


# Assessing the role of socio-economic values on entrepreneurial intentions among university students in Cape Town

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**Background:** This article presents the findings of an empirical fieldwork study conducted in Cape Town, South Africa.

**Aim:** The aim of the study was to establish how socio-economic values (income, economic development, employment or unemployment in the university students' direct environment) shape their entrepreneurial intentions.

**Setting and method:** The study was built on Ajzen's psychological model on entrepreneurial intentions, and used a semi-structured questionnaire to collect data from 274 entrepreneurship university students. Cronbach's alpha was used to measure the reliability of the questionnaire, where six variables out of nine, had a coefficient alpha of more than 0.7, while the remaining three had a coefficient alpha of between 0.5 and 0.7. This instrument was assessed by both statisticians and academics who are experts in their fields to ensure its validity. Multivariate tests of statistical significance were conducted, where correlation and regression statistics were used to analyse the data.

**Results:** Findings suggest that socio-economic factors have an impact in shaping entrepreneurial intentions of the university students.

**Conclusion:** The study formulates the recommendations to the government, businesses, civil society organisations as well as the community within which students live.

## Introduction

Around the world, researchers in the entrepreneurship field tend to agree that the decision to behave entrepreneurially is a result of cognitive aspects that are nurtured by environmental circumstances. It is mostly for this reason that the Theory of Planned Behaviour (TPB) by Ajzen (1991) has been widely used in recent studies as it focuses on the prediction of the human behaviour. Education is one of those environmental factors, and Mushtaq et al. (2011) and Packham et al. (2010) refer to the fact that it significantly correlates with the intention to create new ventures. Other factors of the environment are socio-economic and Linñan et al. (2009) ascertain that there is a wide body of literature that analyse their role in shaping entrepreneurial intentions. Studies by Wennekens et al. (2005) about the U-shaped relationship between the economic development level and entrepreneurial activity, as well as the study by Reynolds (1997) on unemployment levels, employment rate, productive structure and specialisation among other variables, are just a few and have all confirmed the claim that these macro-level values affect entrepreneurial intentions.

Using almost similar variables as Ajzen (1991), Pruett et al. (2009) concluded that one's country, the presence of other entrepreneurs in the immediate environment, the expected family reaction, individual entrepreneurial disposition, how much weight an individual places on independence and opportunity for creative work, are the factors that positively influence entrepreneurial intentions. However, the extent to which socio-economic variables influence start-ups directly (such as in reducing opportunities, raising barriers, etc.) or through their effect on intentions (such as in reducing people willingness and self-perceived capacity to start a venture) is yet to be determined (Linñan et al. 2009). In this sense, this study could provide some insight at least in the South African environment. The objective of this study is to examine the extent to which socio-economic values influence university students' entrepreneurial intentions, and to be able to achieve this objective, the following hypothesis has been set: 'The socio-economic factors of entrepreneurship students have a positive influence on their entrepreneurial decisions'. In light of this hypothesis, one can also illustrate the research model as seen in Figure 1.

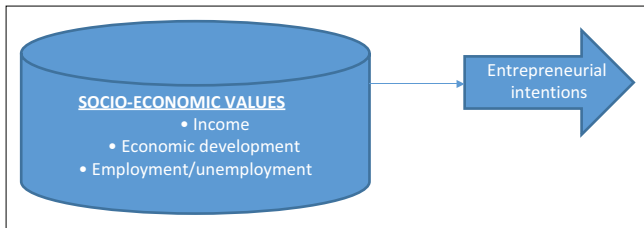


FIGURE 1: Research model.

## Theoretical framework

### Socio-economic values

Like many other factors in the macro environment, socio-economic values play a major role in supporting entrepreneurial initiatives in any region. For instance, household wealth and household prices are expected to positively influence entrepreneurial start-ups. Both of these variables measure the potential access to financial capital for a new business venture (Nijkamp, Moomaw & Traistaru-Siedschlag 2006:144).

With regard to unemployment (another variable of socio-economic constructs), a study conducted by Nijkamp et al. (2006:144) revealed that it had an undetermined impact on start-up rates across the regions or states of the European Union (EU). Paradoxically, unemployment rates are expected to positively correlate with the number of start-ups as people are forced to search new sources of income.

Education as a variable of socio-economic conditions has also proved to be ambiguous in terms of support to the entrepreneurship intentions. Generally, educational attainment is expected to influence the number of business start-ups. However, Guesnier ([1994] in Nijkamp et al. 2006) found the propensity to create a new firm positively correlated with adults with bachelor's degrees, while Hart and Gudgin ([1994] in Nijkamp et al. 2006) found an inverse relationship with individuals with university degrees and the rates of new firm formation. This contradiction necessitates a further investigation. For the purpose of this study, socio-economic factors that were explored are income, economic development and level of employment.

### Income

Traditionally, the influx of people into entrepreneurship has been motivated by the desire to earn income. However, shift from this perspective has been experienced as confirmed by Carsrud and Brännback (2009, 2011) that individuals behave entrepreneurially for social gains. However, this study argues that income can instil entrepreneurial intentions. Luiz and Mariotti (2011:60) posit that students from both the poorest and richest households are most likely to think that they will start up their own businesses. The authors elaborate further that there are, however, some diverging opinions concerning which type of business these students would like to open: those from a richer background think of opening an innovative business, while those with a poor background think about enterprises that are more basic.

Students from lower income groups feel and see entrepreneurship as a necessity, as a result of some doubt about their ability to find a job. To the contrary, students from higher income groups are more confident about finding jobs in large companies and the ability of building a career, thereby seeing entrepreneurship as a risky choice (Luiz & Mariotti 2011:60). The overall finding of Luiz and Mariotti's (2011:60) study is that students from the poorest background appear to be more positive about starting their own businesses and also appear to have access to more information. These arguments are corroborated by most recent studies conducted by Linán, Fernández and Romero (2013) and Pinillos and Reyes (2011), who argue that in countries that experience some great disparities in income, people tend to have diverging interests in entrepreneurship.

### Economic development

Farrington et al. (2012:333), Mueller (2004) and Shane (1992) postulated that the occurrence of entrepreneurial attributes varies across countries and cultures, while factors contributing to these differences have been identified as being the culture, level of economic development of the country and the political-economic traditions (Mueller, Thomas & Jaeger 2002).

Kumar (1997) posited that entrepreneurship promotes capital formation, creates large-scale employment opportunities, promotes balanced regional development, reduces the concentration of economic power and stimulates wealth creation and distribution. Entrepreneurship leads to increasing gross national product and per capita income, leads to improvement in the standard of living, promotes the country's export trade, induces backward and forward linkages and facilitates overall economic development (Kumar 1997).

The previous paragraph clearly argues inversely with one of the arguments put forward in this study – that economic development enhances entrepreneurial intention of entrepreneurial behaviour. This is, therefore, an indication that entrepreneurship and economic development go hand in hand, and that they are mutually inter-reliant. Furthermore, this confirms the necessity of this study to be able to bring to light the extent to which economic development enhances the entrepreneurial behaviour of the university students in the Western Cape.

### Employment or unemployment level

Various types of research indicate a positive relationship between unemployment and firm formation (Keong 2008:54). Many business founders have stated that during the recession they opted to find their own businesses in order to avoid unemployment. Keong (2008:54) further argued that many research results have revealed that comparatively high proportions of nascent entrepreneurs are among the unemployed. As such, the variables of unemployment situations can be assumed to have the strongest direct influence on behaviour and the current employment status is assumed to affect intention and conviction.

Work conditions can also be the catalysts of entrepreneurial intentions. Noorderhaven et al. (2004), as cited by Fayolle, Liñán and Moriano (2014), report that recent works on the role of alternative satisfactory employment opportunities in the incubation of entrepreneurial intentions is worth noting. If people cannot be satisfied by their employment conditions, and are not able to find better alternatives, they may form their intentions based more strongly on subjective norms (SN) (Vinogradov, Kolvereid & Thimoshenko 2013).

## Entrepreneurial intentions

A number of models have been used to explain entrepreneurial intention, such as the Maximization of the Expected Utility Model (Douglas & Shepherd 2000), the Entrepreneurial Event Model, the Model of Implementing Entrepreneurial Ideas (Bird 1988) or Shapero's (1982). Nevertheless, none of them has been as influential as the Ajzen's (1991) Theory of Planned Behaviour (Krueger, Reilly & Carsrud 2000; Liñán & Chen 2009; Moriano et al. 2012; Van Gelderen et al. 2008).

The TPB is explained in three antecedents, personal attitude (PA) towards behaviour, which means the individual's overall evaluation of the entrepreneurial behaviour. It is the behavioural beliefs linking entrepreneurial behaviour to various outcomes and other attributes. Secondly, there is SN which is the individual's perception of the social pressures to undertake the entrepreneurial behaviour, and lastly, it is the perceived behavioural control (PBC), which is the people's perceptions of their ability to perform that behaviour (Fayolle, Liñán & Moriano 2014:681).

Gathungu and Mwangi (2014:114) affirm that entrepreneurial intentions is a strong predictor of future (nascent) entrepreneurial behaviour. This pronouncement came as a conclusion to a number of studies (Behave 1994; Bull & Willard 1993; Carter et al. 2003; Reynolds & White 1997; Venkataraman 1996), especially towards the end of 20th century, where many studies that highlighted the importance of understanding the initial and pre-emergent phase of entrepreneurial behaviour and new ventures started to emerge.

However, according to Carsrud and Brännback (2009, 2011), Krueger and Day (2010) and Krueger (2007, 2009), more and more researches by means of entrepreneurial intention as a framework emerged and showed some new applications, mismatches and specifications. In this regard, Krueger (2009) believes that entrepreneurial intentions is dead and calls for its revival and a deeper reconsidering of studies on the matter. Fayolle and Liñán (2014) indicate the existence of researches that could be used in order to swell and strengthen the importance and applicability of the various models of entrepreneurial intentions, particularly, paying attention to the link between intention and action. Fayolle and Liñán 2014 propose longitudinal studies in these lines whereby attention should be paid to the effect of environmental variables in the transformation of intention into effective action. This study is a response to this call as it takes into account the macro

environment aspects: income, economic development and employment or unemployment. Falsified.

## Research design (methodology)

### Approach

The research approach used for this study was hypothetico-deductive method. By this method, researcher formulates a hypothesis to be tested by the observable data. Important statistical operations were performed in order to test the specific hypothesis towards accepting or rejecting it. The study was conducted in the following five phases:

- The literature review on socio-economic values and entrepreneurial intentions was reviewed.
- The questionnaire was drafted, pilot-tested and finalised for easy use.
- Data were collected in the classrooms from entrepreneurship students.
- Data were captured with the use of SPSS22 to generate the statistical data.
- Finally, the data were analysed and interpreted.

### Research strategy

The research strategy chosen was a survey-correlational. Similar studies have frequently used it and Neuman (2005:250) argued that a survey is often called correlational, whereas Babbie and Mouton (2001) posits that a survey usually adopts both qualitative and quantitative methodologies. This type of study makes use of sample from a population and analyse the data using statistics to make inferences about it. This study also used both methodologies, with statistical data to make it more accurate.

## Techniques and procedures

### The population and sample

For the 2014 academic year, the total number of students enrolled for entrepreneurship programme was as seen in Table 1.

As it happens in many cases, constraints arising from finances and time hinder researchers and affect their ability to use the whole population, even if it was possible. This study also succumbed to this constraint and chose to use a sample.

**TABLE 1:** Determination of the population.

University	Number of students and level of study		Source of information
	Undergraduate	Postgraduate	
UCT	57	62†	Secretary and programme coordinator
USB	250	40†	Administrative staff and the class lecturer
UWC	170	52‡	Administrative staff and the class lecturer
CPUT		335	Secretary and head of department
<b>Total</b>		<b>966</b>	-

†, MBA; ‡, Honours.

UCT, University of Cape Town; USB, University of Stellenbosch Business School; UWC, University of the Western Cape; CPUT, Cape Peninsula University of Technology; MBA, Masters of Business Administration.

In this process, the researcher was guided by The Research Advisors (2006) opinion that:

it is possible to use one of the sample calculation formulae to construct a table that suggests the optimal sample size – given a population size, a specific margin of error, and a desired confidence interval. (p. 1)

For calculating sample using research advisors' formula, see Equation 1 (Krejcie & Morgan 1970; The Research Advisors 2006:3):

$$N = (X^2 * N * P * [1 - P]) \div (ME^2 * [N - 1]) + (X^2 * P * [1 - P]) \quad [\text{Eqn 1}]$$

where n, size of sample needed;  $X^2$ , chi-square for the specified confidence level at one degree of freedom; N, size of the population at hand; P, proportion of the population (0.50 in the research advisors' table); ME, desired margin of error (expressed as proportion).

Table 2, as suggested by The Research Advisors (2006), illustrates the sizes of the population, the confidence levels, as well as the margin errors. This can be explained by an example that if you have 500 students and you wish to have enough sample to generate a 95% confidence interval and a 2.5% margin error, you should have feedback from at least 217 of all your students.

As far as this study is concerned, the universities that constituted the units of investigation totalised  $\pm$  966 entrepreneurship students and including students doing programmes that involved entrepreneurship modules, and with a 95% confidence level taken into account, and a margin error of 5%, a sample of between 260 and 278 was judged satisfactory.

### Data collection

This process was realised through collaboration between researcher and lecturer, where the former requested the later to spare a few minutes towards the end of the class for the students to complete the questionnaires. In all cases, the request was positively approved, and both lecturers and researcher were present during the questionnaire-filling process.

### Analysis and interpretation

Data were coded and captured by means of the Statistical Program for Social Science (SPSS22). The SPSS helped to

**TABLE 2:** Sample and population.

University	Number of students†
UCT	119‡
US	290
UWC	222
CPUT	335
<b>Total</b>	<b>966</b>

Note: Sample used = 270

UCT, University of Cape Town; US, University of Stellenbosch; UWC, University of the Western Cape; CPUT, Cape Peninsula University of Technology.

†, 2014 academic year figures; ‡, only involves undergraduate students, plus full-time MBA students, but excludes modular students.

generate the descriptive statistics, as well as correlational statistics. Univariate analysis was conducted with the use of descriptive statistics (frequency tables, pie chart and histograms), before regression and correlation analyses were carried out, using a combination of factor analysis, analysis of variance (ANOVA) and chi-square for nominal data.

## Findings

### Personal details

Under this section, the researcher presents and analyses the data collected from entrepreneurship students from UCT, US, UWC and CPUT. The following sub-headings were used: age category, gender, race, religion, residential area (whether it is Metro, urban or rural) and study level.

Table 3 shows that the majority of the student respondents are in the age category of 21–25 (52.8%), with the category of up to 20 (35.1%) in second position; both groups represent a huge majority of 87.9% among the respondents. To justify this finding, one needs to consider the fact that the study took both undergraduate and postgraduate as well as full and part-time entrepreneurship students as the respondents. Furthermore, respondents also included those students who had to work after their matriculation before going to university, while others had failed some subjects, thereby putting all these students in the age category of above 20. Other facts include the fact that the average age of joining higher learning institutions (HLIs) in South Africa is 18, while the study involved a few Master's students, thereby justifying the fact that most of the respondents fell below the age of 25.

Reaching such a finding is also responding to the government initiative of establishing agencies, institutions and centres to enhance entrepreneurial behaviour in the country. It should start from young people, and the fact that many of them are attending entrepreneurship programme, suggest a move into right direction. As suggested by Co and Mitchell (2006:349), HLIs can intervene in this initiative by:

- Outlining to the students, the risks and rewards associated with entrepreneurship
- Train them how to seek and recognise opportunity
- The creation and destruction of enterprise
- Development of entrepreneurial traits among students, which is in line with the aim of this study.

Wilson, Kickul and Marlino (2004) appended the above argument by positing that it is important to provide access to entrepreneurship education as it strengthens the intentions of aspiring entrepreneurs. Entrepreneurship education plays a key role in boosting the levels of self-efficacy among the students, thereby leading to the establishment of their own ventures.

**TABLE 3:** Age groups of respondents.

Age category	Up to 20	21–25	26–30	31–35	36–40	Above 40
Percentage	35.1	52.8	5.9	1.8	2.6	1.8



## Gender of respondents

Table 4 provides information about the number of respondents in respect to their genders.

Table 4 reflects a significant percentage of 56.9 of the respondents that were female against 42.3% that were male. Two of the respondents (0.7%) did not indicate their gender. This finding came with no surprise, as the number of female in South Africa surpasses that of their male counterparts, and this seems as a trend in all the countries over the world. We then find this finding justifiable that this gender imbalance in South Africa is also visible in the institutions of higher learning. We are also pleased to reach such a finding which is in line with government and movements for women emancipation that more and more women should participate in the economy, which can be easier once they have successfully completed their university studies. The participation of many female students in the entrepreneurship studies, can also be a suggestion that the future of women entrepreneurs in the country looks promising.

## Racial group of respondents

Table 5 provides information about the number of the respondents with regards to their racial divides.

Table 5 reflects an attention-catching picture concerning the racial groups of the study participants. About half of them (46.4%) are Africans (black people) while the 34.3% are white people. Students of mixed race group were represented at 16.1% compared with 1.5% of Indian descendant students. The group designated as 'other' scored 0.4% (one respondent) and the same score was for Chinese respondents. This finding, though it does not represent the demographic characteristics of the South African society, reflects the real situation that black people (Africans) are the majority (79.2%), followed by both white people and mixed race amounting to 8.9% each, Indians or Asians at 2.5% while the group designated as 'other' comprised 0.5% (Statistics South Africa

**TABLE 4:** Gender of respondents.

Variable	Category	Frequency	%	Valid %	Cumulative %
Valid	Male	116	42.3	42.6	42.6
	Female	156	57	57.4	100.0
	<b>Sub-total</b>	<b>272</b>	<b>99.3</b>	<b>100.0</b>	-
Missing	System	2	0.7	-	-
<b>Total</b>	-	<b>274</b>	<b>100.0</b>	-	-

**TABLE 5:** Racial group.

Variable	Category	Frequency	%	Valid %	Cumulative %
Valid	African	127	46.4	46.9	46.9
	Chinese	1	0.4	0.4	47.2
	Mixed race	44	16.1	16.2	63.5
	Indian	4	1.5	1.5	64.9
	White	94	34.3	34.7	99.6
	Other	1	0.4	0.4	100.0
	<b>Sub-total</b>	<b>271</b>	<b>98.9</b>	<b>100.0</b>	-
Missing	System	3	1.1	-	-
<b>Total</b>	-	<b>274</b>	<b>100.0</b>	-	-

2011:17). This simply means that the demographical composition of races in South Africa is not translated in the attendance of the entrepreneurship programme in these four universities at this point in time.

It is worth noting that white people that are represented at 34.3% in this study have been the dominant racial group in undertaking entrepreneurial activity over the years. Notwithstanding the fact that it is still the case even today, the fact that other races such as mixed race are represented in entrepreneurial courses beyond their real national statistical figures paints a picture that more and more other races are responding to the call about taking entrepreneurial orientation more seriously (Kalitanyi & Visser 2016). Furthermore, the study unveiled that black people – (constitute the majority of the country's population) – are more interested in entrepreneurship programmes indicates that the entrepreneurial spirit can gain momentum if they take their studies seriously and decide to practice what they learnt upon leaving school.

## Regression analysis

This analysis consists of an advanced statistical test to check, among the independent variables, those that influence the dependent variable. Statisticians believe that to be significant, Adjusted *R*-square must be greater than 0.05 (>5%) and have a par value of less than 0.05 (<5%).

With the use of the logistic regression analysis, the items of the income variable influencing the entrepreneurial intentions were identified. The fitness of this model was individually checked, and the output revealed that the model fits the data, because the omnibus test of model coefficients indicates  $p = 0.000 < 0.05$ , while the summary model indicates 0.249.

Looking at the individual items in Table 6 above, the item of using high income to open up a business venture was found significant with a  $p = 0.004 < 0.05$ . This means that this item contributes positively to the variable of income and, consequently, the variable slightly increases the chances of entrepreneurial intentions among students.

The literature has also revealed a similar tendency as Luiz and Mariotti (2011:60) argued that students from lower incomes find entrepreneurship as a necessity consequent to their inability to secure employment. However, the researcher had predicted a positive correlation between these two variables, hence the hypothesis that 'income stimulates entrepreneurship intentions'. The number of items that support this hypothesis is lower than predicted, and the possible reasons could be that many respondents came from a poor or lower income background and, therefore, could not rely on a non-existent income to undertake entrepreneurial ventures.

The second reason could be that many students understand that people do not necessarily start businesses with their own money, and this is partly what the students are taught as part

**TABLE 6:** Regression between income and entrepreneurial intentions.

Model	Unstandardised coefficients		Standardised coefficients (Beta)	<i>t</i>	Sig.
	<i>B</i>	Std. error			
(Constant)	2.905	0.380	-	7.644	0.000
The level of income in the family stimulates entrepreneurial initiatives.	0.053	0.034	0.106	1.531	0.127
I think of entrepreneurial initiatives because there is enough income to capitalise them.	0.008	0.035	0.016	0.232	0.817
Members of families with high income are not motivated to behave entrepreneurially.	-0.005	0.032	-0.011	-0.157	0.875
People without sufficient income are motivated to behave entrepreneurially.	0.044	0.033	0.091	1.309	0.192
If I had a job with a high income, I would save for my entrepreneurial venture.	0.057	0.049	0.094	1.155	0.249
I would use my high income to open a business venture.	0.162	0.056	0.261	2.911	0.004
I know people who used their income to open up business ventures.	0.041	0.042	0.070	0.967	0.335
Monthly income.	0.011	0.010	0.072	1.111	0.268
Do you intend to open up a business?	-0.123	0.258	-0.030	-0.478	0.633
If you intend opening up a business, when?	-0.119	0.045	-0.169	-2.610	0.010

*B*, value of regression coefficient in a sample; Std. error, Standard error; *t*, statistics (coefficient divided by std. error); Sig., Significance.

Note: Dependent variable: Entrepreneurial intentions.

**TABLE 7:** Regression between economic development and entrepreneurial intentions.

Model	Unstandardised coefficients		Standardised coefficients (Beta)	<i>t</i>	Sig.
	<i>B</i>	Std. error			
(Constant)	2.550	0.299	-	8.530	0.000
The level of economic development stimulates entrepreneurial thinking.	0.118	0.071	0.150	1.675	0.095
The level of economic development offers opportunities for entrepreneurial initiatives.	-0.013	0.080	-0.016	-0.164	0.870
The level of economic development provides a framework for businesses to flourish.	-0.044	0.065	-0.055	-0.688	0.492
The current economic development is conducive to the establishment of an entrepreneurial venture.	0.123	0.053	0.155	2.303	0.022
The more the economy is developed, the more entrepreneurship will take place.	0.097	0.063	0.123	1.533	0.127
Countries that are economically developed are more entrepreneurial.	0.042	0.053	0.062	0.785	0.433
A lower level of economic development stimulates entrepreneurial initiatives.	0.037	0.041	0.055	0.886	0.376

*B*, value of regression coefficient in a sample; Std. error, Standard error; *t*, statistics (coefficient divided by std. error); Sig., Significance.

Note: Dependent variable: Entrepreneurial intentions

of the bootstrapping process in South African environment where capital is difficult to secure.

By means of logistic regression analysis, the items that contribute more to the economic development have been identified. Firstly, the fitness of the model was checked, and the output showed that the model coefficients  $p = 0.000 > 0.05$  with the model summary indicated  $0.249 > 0.05$ .

By analysing the individual items in Table 7, the item stating that the current economic development is conducive to the establishment of an entrepreneurial venture was found to be significant, with  $p = 0.022 < 0.05$ . This means that this item has a positive relationship with the variable, and therefore the variable increases the chances of entrepreneurial intentions among students. With very few details, Mueller et al. (2002) posited that factors such as culture, level of economic development of the country and political and economic traditions of the country impact on entrepreneurial attributes. Furthermore, these findings of this study match the results from the study conducted by Falck and Woessmann (2011), where they argue that the country's level control variables to boost entrepreneurial intentions are GDP per capita among other factors. Besides these two statements, the literature does not have sufficient data and information concerning the role of economic development in enhancing entrepreneurial intentions, and this study reached the same results. Once again, this study becomes a huge contributor to the poor existing literature about the topic.

The results provided by the regression analysis concerning employment level and entrepreneurial intentions show a statistical significance with  $p = 0.000 < 0.05$ , whereas the model summary indicates  $0.318 > 0.05$ . This indicates that the model fits the data.

Table 8 shows how significant the item 'I would choose employment over being employed' is. With its model coefficient of 0.000, it shows that this item has a positive impact on the variable of employment level and, therefore, this variable increases the chances of entrepreneurial intentions among entrepreneurship students.

This finding corroborates the results of a study conducted by Dohse and Walter (2012), when they argue that regional-level controls that support entrepreneurial intentions are unemployment among high qualified among other factors. Similarly, this finding clarifies the earlier argument by Nijkamp et al. (2006:144) that studies conducted on the role of employment towards the firm's establishment reveal ambiguous impacts on start-up rates across the regions or states of the EU. Nijkamp's argument was actually against the researcher's expectations, whose predictions are similar to Keong's (2008:54) argument that during a recession period, many people opt for business formation in order to escape unemployment and poverty.

At work, a number of factors can motivate individuals to shape their entrepreneurial intentions. The profit the business

**TABLE 8:** Regression between employment level and entrepreneurial intentions.

Model	Unstandardised coefficients		Standardised coefficients (Beta)	t	Sig.
	B	Std. Error			
(Constant)	1.738	0.306	-	5.682	0.000
The level of employment stimulates entrepreneurial initiatives.	-0.068	0.044	-0.089	-1.544	0.124
I know of people who chose entrepreneurial career despite being employed.	0.075	0.043	0.099	1.761	0.079
The higher the employment level, the higher the entrepreneurial behaviour.	0.027	0.039	0.039	0.696	0.487
The lower the employment, the higher the entrepreneurial initiatives.	0.040	0.041	0.053	0.967	0.334
The level of employment has a positive impact on entrepreneurial initiatives.	0.038	0.049	0.045	0.770	0.442
Some entrepreneurs acquired entrepreneurial skills from the workplace.	0.097	0.052	0.107	1.887	0.060
I would choose self-employment over being employed.	0.342	0.037	0.506	9.197	0.000
The level of employment in my region is high.	-0.014	0.031	-0.025	-0.463	0.643

B, value of regression coefficient in a sample; Std. error, Standard error; t, statistics (coefficient divided by std. error); Sig., Significance.

Note: Dependent variable: Entrepreneurial intentions

makes, the independence of the entrepreneur, the flexi work hours they enjoy, as well as their lifestyle can motivate many employees to think of becoming self-employed. This is what Keong (2008) reported as reasons why employed people become entrepreneurs in order to apply the knowledge and be more independent.

## Correlation analysis

Statisticians believe that correlations ( $r$ ) of 0.005 and 0.001, paired with a par value of 0.000, implies the existence of a relationship between two variables, and that the variable is statistically significant. In order to draw meaningful conclusions about the research findings on the relationship between socio-economic values against entrepreneurial intentions, the following process was followed:

- Firstly, the relationships between the above variables had to be established.
- Secondly, each of these relationships was interpreted and is discussed in this study.

Table 9 shows the items of the variable of income. This variable has a total of 10 items. After the bivariate analysis process, it was realised that only seven items have the required correlation value of above 0.005, paired with a par value of 0.000 for almost all the items except one. This shows that there is strong relationship between the independent variable of income and the dependent variable of entrepreneurial intentions, and that the independent variable of income is statistically significant.

In this study, the income variable was found to be a significant factor towards entrepreneurial intentions of students. This finding correlates with Luiz and Mariotti (2011:60) that students from both poorest and richest households are most likely to think that they will start up their own businesses, though there are diverging opinions concerning which type of business these students would like to open. Those from a richer background think of opening an innovative business, whereas those with a poor background think about more basic enterprises. This finding also correlates with the fact that people with a higher income are always looking for investing the extra portion, hence they think of opening up businesses. In the South African context, this reminds one of the rationale behind the introduction of the Close

**TABLE 9:** Correlation between income and entrepreneurial intentions.

Item	Pearson correlation	p
The level of income in the family stimulates entrepreneurial initiatives.	0.261	0.000
People without sufficient income are motivated to behave entrepreneurially.	0.180	0.004
If I had a job with a high income, I would save for my entrepreneurial venture.	0.408	0.000
I would use my high income to open a business venture.	0.495	0.000
I know people who used their income to open up business ventures.	0.373	0.000
Do you intend to open up a business?	-0.564	0.000
If you intend to open up a business, when?	-0.234	0.000

**TABLE 10:** Correlation between economic development and entrepreneurial intentions.

Item	Pearson correlation	p
The level of economic development stimulates entrepreneurial thinking.	0.221	0.000
The level of economic development offers opportunities for entrepreneurial initiatives.	0.175	0.005
The level of economic development provides a framework for businesses to flourish.	0.133	0.033
The current economic development is conducive to the establishment of an entrepreneurial venture.	0.206	0.001
The more the economy is developed, the more entrepreneurship will take place.	0.222	0.000
Countries that are economically developed are more entrepreneurial.	0.189	0.002

Corporations Act in 1984, before it was discontinued by the Companies Act of 2008.

The variable of economic development as independent variable has a total of seven items. After the bivariate test, it was realised that only six items have the required correlation value of above 0.005, paired with a par value of between 0.000 and 0.033, as reflected in Table 10. It therefore reflects that there is relationship between the independent variable of economic development and the dependent variable of entrepreneurial intentions, and this independent variable is statistically significant.

This finding came as a surprise, as throughout the literature review the researcher did not find information to support or to deny the existence of the relationship between the two variables. However, through the number of items supporting the variable, this study has found that a strong relationship does exist between the two. The researcher is therefore

**TABLE 11:** Correlation between employment and entrepreneurial intentions.

Item	Pearson correlation	<i>p</i>
I know of people who chose an entrepreneurial career despite being employed.	0.251	0.000
Some entrepreneurs acquired entrepreneurial skills from the workplace.	0.235	0.000
I would choose self-employment over being employed.	0.571	0.000

pleased to have enriched the literature in this regard, and recommends further research concerning this hypothesis.

The independent variable of employment has eight as the total number of items. The bivariate test has revealed that only three items have the required correlation value of above 0.005, paired with a *p* value of 0.000 for all three items. This is an indication of an existence of a relationship between the independent variable of employment and the dependent variable of entrepreneurial intentions (Table 11).

Generally, the literature concerning the way through which unemployment supports or drives people into entrepreneurship is plentiful. Through this study, the researcher discovered that many business founders stated that during the recession they opted to found their own businesses in order to avoid unemployment. Similarly, Keong (2008:54) posited that many studies conclude that high proportions of nascent entrepreneurs are among the unemployed. Clearly, these statements are contradictory to the finding in the previous paragraph.

From the finding of the same paragraph above, it can be argued that people develop ideas and methods of establishing and running businesses while they work. On the contrary, if people are pushed into entrepreneurship because of unemployment, it would be interesting to find which types of businesses, how far those businesses can grow and what the backgrounds of those businesses' creators are.

## Conclusion and recommendations

The bivariate analysis showed an existence of a positive correlation between dependent variables of socio-economic values (income, economic development and employment or unemployment) and the independent variable of entrepreneurial intentions because 16 items out of 25 revealed that relationship. This positive relationship was further confirmed by the regression analysis results, during which four items were found to have a positive relationship, leading to the conclusion of accepting the hypothesis (that socio-economic values of entrepreneurship university students have a positive impact on their entrepreneurial intentions) set out in the beginning of this article.

This existence of a positive relationship as a finding of this study supplements the findings of a study by Reynolds (1997), who posited that socio-economic factors that may have an effect on starting up a venture are unemployment levels, employment rate, productive structure and specialisation, among other variables. However, studies

conducted by other researchers in this field have reached the findings that are in line with those of this study. For example, Nijkamp et al. (2006:144) articulated that household wealth and household prices are expected to positively influence entrepreneurial start-ups. Both of these variables measure the potential access to potential financial capital for a new business venture. The recently approved minimum wage agreement between government, labour and businesses is a step in right direction as it will be injecting more income in the communities where respondents of this study live.

It is therefore recommended that government, labour movements as well as the management of businesses continue to engage in discussions and assess the possibilities to further increase the amount of money that goes out in the communities, as it may be a tremendous booster of entrepreneurial activities.

Government, civil society organisations as well as the community leaders should engage in constant education about the proper utilisation of the income. It is also recommended to the government to continually work towards poverty alleviation in the communities, as this stimulates the entrepreneurial behaviour of the people living in the area, mainly to be able to keep a relatively higher standard offered to them.

And finally, the study also discovered that unemployment stimulates entrepreneurial behaviour. With the current unemployment rate in South Africa of 27.1%, it is hoped that many people would turn their minds towards self-employment as the first option rather than waiting to be employed.

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The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

## Authors' contributions

V.K. contributed to the topic refinement, data collection, methodology drawing, data analysis, literature review and article compilation. E.B. did proofreading the manuscript.

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