

The impact of perceived innovativeness, perceived risk and perceived educational support on University student's entrepreneurial intention

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Keywords

Entrepreneurial intention, Entrepreneurial marketing, Perceived educational support, Perceived innovativeness, Perceived risk

Abstract

Entrepreneurial marketing is fundamental to the success of innovative ventures which contribute to a country's economic development. This study investigates the impact of perceived innovativeness, perceived risk and perceived educational support on the university students' entrepreneurial intentions. Data was collected from 300 university students and analysed using SmartPLS software to test the proposed structural equation model, using the partial least squares (PLS) path modelling method. In general, based on the findings from the sampled group of respondents, it appears that Commerce students may be more inclined to pursue entrepreneurial activities than are Law students. The respondents from the Commerce faculty, on average, displayed a higher likelihood to invest their earnings into risky business ventures than did the Law student respondents. The Commerce faculty also appears to foster more educational support for entrepreneurship than the Law faculty does.

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The introduction

Marketing and entrepreneurship are typically considered and categorised as two different or separate business activities (Hamali, Suryana, Effendi & Azis, 2016). However, successful entrepreneurship attempts to combine the two disciplines into one, concept known as entrepreneurial marketing (Hamali et al., 2016). Whilst there has been an abundance of research on the entrepreneurial intention of students in countries such as Sweden and the United States of America (USA) Yurtkoru, Acar and Teraman (2014), limited research in this area exists in the African context. Most global and local literature to date explores the impact of adult entrepreneurs on the economy of a region or country rather than the impact, or potential impact, of students who are prospective entrepreneurs (Turker & Selcuk, 2009). Given that entrepreneurial intention has the potential to predict successful entrepreneurs, a gap exists in researching students' entrepreneurial intention (Yurtkoru, et al., 2014). Furthermore, Malebana (2014) identifies a gap existing in research linking the relationship between educational support and entrepreneurial intention. The current research study aims to fill this gap. The research question that guides this paper is: *What are the factors that influence the entrepreneurial intentions of university students in the commerce and law faculty?*

Over 50% of South Africans who run their own businesses are youth (Seth, 2017). This is testament to the growing rate of young entrepreneurs in South Africa (Business Report, 2017). South Africa thus has a hub of young, bright minds who seek success in the entrepreneurial world (Chiloane-Tsoka, 2016). Recent research conducted by Barba-Sanchez and Atienza-Sahuquillo (2018) explored those factors of entrepreneurial education that influence entrepreneurial intention. Another study conducted by Turker and Selcuk (2009) explored the impact of personality factors on

entrepreneurial intentions, such as risk-taking ability, the need for achievement, and the need for control. Recent research has revealed a number of factors that influence entrepreneurial intention. Three of the most significant factors have been found to be educational support (Barba-Sanchez & Atienza-Sahuquillo, 2017), perceived risk (Van Praag & Cramer, 2001) and perceived innovativeness (Soria & Huarng, 2013). The authors of this research paper consider it to be of value as it is the first to explore in depth the specific factors influencing entrepreneurial intention relating to perceived risk, perceived innovativeness, and perceived educational support amongst two sampled student groups in the University of Cape Town's Law and Commerce faculties respectively.

2. Literature review

2.1 Factors of entrepreneurial intentions and hypotheses development

Previous research exists which has uncovered factors that motivate entrepreneurial intention amongst students. In a recent study Barba-Sanchez and Atienza-Sahuquillo (2018) explored the role that entrepreneurship-education amongst engineering students plays in these individuals' motivations to develop innovative technology-based companies. Three types of motivations were explored as being influencers of entrepreneurial intention: the need for success, the need for independence, and the need for economic motivations (Barba-Sanchez & Atienza-Sahuquillo, 2018). This research showed that the need for independence was the most critical factor in the entrepreneurial intent of future engineers in their group of respondents (Barba-Sanchez & Atienza-Sahuquillo, 2018). However, the literature review for this study found little research to have been conducted regarding perceived innovativeness, perceived risk and perceived educational support as having a combined significant effect on the entrepreneurial intentions of students, specifically on commerce and law students who constituted the research population for the current study.

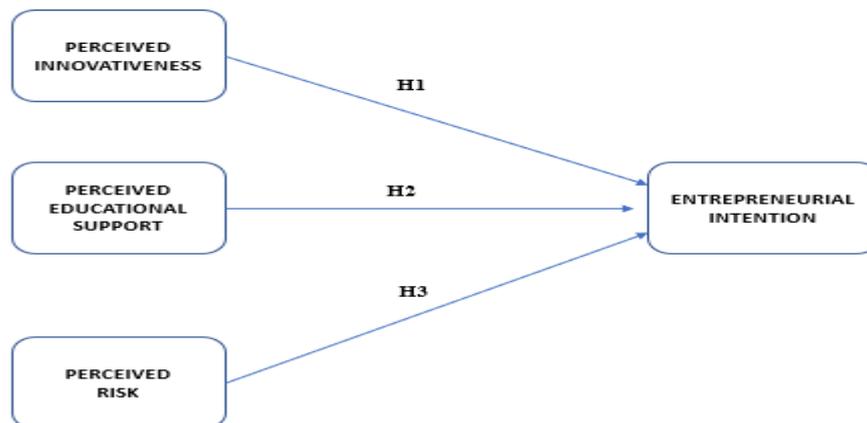


Figure 1: The conceptual model

2.1.1 Perceived innovativeness

Innovation has been found to be a crucial strategy for any company seeking to dominate present current markets as well as develop new markets in the future, markets which are able to contribute to sustainable industry leadership (Datta, 2013). Therefore, innovation can be said to be the essence of an organisation and to contribute towards the organisation's sustainability (Datta, 2013). Perceived Innovativeness can be described as the willingness on the part of an aspiring or existing entrepreneur to envision and/or design, and to adopt new and innovative ways of thinking and using of technology. Therefore, the concept of perceived innovation can measure the extent to which an individual is interested in developing new ideas, new and imaginative concepts, or innovative products and services (Alan, Kabadayi, Bakis, Can & Sekerin, 2017). Perceived innovativeness can be regarded as an important factor that influences the adoption by an aspiring entrepreneur of new ideas and technologies to be used in entrepreneurial activities and marketing

(Alan et al., 2017). Informed by this concept of perceived innovativeness from the literature, this study explores the impact of perceived innovativeness of sample groups students from the Commerce and Law faculties, respectively, of the University of Cape Town on the entrepreneurial intention of these students. Based on this concept of innovation and on its being a factor influencing entrepreneurial intention, the following hypothesis is proposed:

H1: Perceived innovativeness positively influences university students' entrepreneurial intentions.

2.1.2 Perceived educational support

If one accepts, based on various studies, that tertiary education significantly influences the career selection of students from all faculties, universities can be perceived as being potential sources of future entrepreneurs (Turker & Selcuk, 2009). According to Turker and Selcuk (2009) there exists a wide range of university courses that explore the nature, scope and structure of entrepreneurial education. Entrepreneurial education can also be viewed as a subset of general business management education (Turker & Selcuk, 2009). A recent study conducted by Barba-Sanchez and Atienza-Sahuquillo (2017) explored the role that education plays in motivating a sample group of university students' intentions to become entrepreneurs. These authors raise an important question as to whether entrepreneurship can be encouraged through university education (Barba-Sanchez & Atienza-Sahuquillo, 2017). Based on these studies done which found educational support to be a factor positively influencing entrepreneurial intention, the following hypothesis is proposed:

H2: Perceived educational support positively influences university students' entrepreneurial intentions.

2.1.3 Perceived risk

Risk, in its simplest terms is described as uncertainty when the probabilities and outcomes of certain occurrences are known Paulsen, Platt, Huettel and Brannon (2012). University students are seen by many researchers and economic policy makers as a source of new entrepreneurs entering into the modern business world (Sharmajune, 2017). Thus, it is important to understand what leads students from having the intention to take a risk, to actually taking the risk. One of the core personality traits of any entrepreneur has been found to be that of risk-taking (Van Praag & Cramer, 2001). Risk dictates every decision an entrepreneur makes and in order for the outcome of the decision to be successful, the magnitude of the risk must be assessed (Paulsen et al., 2012). The concern here is finding out what factors influence students' willingness to take risk. More specifically, this study focuses on the risk-taking propensity among two groups of student respondents in the commerce and law faculties respectively. Based on this outline of risk as being a factor of entrepreneurial intention as described in the literature, the following hypothesis is proposed:

H3: Perceived risk positively influences university students' entrepreneurial intentions.

3. Research methodology

This research used a conclusive descriptive research design that seeks to investigate four constructs. These constructs include perceived educational support, perceived innovativeness, perceived risk and entrepreneurial intentions of students at the University of Cape Town. The questionnaire was distributed through an online platform named Qualtrics. The sample size was 300 respondents in total, which included students from the Law and Commerce faculties. More specifically samples of 150 students from each faculty were used in the study to create a more accurate response. The 5-item scale used to measure entrepreneurial intention was based on scales developed by Linan and Chen (2009). Perceived educational support was measured based on a 3-item scale developed by Turker et al. (2005). The scale used to measure perceived innovativeness is adapted from one developed by Hurt, Joseph and Cook (1977). The scale used to measure perceived risk was based on a scale developed by Weber, Blais and Betz (2012) which used five-point Likert scale items to measure risk perceptions and risk behaviours of university students.

4. Results

This study used Partial Least Squares Structural Equation Modelling (PLS-SEM). SmartPLS 3 to provide the necessary statistical outputs useful for interpretation in this study. Of the respondents, 53 % were male and 47% were female; 17.33% of respondents were between the ages of 18 and 20, and 75.33% were between the ages of 21 and 23. Lastly, 7.33% of respondents were between the ages of 24 and 26.

The Cronbach Alpha values for Entrepreneurial Intention, Perceived Educational Support, and Perceived Innovativeness are 0.969, 0.834 and 0.841 respectively. These values are all greater than 0.7, indicating that these three constructs are internally consistent. The Cronbach Alpha values should be greater than 0.7 for constructs to be deemed internally consistent (Wong, 2013). Perceived Risk has a Cronbach Alpha value of 0.659, which falls just short of the traditional benchmark figure of 0.7. However, a study conducted by Bults (2011) that measured perceived risk, anxiety and other behavioural responses found that these constructs were deemed reliable at Cronbach alpha values greater than 0.6. Therefore, the Perceived Risk construct is also internally consistent with a Cronbach Alpha value of 0.65 (Bults, 2011). The Composite reliability values for the measurement model should also be generally greater than 0.8 for the constructs to be internally consistent (Wong, 2013). The Composite Reliability values for Entrepreneurial Intention, Perceived Educational Support and Perceived Innovativeness are 0.975, 0.899 and 0.873 respectively. These values are all greater than 0.8, indicating that these three constructs are internally consistent. Again, Perceived Risk falls short of the traditional benchmark figure with a Composite Reliability value of 0.695. However, the study conducted by Bults (2011) also deemed 0.6 an acceptable value to warrant internal consistency for the Perceived Risk construct. Convergent validity is measured by Average Variance Extracted (AVE) and this value should be greater than 0.5 (Wong, 2013). Entrepreneurial Intention, Perceived Educational Support, Perceived Innovativeness and Perceived Risk display convergent validity with AVE values 0.888, 0.748 and 0.535 and 0.686 respectively.

The PLS-SEM structural model is used to assess the R Square value, which indicates overall model fit (Wong, 2013). The Standardized Root Mean Square Residual (SRMR) value should be less than 0.1 and the Normed Fit Index (NFI) should be around 0.9 to be considered a good fit (Nitzl, Roldan & Cepeda, 2016). The SRMR value of 0.065 is smaller than 0.1 and the NFI value of 0.863 is close to 0.9, while the R value is 0.397. This indicates a moderate model fit for the combined structural model in this study measuring both Commerce and Law students (Wong, 2013).

4.1. Model Hypotheses

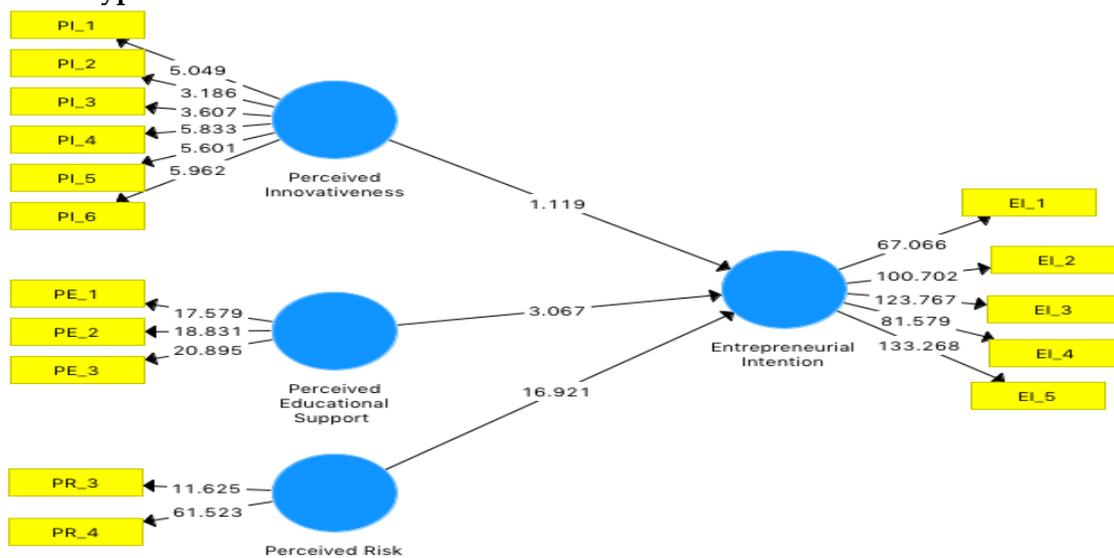


Figure 2: Hypotheses results

Nitzl et al. (2016) explain that a t-statistic for each path must be at least $t > 1.96$ for the relationship to be significant. The first hypothesis (H1) below assesses the effect of Perceived Innovativeness on the entrepreneurial intentions of sampled groups of Commerce and Law students at the University of Cape Town. This hypothesis has a fairly-weak path value of 0.062 at the 5% significance level with a t-statistic of 1.119. Conclusively, it is safe to assume that Perceived Innovativeness does not positively influence students' entrepreneurial intentions at the University of Cape Town.

The second hypothesis (H2) assesses the effect of Perceived Educational Support on the entrepreneurial intentions of two sampled groups of students from the Commerce and Law faculties at the University of Cape Town. This hypothesis has a moderately strong path value of 0.132, suggesting a positive, but moderate relationship between the two constructs at the 5% significance level with a t-statistic of 3.067. This t-statistic is significant and, therefore, it has been shown that Perceived Educational Support positively influences the Entrepreneurial Intentions of two groups of student respondents from the Law and Commerce faculties respectively, at the University of Cape Town.

The final hypothesis (H3) assesses the effect of Perceived Risk on the entrepreneurial intentions of Commerce and Law students at the University of Cape Town. This hypothesis has the strongest path value of 0.591 at the 5% significance level with a t-statistic of 16.921, suggesting a positive and substantial relationship between the two constructs. Thus, Perceived Risk positively influences the Entrepreneurial Intentions of two sampled groups of students from the Law and Commerce faculties, respectively, at the University of Cape Town.

5. Discussions and conclusions

After looking at the path values, test-statistics and p-values for Commerce and Law student respondent groups, it can be concluded that perceived educational support and perceived risk positively influence the entrepreneurial intentions of student respondents from the University of Cape Town, while perceived innovativeness was found not to influence entrepreneurial intention. These findings are in line with the study conducted by Turker and Selcuk (2009) which showed that educational support factors and some personality factors, such as risk-taking ability, had a significant effect on the entrepreneurial intentions of students participating in that study. The study conducted by Block, Hoogerheide and Thurik (2013), also supports these findings. The study found the effect of education on respondents' entrepreneurial intention to be strongly positive. The Thurik (2013) study also found perceived Innovativeness and entrepreneurial Intention produced a weak path value and high p-value, proving not statistically significant enough in the model. This finding is supported by a study conducted by Nurcan and Kaya (2017), which also concluded that perceived innovativeness has a weak impact on a sampled group of undergraduate students' entrepreneurial intentions. A possibly viewpoint on, or interpretation of, this would be that an individual would likely not disagree with statements measuring their innovativeness or creativity. As such, the Perceived Innovativeness construct did not display enough variation in the study to model its effect on the sample students' respondents' entrepreneurial intentions. This could suggest a lack of innovative aspirations among that group of student respondents as an indicator of entrepreneurial intention.

This study has unpacked two important factors that appear to drive entrepreneurial intention amongst some students at the University of Cape Town, namely Perceived Educational Support and Perceived Risk. Firstly, an entrepreneurial support culture should be created in all universities. This would ideally include affording all students the opportunity of exposure to successful, inspirational entrepreneurs and advice. Such a culture would allow for structure and direction to be given to potential entrepreneurial students. Within this support culture, discussions could be initiated between and within all faculties regarding entrepreneurial curriculum and career paths. This would begin to create awareness, support and encouragement of entrepreneurship in universities. Secondly, each faculty and discipline could have compulsory courses and lecture material that encompasses

aspects of entrepreneurship. This would incorporate entrepreneurial information directly and in practical ways into every faculty curriculum and thus develop students' awareness of the possibility of becoming an entrepreneur. Thirdly, an entrepreneurship project could be introduced on an annual basis that gives all students the opportunity to be creative and express and apply their entrepreneurial skills in a hands-on context. The project could take the form of a competition amongst participants to create the most creative and innovative idea or business. This could inspire students to explore entrepreneurship in a practical way.

6. Limitations and direction for future research

The first major factor limiting the current study was the target sample and related to the data collection instrument. This sample was made up of UCT Law and Commerce students who were all social media users. Data collection was conducted through a questionnaire via WhatsApp, Facebook and Instagram. Ideally data collection could include more social media channels such as LinkedIn and Twitter as well as face-to-face personal interviews - which would mean a mixed quantitative/qualitative research design. Using personal social media accounts such as Facebook, Instagram and WhatsApp reach a target audience that is closely linked in terms of education space and socio-economic status to the researchers. The second limitation was the sample size of 300 respondents. Of this total sample, the two sample populations consisted of two groups of 150 respondents each. Increasing the sample size would have given a more accurate representation of the population. A larger sample size could have increased the accuracy and deepened interpretations of the results as well as decreasing the margin for error in the study.

Thus, future research should include a larger sample size in order to make the results more accurate and meaningful. Focusing on only two faculties, Commerce and Law, was a limitation to meaningful, broader, in-depth measuring of entrepreneurial intention. Including other major faculties could probably have provided more insightful information regarding students' entrepreneurial intention. There are many other factors that contribute to a student's entrepreneurial intention (Gordon & Bursuc, 2018). Thus, increasing the number of constructs used to measure for entrepreneurial intention may have been helpful in improving the results of this study. Therefore, for future research, constructs such as gender, family influence, peer pressure, cultural subsets, personal wealth, family wealth/socio-economic status, and values could or should be used to measure entrepreneurial intention in more depth.

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