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Entrepreneurial intentions among university students in Italy

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Abstract

Purpose: In Italy, thousands of university graduates intend to engage in job being their first choice rather to start their own businesses. The aim of this study is to explore university students' entrepreneurial mindset and their intentions for starting a new business by investigating the deterring factors which restrict them to go towards self-employment.

Methodology: The primary data were collected by a self-prepared questionnaire to assess the role of explanatory factors such as gender, age, degree, department, previous education, previous grades, job experience, business experience, family background, entrepreneurial education, personality traits (Five Factor Model), finance and government support with the dependent variable "entrepreneurial intentions". The data was then analysed using multiple regression model.

Findings: Gender, family background, entrepreneurial education, extraversion, agreeableness, and openness to experience showed positive results while age, previous grades, and neuroticism showed a negative relationship with entrepreneurial intentions.

Limitations: This study was limited to its sample population and the set of explanatory variables which can be extended in the future research.

Originality: This study fulfils the need to identify the factors which play a significant role in influencing the students' entrepreneurial mindset. This is a latest study with the selected factors in the context of the Italian university students.

Keywords: Entrepreneurship, Entrepreneurial intentions, Entrepreneurial mindset, Entrepreneurial education

Background

Entrepreneurs are considered the backbone of the industries as they come up with innovative business ideas which ultimately contribute to the social and economic growth. In Italy, thousands of students graduate from universities every year, but only a few of them intend to start their own businesses. The preference for a paid job is one of the main reasons of unemployment rate among young (25–34) university graduates which has increased from 11.5% in 2011 to 15.3% at the end of 2016 (ISTAT). The situation then becomes disturbing for young graduates, public and for government as well. The best option is thus, to move towards self-employed instead of looking for wage employment as a *survival strategy*.

The evidence from OECD nations showed that less than 10% of young population was involved in starting new ventures during early 2000s (Nolan, 2003). Twaalfhoven (2003)

found that the proportions of the European students who are interested in becoming entrepreneurs within 3 years after their graduation are only 10%. The situation is not very appreciable in Italy due to the noticeable dispersion of micro-firms and self-employment in total employment. For instance, the entrepreneurial activity was found less than 5% among adult population involved in starting and managing a new business which is significantly lower when compared to most advanced economies (Bosma and Leve, 2009). Furthermore, the startup rate of new businesses has constantly decreased, whereas the mortality rate of firms has been increased which generated a destructive and growing demographic imbalance (Arrighetti and Traù, 2006, 2012).

According to GEM (2014), among the innovation driven economies; Italy has the second lowest values for TEA (Total early-stage Entrepreneurial Activity) with the rate of 4.4%. This remained stagnant during 2016 (GEM, 2016). The perception of entrepreneurial opportunities in Italy is also quite low, about the half of average of Innovation-Driven countries which can be due to the fear of failure (GEM, 2016). The data from previous studies revealed that the TEA always remained very limited in Italy in recent years, particularly after 2007. After the very low level (3.4%) registered in 2013, it is back to 4.3% which is equal to the level seen in 2012.

The latest relevant studies conducted in Italy were by Ferrante et al. (2016) and Fini et al. (2016) who described the students' entrepreneurial engagement as well as their entrepreneurial intentions and showed a large share of intentional entrepreneurs in Italian universities. While in another relevant study, Arrighetti et al. (2013) estimated the sources of entrepreneurial intentions, differentiating between the propensity to start a new business and the perceived likelihood of becoming an entrepreneur. The latter study specifically discusses about the entrepreneurial mind-set of the students by analysing the influencing factors and provides a valuable contribution to the literature with the set of specific variables which is not currently available in the Italian context.

Motivation of the study

The aforementioned discussion provides the evidence of the insufficient entrepreneurial activities for the economic development in Italy and hence, seriously needs to be addressed. This would possibly be achieved through looking into the factors holding youth back moving toward self-employment. This is, in fact, the motivation of this study; to explore the facts behind the scene. Education plays an important and positive role in entrepreneurial performance. University students are young and highly educated potential entrepreneurs and the choice to focus on them justifies the reason of their role in future economic development in Italy (Ferrante, 2005; Van Der Sluis, Van Praag, and Vijverberg 2005; Van Der Sluis, Van Praag, and Vijverberg 2008). Moreover, new businesses created by university students and graduates are a powerful tool to bring new knowledge and strategies to the market which turns out spur productivity growth and job creation (Ferrante, Federici and Parisi, 2016). Thus, the university students signify the most capable segment of the future entrepreneurial supply and their response may have stimulating policy inferences.

Objective of the study

This sole objective of this study is to identify the motivational factors which can support university student in Italy to become entrepreneurs.

Research questions

The major question of this research work revolves around which factors can motivate and hinder the entrepreneurial intentions among university students in Italy?

The following specific questions have also been addressed on the basis of the main question to explore the entrepreneurial intentions:

- 1- Do demographic factors such as age, gender, education level and grades, work and business experience, family background affect the entrepreneurial intentions among university students?
- 2- How do big five personality traits affect the entrepreneurial intentions?
- 3- Is there any relationship between entrepreneurial education and entrepreneurial intentions?
- 4- Does government support spurs entrepreneurial intentions?
- 5- Does finance availability promote the entrepreneurial intentions among university students?

Literature review

In recent years, entrepreneurship has played a major role towards job creation and contributed to economic growth and overall to national prosperity (OECD, 2012). In Europe, for the last many years promotion of entrepreneurship has become significantly important for the policy makers to lay down certain policies in order to boost up the entrepreneurship.

Entrepreneurial intentions stated by Thompson (2009) as *“self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future”*. Choo and Wong (2009) described entrepreneurial intentions as the exploration and assessment of information which is beneficial to achieve the objective of business creation. The focus of entrepreneurship is to have entrepreneurial intentions before starting the actual business because it determines the starting point of a new business creation. A personal commitment which has an important impact on shaping new ventures comes from entrepreneurial intentions (Choo and Wong, 2009). The literature on entrepreneurial intentions specifies the significance of self-employment intentions (Fridoline, 2009). Accordingly, identifying these intentions will allow the scholars to explore the dynamics of business venture creation process (Weerakoon and Gunatissa, 2014).

Kristiansen and Indarti (2004) identified the factors of entrepreneurial intentions in Norwegian and Indonesian students. They found high level of entrepreneurial intentions among Indonesian students which was due to economic challenges in Indonesia. While low level was found among Norwegian students, possibly due to high economic remunerations to employees. In addition, high level of entrepreneurial intentions existed in American students' compared to French students. The significant difference was due to already established entrepreneurial culture and the positive attitude towards new venture creation (Boissin et al., 2009).

In China, male students are more likely to become entrepreneurs than female students. Subsequently, American students' intention level was also found higher than Chinese students due to an entrenched culture of self-independence in the USA.

However, the Chinese students with self-employment experience background had a stronger level of entrepreneurial intentions than American students (Plant and Ren, 2010).

Social environment factors through institutions such as legal rules and government support play a vital role in affecting individuals' entrepreneurship (Stephen, Urbano, and van Hemmen, 2009). Bridge, O'Neill and Martin (2009) added that entrepreneurial education plans, sponsoring enterprise advice, training centers, and giving financial support are the key elements, a government can provide to the new business start-ups to encourage and develop more businesses.

Generally, the availability of financial capital has been directly associated with entrepreneurship (Kim et al., 2013; Rodriguez et al., 2009). Potential entrepreneurs are needed to raise capital from other places as they hardly finance a new business completely by themselves (Steier and Greenwood, 2000). Empirical researchers showed that the lack of capital is considered as the major barrier for most entrepreneurs (Steel, 1994, Meier and Pilgrim, 1994) and that capital can come in the shape of gifts, support from family, friendly loans, or loans from financial institutions with interest.

The entrepreneurial education increases the entrepreneurship intentions and raises the knowledge and skills of individuals as well. Entrepreneurship intention can be influenced to address various subjective norms and resources which are barriers to create new ventures (Davey et al., 2011; Jones et al., 2011). It has been shown that positive relationship occurs between economics and business education and business creation. As a result, it can be seen by the intensive growth of business education in USA which has enhanced the levels of start-ups and new ventures (Drost, 2010). The entrepreneurial education has showed higher perceived entrepreneurial motivation than the students without enterprise courses (Solevik, 2013). Subsequent studies also show that entrepreneurship education can possibly support graduates to become good entrepreneurs (Pickernell et al., 2011) as it increases the entrepreneurial awareness among students which can encourage them to adopt entrepreneurship as a career and start new business ventures (Kirby, 2004).

The personality of students indirectly influences their intentions to start a new business through their attitudes (Lüthje and Franke, 2003). The personality traits can be categorised into two sets such as general and specific personality traits. The general personality traits include openness to experience, neuroticism, extraversion, agreeableness, conscientiousness, i.e. the big five; whereas, specific personality traits comprise locus of control, need for achievement, autonomy, risk-taking, innovativeness and self-efficacy. The present study focus on the general personality traits (the big five personality factors).

Methods

Regular and full-time (I and II bachelor and Master) students enrolled at University of Cassino and Southern Lazio (4000 appx.) were sent the questionnaires via email for a survey. However, due to incomplete/wrong email addresses in the student database, some students couldn't receive the questionnaires. The parameters of 5% margin of error, 99% confidence level and 20% estimated response rate were fixed. Total 586 respondents were needed but only 510 students (both male and female) responded and

produced 13% response rate. Overall, after completion of survey, the actual margin of error was 5.33%.

The research goals/questions of this study needed the exploration of certain relationships. The survey strategy was based on a self-prepared questionnaire designed in Italian language. Cronbach's Alpha test was used to analyse the reliability while KMO and Bartlett's test for the validity of the questionnaire. The questionnaire contained total 5 sections. The first section of the questionnaire contained demographic information. The second section was related to environmental support and involves two variables which are Finance availability and Government support. The third section described the entrepreneurial education. The fourth section was related to entrepreneurial intentions while the last section was devoted to the analysis of the personality traits.

A total of 18 independent variables (gender, age, degree, department, HS education, HS grades, job experience, business experience, family background (i.e. parent's education, parent's occupation), availability of capital, government support, entrepreneurial education, extraversion, conscientiousness, agreeableness, neuroticism, and openness to experience) were used to analyse the effect on the entrepreneurial intentions (dependent variable). Only continuous variables including entrepreneurial intentions were measured on the 5 point Likert scale. Multiple regression model was applied to analyse the data using IBM SPSS 22.

Results

Table 1 shows the frequency and percentages of all the categorical variables while the mean values and standard deviation are given for the continuous variables.

According to Tables 2, 10 variables which are Age, Gender (female), Previous grades, Mother occupation, Business experience, Entrepreneurial education, Extraversion, Agreeableness, Neuroticism, and Openness were showing significant values, which means that these are the only best predictors of the model. The last column of Table 2 shows the Collinearity Statistics where tolerance and VIF of all the variables are perfect and multicollinearity does not exist at all.

The detail of the analysis is as follows: University students with the age group of 21–23 and 24–25 contribute less to the dependent variable (Entrepreneurial Intentions) as compared to the age group of 20 or less.

The slope of Female entrepreneurial intentions is significantly negative as compared to the slope of the male students which indicates that female students have less interest in entrepreneurship. Students with HS diploma grade from 60 to 70 showed a stronger intention towards entrepreneurship against the students with grades from 91 to 100. The students whose mothers were entrepreneurs showed a positive influence on the entrepreneurial choice as compared to the students whose mothers are freelancers or employees. University students with any previous experience in starting or running a business were 20% more likely to become entrepreneurs as compared to the students without any business experience. Entrepreneurial education had a positive effect on students' entrepreneurial intentions as one unit increased in entrepreneurial education; intentions to become an entrepreneur increased by 0.09 units. In personality test, extraversion, agreeableness, and openness to experience showed a positive sign while neuroticism showed a negative sign.

Table 1 Descriptive Statistics

Variable	Frequency	%
Gender		
Female	273	53.5
Male	237	46.5
Age		
20 or less	67	13.1
21–23	170	33.3
24–26	165	32.4
27–29	57	11.2
30 or more	51	10.0
Degree Program		
Bachelor	309	60.6
Master	201	39.4
Department		
Economics	171	33.5
Law	81	15.9
Engineering	123	24.1
Humanities	88	17.3
Literature and Philosophy	47	9.2
Previous Education		
Classical High School	101	19.8
Scientific High School	193	37.8
Artistic High School	27	5.3
Education/Teaching School	42	8.2
Arts Institute	4	.8
Others	143	28.0
Previous Education Grades		
60	20	3.9
61–70	77	15.1
71–80	114	22.4
81–90	176	34.5
91–100	123	24.1
Father Education		
No education	1	.2
Elementary School	81	15.9
Middle School	174	34.1
Diploma	184	36.1
University	70	13.7
Mother Education		
No education	0	0.0
Elementary School	42	8.2
Middle School	176	34.5
Diploma	214	42.0
University	78	15.3
Father Occupation		

Table 1 Descriptive Statistics (*Continued*)

Variable	Frequency	%
Freelancer	73	14.3
Employee	252	49.4
Entrepreneur	84	16.5
Unemployed	51	10.0
Retired	50	9.8
Mother Occupation		
Freelancer	64	12.5
Employee	192	37.6
Entrepreneur	53	10.4
Unemployed	163	32.0
Retired	38	7.5
Job Experience		
No	232	45.5
Yes	278	54.5
Business Experience		
No	468	91.8
Yes	42	8.2
Variable	Mean	SD
Capital Availability	2.15	0.64
Government Support	1.98	0.73
Entrepreneurial Education	3.02	0.61
Entrepreneurial Intentions	3.35	0.74
Extraversion	3.54	0.84
Agreeableness	3.92	0.78
Conscientiousness	3.91	0.84
Neuroticism	2.89	0.73
Openness	3.95	0.67

In Table 3, R square represents 27%. In other terms, 27% of the variance in the dependent variable (entrepreneurial intention) is explained by the model, therefore, the regressors are sufficiently explain the response variable.

ANOVA results in Table 4 showed the fitness of the model. Based on the significance values (0.000), the null hypothesis was rejected and it was concluded that the overall model was fit and significant.

Discussion

Various categorical and continuous variables were analysed during the present study but only statistically significant variables are discussed.

To analyse the relation between age groups with students' entrepreneurial intentions, the age was inserted in the multiple regression model (Table 2). Although, only 2 age groups (21–23 and 24–25) were found with the statistically significant results in the comparison of the base age group (20 or less). It was concluded that the students with the age group of 20 or less are more inclined to become entrepreneurs as compared to the other groups. The younger individuals showed higher intention for entrepreneurial

Table 2 Multiple regression model. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error				Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	2.539	.408		6.229	.000	1.738	3.341		
Age Group									
Age_21–23	−.232	.099	−.148	−2.341	.020	−.427	−.037	.390	2.56
Age_24–26	−.278	.108	−.176	−2.571	.010	−.491	−.066	.332	3.01
Age_27–29	−.260	.136	−.110	−1.912	.056	−.526	.007	.465	2.15
30 or more	−.162	.146	−.065	−1.110	.268	−.448	.125	.446	2.24
20 or less (base)									
Gender									
Female	−.234	.066	−.158	−3.533	.000	−.365	−.104	.778	1.28
Male (base)									
Degree									
Master	−.053	.078	−.035	−.681	.496	−.207	.100	.585	1.70
Bachelor (base)									
Department									
Law	.096	.096	.048	1.003	.316	−.093	.285	.689	1.45
Engineering	−.097	.089	−.056	−1.095	.274	−.273	.078	.586	1.70
Humanities	−.061	.093	−.031	−.651	.515	−.244	.123	.685	1.45
Philosophy	−.177	.116	−.069	−1.522	.129	−.405	.052	.753	1.32
Economics (base)									
Previous Education									
Classical High School	.155	.099	.083	1.568	.117	−.039	.348	.552	1.81
Scientific High School	.036	.082	.024	.437	.663	−.126	.198	.534	1.87
Artistic High School	.175	.152	.053	1.152	.250	−.124	.475	.733	1.36
Educational studies School	.061	.124	.023	.496	.620	−.182	.305	.735	1.36
Arts institution	.041	.346	.005	.118	.906	−.639	.721	.914	1.09
Others (base)									
HS Grades									
60	.357	.166	.093	2.156	.032	.032	.683	.823	1.21
61–70	.233	.102	.113	2.293	.022	.033	.433	.641	1.56
71–80	.140	.091	.078	1.536	.125	−.039	.318	.593	1.68
81–90	.121	.082	.078	1.477	.140	−.040	.282	.561	1.78
100 (base)									
Father Occupation									
Freelancer	.208	.111	.098	1.874	.062	−.010	.425	.565	1.77
Employee	−.112	.088	−.075	−1.262	.208	−.285	.062	.436	2.29
Unemployed	.060	.125	.024	.480	.632	−.186	.306	.604	1.65
Retired	.020	.129	.008	.152	.879	−.234	.273	.578	1.73
Entrepreneur (base)									
Mother Occupation									

Table 2 Multiple regression model. Coefficients^a (Continued)

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error				Lower Bound	Upper Bound	Tolerance	VIF
Freelancer	-.302	.132	-.135	-2.300	.022	-.561	-.044	.449	2.22
Employee	-.331	.107	-.216	-3.090	.002	-.542	-.121	.315	3.17
Unemployed	-.182	.113	-.115	-1.619	.106	-.404	.039	.309	3.23
Retired	-.259	.147	-.092	-1.761	.079	-.548	.030	.570	1.75
Entrepreneur (base)									
Work Experience									
Yes	.017	.067	.011	.254	.800	-.114	.148	.768	1.30
No (base)									
Business Experience									
No	-.200	.116	-.074	-1.714	.087	-.428	.029	.832	1.20
Yes (base)									
Parents' Education	-.003	.043	-.003	-.061	.952	-.086	.081	.787	1.27
Finance Availability	-.022	.054	-.019	-.406	.685	-.127	.084	.713	1.40
Government Support	-.004	.046	-.004	-.095	.925	-.095	.086	.745	1.34
Entrepreneurial Education	.082	.029	.118	2.824	.005	.025	.140	.883	1.13
Personality Trait									
Extraversion	.123	.042	.138	2.904	.004	.040	.206	.681	1.46
Agreeableness	.114	.045	.119	2.501	.013	.024	.203	.686	1.45
Conscientiousness-.015.040-.017-.365.715-.093.064.7531.32 Neuroticism-.085.043-.084-1.966.050 -.169.000.8551.17 Openness.198.049.1804.050.000.102.295.7791.28 ^a Dependent variable: entrepreneurial intentions									

behaviours than the older individuals, implying that individual's age is negatively related to entrepreneurial intention which is in consistent with the previous findings of Criaco (2012); Hatak et al. (2014).

Both international studies and the Danish Global Entrepreneurship Monitor (Schøtt, 2011; Amorós and Bosma, 2014;) found a consistent pattern of a larger share of males in the engagement of entrepreneurial activities compared to females (as measured by an intention to start a new business). The present study also explored that how gender might differ in entrepreneurial intentions. Table 2 shows that male (43.8%) and female students (56.2%) intend to start their career as employees. The share of intentional entrepreneurs among males was significantly higher (25%) than among females. Interestingly, the share of male and female students who intend to become employees after 5 years of their graduation is lower for both male (14.3%) and female (15.8%) students and the share of female students was found slightly higher than the share of male students (Table 5).

Table 3 Model summary

Model	R	R Square	Adjusted R Square	Std. error of the estimate
1	.521 ^a	.271	.213	.65889

Table 4 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	76.139	38	2.004	4.615	.000
	Residual	204.477	471	.434		
	Total	280.616	509			

^a. Dependent Variable: Entrepreneurial Intentions

This investigation shows a positive relationship between university students' entrepreneurial intentions and their HS diploma grade. The students were asked to select their HS grades from given categories. In multiple regression model (Table 2), the first two categories (60 and 60—71) were statistically significant, indicating a negative relationship between grades and entrepreneurial intention among university students.

Family background were divided into two sections; parents' level of education and parents' occupation. It has been already pointed out by Ozaralli and Rivenburgh (2016) that families with entrepreneurial occupation provide youngsters with an opportunity to obtain certain business skills, confidence, experience, and vision, all of which contribute to the inclination to start a new business. In accordance, the results of present study showed that the students whose mothers were working as entrepreneurs had significantly more intentions to start a business, compared to the students whose mothers were involved in any other occupation. These results, thus, support the evidence of the previous studies (Shapero, 1984; Scott and Twomey, 1988; Katz, 1992) showing that the family background influences entrepreneurial intentions. Similarly, Peterman and Kennedy (2003) found that the intention to start a new business becomes more positive by prior exposure to entrepreneurship.

The statistically significant relationship between extraversion and students' entrepreneurial intentions was found and hence confirms the findings in the leadership literature which proposes that extraversion is positively related to leadership (Burch and Anderson, 2008). Furthermore, as individuals who are extravert, are usually more certain about their abilities, their intentions are louder than someone who is more introverted.

Openness to experience appears to be the personality dimensions that have the strongest effect on entrepreneurial intentions in this study because the individuals who score high in openness to experience are more likely to be intellectually curious, imaginative and creative, related to opportunity recognition (Ciavarella et al., 2004). The results showed that the openness personality traits have positive association with student's entrepreneurial intentions. The more the student was curious and imaginative, the more he/she is likely to start a business. The current findings support the previous studies i.e. Schumpeter (1911) who argued that exploring new ideas, being creative, and taking novel approaches were essential for starting a new venture as well as Caliendo et al., (2011) about the effect of openness on self-employment.

Previous studies suggest that entrepreneurs are expected to score lower on agreeableness (Singh and DeNoble 2003; Zhao and Seibert, 2006; Zhao, 2009). An agreeable individual is more likely to be manipulated and influenced by others (Liang et al., 2015). On the other hand, a high level of agreeableness was necessary to receive the required support, for instance, to start up a new venture. Entrepreneurs who create trusting, flexible and polite relationships with their customers should expect to reap the profits

Table 5 Starting business after 5 years of the graduation * Gender Crosstabulation

		Gender		Total
		Female	Male	
No	Count	230	203	433
	% within Gender	84.2%	85.7%	84.9%
Yes	Count	43	34	77
	% within Gender	15.8%	14.3%	15.1%
Total	Count	273	237	510
	% within Gender	100.0%	100.0%	100.0%

of repeat business (Ciavarella et al., 2004). Furthermore, high scores of agreeableness tend to reduce the rate of failure for entrepreneurs in vastly innovative businesses (Cantner, Silbereisen, and Wilfling, 2011). The results of this study are in line with Ciavarella et al., 2004, Cantner, Silbereisen, and Wilfling, 2011, as we found significant evidence of a positive relationship between agreeableness and students' entrepreneurial intentions.

Prior studies confirm that entrepreneurs tend to score low on Neuroticism which is the reversed version of emotional stability (Zhao and Seibert, 2006). This also comes back when observing the entrepreneurial personality positing that a high score on Emotional stability is anticipated for an entrepreneur (Schmitt-Rodermund, 2004). Emotional stability has shown a positive relationship with entrepreneurial performance (Zhao, Seibert, and Lumpkin 2010). Unexpectedly, our findings revealed that neuroticism, a negative emotionality such as feeling anxious, worried, touchy, and tense enhance entrepreneurial intentions. Uysal and Pohlmeier (2011) revealed that neuroticism had a negative association with the probability of finding a job. Thus, it seems that the lack of amiability and vulnerability motivate people with high neuroticism to build up their own business.

Entrepreneurial education is one of the most important and significant variables in this study. The findings reveal a strong relationship between entrepreneurial education and entrepreneurial intentions. Previous studies (e.g. Basu and Virick, 2008; Davey et al., 2011) support these findings. Likewise, Solesvik (2013) found that the students participated in entrepreneurial education had higher perceived entrepreneurial motivation than the students who did not study entrepreneurial courses. Therefore, it can be stated that a strong relationship and positive correlation exists between entrepreneurial education and intent towards entrepreneurship. However, only 10% of the students in this study have participated in any of the entrepreneurial course at least once at the time of this study. This implies that it is fundamental to have a good entrepreneurial education program to develop positive entrepreneurial intentions among students.

Conclusion

The objective of this study was to explore factors motivating the university students to embrace self-employment. To achieve this objective, the study explored the entrepreneurial intentions among the university students. The analysis confirms many previous findings in the literature on students' entrepreneurial intentions. For instance, the research has given further evidence of the importance of entrepreneurial education to make entrepreneurial mindset as well as supported the previous findings which stated

that the male students were more interested towards entrepreneurship than the female students. This research also explored some interesting findings that the students with the younger age and low previous education grades were more inclined to become self-employed. This can make sense as the young blood is likely to take high risks which is considered as one of the essential entrepreneurial traits. Moreover, The creative individuals were often found with low grades or dropouts. Relating to the parents' occupation, students whose mothers were working as entrepreneurs showed positive response towards self-employment. Furthermore, the decision to start a new venture seems to be influenced by personality traits as extroversion, agreeableness and openness draw a positive while neuroticism has a negative impact on students' entrepreneurial intentions.

Practical implications

This study suggests that the universities should focus their attention on attracting students towards entrepreneurial education as students who attended entrepreneurial courses/trainings showed significantly higher entrepreneurial intentions. Therefore, universities are recommended to expand the number of entrepreneurship courses/trainings as well as provide the opportunity to take entrepreneurial course/training to the students from all the faculties/departments of this university.

Furthermore, improving the image of entrepreneurship as a plausible career option could affect students' intentions towards entrepreneurship. The universities should promote entrepreneurship through entrepreneur and business role models to draw a positive image of entrepreneurship in the campus and to motivate students to pursue their projects. It is important to facilitate interaction between experienced entrepreneurs and the students.

Limitations

The present study was conducted on a limited and not probabilistic sample based on the students from the University of Cassino and Southern Lazio. Moreover, the limited sets of explanatory variables were assessed. Although, the questionnaire was sent to almost all the students of every department of the university, but 510 responses were received. Therefore, the results of this study are limited to its sample population. Factors such as entrepreneurial intentions can change over time and could be influenced by other factors not covered in this study. The sample population and sets of variables can be extended in the future research

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Availability of data and materials

The datasets generated and/or analysed during the current study are available with the name of [Data_Mentalità Imprenditoriale tra gli Studenti Universitari in Italia_Copy] repository, [<https://drive.google.com/open?id=1iMbTLnb2Wmd1sQDxvwj4L8hqzx81148>].

Authors' contributions

MI conducted the survey, research analysis, discussion and results while MS contributed in Literature review. Both authors read and approved the final manuscript.

Competing interests

The authors declare that they have no competing interests.

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