreneurial self-efficacy: the development of a measure and its relationship to entrepreneurial intention action. *Frontiers of Entrepreneurship Research*, 73-87.

De Vita, L., Mari, M., & Poggesi, S. (2014). Women entrepreneurs in and from developing countries: Evidences from the literature. *European Management Journal*, 32(3), 451-460. <u>https://doi.org/10.1016/j.emj.2013.07.009</u>

DeVellis, R. F. (2016). Scale development: Theory and applications (Vol. 26). Sage publications.

Dvouletý, O., Mühlböck, M., Warmuth, J. & Kittel, B. (2018). 'Scarred' young entrepreneurs. Exploring young adults' transition from former unemployment to self-employment. *Journal of Youth Studies*, 21(9), 1159-118. <u>https://doi.org/10.1080/13676261.2018.1450971</u>

Eagly, A. H. (2013). Sex differences in social behavior: A social-role interpretation: Psychology Press. https://doi.org/10.4324/9780203781906

Elliott, A., & Woodward, W. (2007). Statistical analysis quick reference guidebook: With SPSS examples: Sage. https://doi.org/10.4135/9781412985949

ISSN 2345-0282 (online) <u>http://jssidoi.org/jesi/</u> 2022 Volume 9 Number 3 (March) http://doi.org/10.9770/jesi.2022.9.3(23)

European Commission. (2017). Taking the future into their own hands. Youth work and entrepreneurial learning. Retrieved from <u>https://op.europa.eu/s/oHsv</u>

Ferguson, K. M. (2018). Employment Outcomes from a Randomized Controlled Trial of Two Employment Interventions With Homeless Youth. *Journal of the Society for Social Work and Research*, 9(1), 1. <u>https://doi.org/10.1086/696372</u>

Gartner, W. B. (1988). "Who is an entrepreneur?" is the wrong question. American journal of small business, 12(4), 11-32. https://doi.org/10.1177/104225878801200401

Gibb, A., & Ritchie, J. (1982). Understanding the Process of Starting Small Businesses. *European small business journal*, 1(1), 26-45. https://doi.org/10.1177/026624268200100102

Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, 4(1), 26. https://doi.org/10.1037/1040-3590.4.1.26

Grewe, U., & Brahm, T. (2020). Development of entrepreneurial competences in mini-companies at schools. *Education & Training*, 62(7/8), 917-931. <u>https://doi.org/10.1108/ET-08-2019-0186</u>

Hechavarría, D. M., Terjesen, S. A., Stenholm, P., Brännback, M., & Lång, S. (2018). More than Words: Do Gendered Linguistic Structures Widen the Gender Gap in Entrepreneurial Activity? *Entrepreneurship Theory and Practice*, 42(5), 797-817. https://doi.org/10.1177/1042258718795350

Heinrichs, K. (2016). Dealing with Critical Incidents in the Postformation Phase: Design and Evaluation of an Entrepreneurship Education Course. Vocations and Learning, 9(3), 257-273. <u>https://doi.org/10.1007/s12186-016-9151-x</u>

Huber, L. R., Sloof, R., & Van Praag, M. (2014). The Effect of Early Entrepreneurship Education: Evidence from a Field Experiment. *European Economic Review*, 72, 76-97. <u>https://doi.org/10.1016/j.euroecorev.2014.09.002</u>

Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education*+ *Training*, 53(5), 353-370. <u>https://doi.org/10.1108/00400911111147686</u>

Ismail, A. B. (2017). We are different: a case study of entrepreneurship education in Malaysia. Queensland University of Technology.

Kinner, C. (2015). Boosting High-Impact Entrepreneurship in Australia-A Role for Universities. Australian Government: Office of the Chief Scientist.

Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5), 411-432. <u>https://doi.org/10.1016/S0883-9026(98)00033-0</u>

Lerner, R. M., & Damon, W. (2012). Entrepreneurship in adolescence: A relational developmental systems approach. *International Journal of Developmental Science*, 6(3-4), 117-126. <u>https://doi.org/10.3233/DEV-2012-12107</u>

Lim, S., & Envick, B. R. (2013). Gender and entrepreneurial orientation: a multi-country study. *International Entrepreneurship Management Journal*, 9(3), 465-482. <u>https://doi.org/10.1007/s11365-011-0183-2</u>

Mahmoud, M. A., Ahmad, S., & Poespowidjojo, D. A. L. J. M. R. R. (2020). Intrapreneurial behavior, big five personality and individual performance. *Management Research Review*, 43(12) <u>https://doi.org/10.1108/MRR-09-2019-0419</u>

McCallum, E., Weicht, R., McMullan, L., & Price, A. (2018). EntreComp into action-Get inspired, make it happen: A user guide to the European Entrepreneurship Competence Framework.

Milovic, N., Jocovic, M., & Djurisic, V. (2020). The Role of Entrepreneurship in the Development of Local Self-Governments in Montenegro. *Transformations in Business & Economics*, Vol. 19, No 2 (50), 159-170

Moyle, C-L., Pandey, V., Renando, C., Barrett, R. & Sharma, A. (2019). Queensland Connects: Accelerating Queensland's Innovation-Driven Entrepreneurs, Australian Centre for Entrepreneurship Research. Available from <u>https://eprints.qut.edu.au/131590/7/131590.pdf</u>

Newman, A., Obschonka, M., Schwarz, S., Cohen, M., & Nielsen, I. (2019). Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. *Journal of Vocational Behavior*, 110, 403-419. <u>https://doi.org/10.1016/j.jvb.2018.05.012</u>

ISSN 2345-0282 (online) <u>http://jssidoi.org/jesi/</u> 2022 Volume 9 Number 3 (March) <u>http://doi.org/10.9770/jesi.2022.9.3(23)</u>

Obschonka, M. (2016). Adolescent pathways to entrepreneurship. *Child Development Perspectives*, 10(3), 196-201. https://doi.org/10.1111/cdep.12185

Obschonka, M., Hakkarainen, K., Lonka, K., & Salmela-Aro, K. (2017). Entrepreneurship as a twenty-first century skill: entrepreneurial alertness and intention in the transition to adulthood. *Small Business Economics*, 48(3), 487-501. https://doi.org/10.1007/s11187-016-9798-6

Oosterbeek, H., Van Praag, M., & Ijsselstein, A. (2010). The impact of entrepreneurship education on entrepreneurship skills and motivation. *European Economic Review*, 54(3), 442-454. <u>https://doi.org/10.1016/j.euroecorev.2009.08.002</u>

Pepin, M., & St-Jean, E. (2019). Assessing the impacts of school entrepreneurial initiatives. *Journal of Small Business and Enterprise Development*, 26(2), 273-288. <u>https://doi.org/10.1108/JSBED-07-2018-0224</u>

Pinho, M. I., Fernandes, D., Serrão, C., & Mascarenhas, D. (2019). Youth Start Social Entrepreneurship Program for Kids: Portuguese UKIDS-Case Study. *Discourse and Communication for Sustainable Education*, 10(2), 33-48. <u>https://doi.org/10.2478/dcse-2019-0016</u>

Quality Assurance Agency for Higher Education. (2018). Enterprise and entrepreneurship education: Guidance for UK higher education providers: QAA Gloucester.

Rodriguez, S., & Lieber, H. (2020). Relationship between Entrepreneurship Education, Entrepreneurial Mindset, and Career Readiness in Secondary Students. *The Journal of experiential education*, 43(3), 277-298. <u>https://doi.org/10.1177/1053825920919462</u>

Ryu, P., & Kim, D. (2020). Moderating effect of gender on the opportunity recognition and entrepreneurial intention. *Entrepreneurship and Sustainability Issues*, 8(1), 725-740. <u>https://doi.org/10.9770/jesi.2020.8.1(49)</u>

Schlaegel, C., & Koenig, M. (2014). Determinants of entrepreneurial intent: A meta-analytic test and integration of competing models. *Entrepreneurship Theory Practice*, 38(2), 291-332. <u>https://doi.org/10.1111/etap.12087</u>

Schroder, E., & Schmitt-Rodermund, E. (2006). Crystallising Enterprising Interests among Adolescents through a Career Development Program: The Role of Personality and Family Background. *Journal of Vocational Behavior*, 69(3), 494-509. https://doi.org/10.1016/j.jvb.2006.05.004

Shinnar, R. S., Giacomin, O., & Janssen, F. (2012). Entrepreneurial Perceptions and Intentions: The Role of Gender and Culture. *Entrepreneurship Theory and Practice*, 36(3), 465-493. <u>https://doi.org/10.1111/j.1540-6520.2012.00509.x</u>

Tabachnick, & Fidell. (2007). Using multivariate statistics: Allyn & Bacon/Pearson Education.

Teixeira, S. J., Casteleiro, C. M. L., Rodrigues, R. G., & Guerra, M. D. (2018). Entrepreneurial intentions and entrepreneurship in European countries. *International Journal of Innovation Science*, 10(1), 22-42. <u>https://doi.org/10.1108/IJIS-07-2017-0062</u>

Thébaud, S. (2015). Business as plan B: Institutional foundations of gender inequality in entrepreneurship across 24 industrialised countries. *Administrative Science Quarterly*, 60(4), 671-711. https://doi.org/10.1177/0001839215591627

Tomal, M., & Szromnik, A. (2022). Determinants of entrepreneurial intentions of university students in selected post-communist countries in Europe: investigating cross-cultural differences. *Journal of Business Economics and Management*, 23(1), 60-81. https://doi.org/10.3846/jbem.2021.15546

Valliere, D., & Peterson, R. (2009). Entrepreneurship and economic growth: Evidence from emerging and developed countries. *Entrepreneurship Regional Development*, 21(5-6), 459-480. <u>https://doi.org/10.1080/08985620802332723</u>

Veciana, J. M., Aponte, M., & Urbano, D. (2005). University students' attitudes towards entrepreneurship: A two countries comparison. *The International Entrepreneurship Management Journal*, 1(2), 165-182. <u>https://doi.org/10.1007/s11365-005-1127-5</u>

Westhead, P., & Solesvik, M. Z. (2016). Entrepreneurship education and entrepreneurial intention: Do female students benefit? *International small business journal*, 34(8), 979-1003. <u>https://doi.org/10.1177/0266242615612534</u>

Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265. <u>https://doi.org/10.1037/0021-9010.90.6.1265</u>

ISSN 2345-0282 (online) <u>http://jssidoi.org/jesi/</u> 2022 Volume 9 Number 3 (March) http://doi.org/10.9770/iesi.2022.9.3(23)

Funding: This article is an output of project "Youth Employment Social Entrepreneurship" (YES, project number: 617207-EPP-1-2020-1-RO-EPPKA2-CBY-ACPALA), implemented with the support of the Erasmus+ programme of the European Union, Grant decision (agreement number: 2020-617207) of the European Commission Education, Audiovisual and Culture Executive Agency (EACEA). The article reflects the views only of its authors and the European Commission cannot be held responsible for any use which may be made of the information contained therein.

Data Availability Statement: All data is provided in full in the results section of this paper.

Authors' Contributions: Conceptualization: Daniel Vankov, David Kozma, Martin Galanternik, Johan Chiers, Borislav Vankov, Lin Wang; methodology: Daniel Vankov, David Kozma, Martin Galanternik, Johan Chiers, Borislav Vankov, Lin Wang; data analysis: Daniel Vankov, writing—original draft preparation: Daniel Vankov; writing; review and editing: Daniel Vankov, David Kozma, Martin Galanternik, Johan Chiers, Borislav Vankov, Lin Wang; visualization: Daniel Vankov, David Kozma, Martin Galanternik, Johan Chiers, Borislav Vankov, Lin Wang; visualization: Daniel Vankov, David Kozma, Martin Galanternik, Johan Chiers, Borislav Vankov, Lin Wang; visualization: Daniel Vankov, David Kozma, Martin Galanternik, Johan Chiers, Borislav Vankov, Lin Wang; visualization: Daniel Vankov, David Kozma, Martin Galanternik, Johan Chiers, Borislav Vankov, Lin Wang; visualization: Daniel Vankov, David Kozma, Martin Galanternik, Johan Chiers, Borislav Vankov, Lin Wang; visualization: Daniel Vankov, David Kozma, Martin Galanternik, Johan Chiers, Borislav Vankov, Lin Wang; visualization: Daniel Vankov, David Kozma, Martin Galanternik, Johan Chiers, Borislav Vankov, Lin Wang; visualization: Daniel Vankov, David Kozma, Martin Galanternik, Johan Chiers, Borislav Vankov, Lin Wang. All authors have read and agreed to the published version of the manuscript.

Daniel VANKOV, PhD, Fellow with the Queensland University of Technology. After more than 15 years of managing international projects in the not-for-profit industry, ten as a C-Level manager, I decided to fill-in identified gaps in understanding applied psychology by becoming an academic. As a result, my PhD builds on three master qualifications in the field of business and economics, incl. the prestigious Cambridge University MBA. My expertise draws on concepts and evidence from the domains of psychology, business and technology. My focus is on extracting and applying data-driven knowledge to improve outcomes for end-users, leadership and culture in the form of enhanced efficiency, accuracy, timeliness and convenience of delivered services. I keep engaging with the industry as a consultant and a researcher, such as with Michiel de Ruyter Scientific Organization from Partium within this YES project article. Research interests: International Cooperation, Entrepreneurship, International Business, Project Management, Strategy, Innovation, and Technology. ORCID ID: <u>https://orcid.org/0000-0002-0739-7712</u>

Dávid-Gyula KOZMA, M.A. in European Social Politics and M.A. in Entrepreneurship and Business Administration, Partium Christian University, Oradea, Romania. He is the Executive Director of Asociatia Krebelsberg Kuno. Research interest: Youth Entrepreneurship, Business Development, Human Resources, Social Policy. ORCID ID: <u>https://orcid.org/0000-0001-7389-0276</u>

Martin GALANTERNIK, B.A. in Political Science, University of Buenos Aires, Argentina. He is the founder and Executive Director of MINU Asociación Civil and Coordinator of the Latin American Political Innovation Network. Research interest: Youth Entrepreneurship, Civic Education, Latin American Politics, Youth Engagement, Road Safety. ORCID ID: <u>https://orcid.org/0000-0002-1015-3815</u>

Johan CHIERS, M. Sc in Electromechanical Engineering, Vrije Universiteit Brussels (VUB), Belgium. He is the Managing Director of Responsible Young Drivers and the founder of TOP-25 Europe. Former President of the Belgian Federation of Philantropic Foundations. Research interests : Youth Entrepreneurship, Health Promotion, Injury Prevention, Road Safety. ORCID ID: https://orcid.org/0000-0003-1118-8339

Borislav VANKOV, M.A. in Law, University of national and world economy Sofia, Bulgaria. Founder and projects coordinator of Narodno Chitalishte Svetal Den – 2009 and Management board member of the Bulgarian Union of Blind People. Research interest: Social Entrepreneurship, Youth Entrepreneurship, Road safety, Integration of People with Disabilities, Civil Education. ORCID ID: <u>https://orcid.org/0000-0003-4140-0484</u>

Lin WANG, B.A. in Public Health, Medical School, Fudan University, China. She is the founder and Executive Director of JS CREATIVE Co. Ltd, Deputy director of JURAN Institute in China, and mentor of China youth Entrepreneurship. Research interest: Youth Entrepreneurship, Quality Management, Child & Adolescent Injury Prevention. ORCID ID: <u>https://orcid.org/0000-0001-6017-182X</u>

Make your research more visible, join the Twitter account of ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES: @Entrepr69728810

Copyright © 2022 by author(s) and VsI Entrepreneurship and Sustainability Center This work is licensed under the Creative Commons Attribution International License (CC BY). <u>http://creativecommons.org/licenses/by/4.0/</u>

😨 🛈 Open Access