# THE FACTORS THAT INFLUENCE THE ENTREPRENEURIAL INTENTIONS OF UNIVERSITY STUDENTS

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## ABSTRACT

This study investigates the impact of perceived innovativeness, perceived risk and perceived educational support on the part of a particular group of university students' entrepreneurial intentions. It is the researchers' view that a clearer understanding of the specific nature of entrepreneurial intentions amongst students would help determine whether they would be likely to engage in entrepreneurial marketing activities in the future. A descriptive research method is used, the main research instrument being an online questionnaire, to explore the entrepreneurial intention of a group of students from the Commerce and Law faculties at the University of Cape Town. Data will be analysed using SmartPLS software to test the proposed structural equation model, using the partial least squares (PLS) path modelling method. It is intended that a clearer understanding of the strength of the three factors exerting an influence on entrepreneurial intention will be reached as well as an understanding of whether there is a significant difference in results between the two sampled participating groups of students from the Commerce and Law faculties respectively. Ultimately, the managerial implication of entrepreneurial intention is discussed in a South African context for the growth of the economy; this discussion, and the conclusions reached, is grounded by theories of entrepreneurial marketing, innovation, and risk.

**Keywords:** Entrepreneurial Marketing, Entrepreneurial Intention, Perceived Risk, Perceived Innovation, Perceived Educational Support.

## **INTRODUCTION**

Marketing and entrepreneurship are typically considered and categorised as two different or separate business activities (Hamali et al., 2016). According to Schmid et al., (2016), marketing can be considered an essential and integral part of business operations and as a means to inform customers about the company and the products it offers, whereas entrepreneurship has been traditionally solely associated the process of individuals seeking to establish their own business enterprises. However, successful entrepreneurship attempts to combine the two disciplines into one, concept known as entrepreneurial marketing (Hamali et al., 2016). Entrepreneurial marketing is the marketing of small start-up businesses with an entrepreneurial behaviour (Hacioglu et al., 2012). Entrepreneurial marketing is categorized as having several dimensions, and entrepreneurs as having certain characteristics, including proactiveness, opportunity focus, calculated risk-taking, innovativeness, customer intensity, resource leveraging, and value creation (Hacioglu et al., 2012).

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An understanding and assessment of the nature and degree of entrepreneurial intention existing in an individual aspiring entrepreneur is vital if researchers, economic policy makers or marketing organizations want to determine whether individuals or groups are likely to become successful entrepreneurs and contribute positively to the South African economy (Yurtkoru et al., 2014). Ambad & Ag Damit (2015) stress the importance of the existence of entrepreneurial intention amongst young South Africans to encourage entrepreneurial marketing activities, which in turn has the potential to motivate future economic development and growth efforts). Therefore, based on the literature cited so far, it can be argued that it is essential to begin to identify and understand the specific factors that influence entrepreneurial intentions amongst students: a clearer understanding of these can help uncover important drivers of these intentions amongst those South African students who are considering entrepreneurship as a career.

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 et al., 2014), limited research in this area exists in the South 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, 2008). 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.

This is testament to the growing rate of young entrepreneurs in South Africa 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 & Atienza-Sahuquillo (2018) explored those factors of entrepreneurial education that influence entrepreneurial intention. Another study conducted by Turker and Selcuk (2008) 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 to influence entrepreneurial intention. Three of the most significant factors have 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.

Firstly, entrepreneurial intention will be discussed in terms of its relevance to entrepreneurial marketing. Secondly, perceived innovativeness plays a large role in any successful entrepreneur as it forms the fundamental purpose of a new business (Yurtkoru et al., 2014). Thirdly, educational support is perceived by some researchers as being pivotal in shaping a person's goals, actions, and success. Lastly, the ability to perceive risk is a critical component of a successful entrepreneur's character (Chiloane-Tsoka, 2016). Systematic and informed risk assessment is vital in ensuring financial stability for any person, but particularly in the entrepreneurial context.

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?

## LITERATURE REVIEW

This literature review begins by exploring the literature dealing with the concepts of entrepreneurship and entrepreneurial marketing. This is followed by an exploration of entrepreneurial intention and the factors influencing this construct, based on the reviewed literature. Based on the literature, perceived innovativeness, perceived educational support and perceived risk are explored and discussed as factors influencing entrepreneurial intention. The literature review concludes by discussing the proposed theoretical model and variables to be used in this study.

## Entrepreneurship

The classic definition, coined nearly 30 years ago by Gartner (1990), saw entrepreneurship as involving individuals or groups with unique skills and personality traits who seek to create an innovative idea, product, service or new technology (Gartner, 1990). More recently, Ambad & Ag Damit (2015) see entrepreneurship as playing a crucial role in the economic growth and development of economies through job creation, innovation, and productivity. Based on this idea, entrepreneurship can be seen as being crucial for developing economies such as South Africa in their attempts to adjust their developmental views and plans, such as South Africa's National Development Plan (2012), to encourage entrepreneurship and thus set up the country for successful enterprise development into the future (Adekiya & Ibrahim, 2016). Africa has high levels of unemployment among the youth. In other emerging markets such as India, the unemployment challenge is due to lack of skill and entrepreneurial knowledge among youth (Jena, 2020).

Thus, in this context there is a growing need for students to become entrepreneurs to accelerate economic development by generating innovative ideas and converting them into profitable businesses in our ailing economy and in our society (Turker & Selcuk, 2008). The authors of this paper would argue that students who create new ventures have the potential to provide employment opportunities through technological innovation and increase competitiveness within the market which in turn drives economic output and growth (Turker & Selcuk, 2008). This study seeks to explore the nature of the intentions of a sample group of students at a South African university of becoming future entrepreneurs and in the process to make use of entrepreneurial marketing activities which in turn have the potential to make a positive impact on the future of the South African economy.

# **Entrepreneurial Marketing**

Mort et al., (2012) outline three different approaches to characterizing entrepreneurial marketing. The first specifies the link between marketing and entrepreneurship and discusses whether entrepreneurial marketing is a proactive identification. It also looks at the exploitation of opportunities for the acquisition and retainment of profitable customers through innovative approaches to risk management, value creation and resource leveraging (Mort et al., 2012). The second approach explores the question of whether entrepreneurial marketing is distinguishable by a set of strategies for opportunity creation which include customer based innovative products and resource enhancement for the emerging business and its products (Mort et al., 2012). The third approach talks about whether entrepreneurial marketing is a function as well as a set of processes for creating, communicating and delivering value to the customers in ways that benefit

the newly found organization. This organization is characterized by innovativeness, risk-taking and proactiveness (Hacioglu et al., 2012). These approaches confirm entrepreneurial marketing as being unable to exist without the presence of strong intentions amongst individuals to become successful entrepreneurs within their local or national economy. The current research study explores these approaches in terms of their potential to help facilitate successful student entrepreneurs in developing economic markets. Yet, the students are unable to learn the required entrepreneurial marketing skills that are necessary to endure in the real entrepreneurial marketplace (Amjad et al., 2020).

#### **Entrepreneurial Intention**

A person's entrepreneurial intentions are the key factors to foretell their entrepreneurial behaviours (Jena, 2020). Entrepreneurial intention refers to a person's willingness to carry out entrepreneurial endeavors (Ismail, 2015). Intentionality is characterised as a state of mind channeling a person's attention, experience and action towards a pre-determined goal or path to accomplish something (Adekiya & Ibrahim, 2016). Psychological theories, such as Ajzen's (1985) "*single theory of planned behavior*", explain a clear link between intentions and behaviour (Adekiya & Ibrahim, 2016). Ajzen's theoretical approach explored intentions as being the single most prominent predictor of planned behaviour (Krueger & Carsrud, 2010). If entrepreneurship is defined as a process, then intention becomes a foundation of entrepreneurial activity (Ismail, 2015). It can therefore be said that entrepreneurship is intentional and involves an individual's choice rather than manifesting by accident (Ismail, 2015). Existing research, such as that done by Krueger & Carsrud (2010), has explored intention-based models of entrepreneurial activity.

# **Factors of Entrepreneurial Intentions**

Previous research exists which has uncovered factors that motivate entrepreneurial intention amongst students. In a recent study Barba-Sanchez & 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). Shrivastava & Acharya (2020) found out that entrepreneurial intentions is positively related to the educational experience in an entrepreneurship education program. Another study conducted by Turker & Selcuk (2008) showed structural factors, educational support factors, and some personality factors, such as risk-taking ability, the need for achievements and the need for control, to have a significant effect on the entrepreneurial intentions of the students participating in their study.

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. An outline of these three factors, as explored in the reviewed literature, is presented in the next section.

#### **Perceived Innovativeness**

Perceived innovativeness of products/services manufactured are therefore key indicators with which measures and discovers innovativeness at all phases of the entrepreneurial life cycle, from new to recognized entrepreneurs (Tominc, 2019). Soriano & Huarng (2013) see innovation as an essential tool for entrepreneurs and that therefore, innovation is a specific instrument of entrepreneurship (Soriano & Huarng, 2013). As has been mentioned, and confirmed by these researchers, entrepreneurship makes a significant contribution towards economic progress in a sector, economy, or a country (Soriano & Huarng, 2013). It is also apparent that innovativeness is essential for a firm to maintain a competitive advantage as well as survive within their market (Hacioglu et al., 2012). Accordingly, innovation is the business activity most closely linked to economic growth and therefore entrepreneurs should seek to introduce new inventions and marketing techniques and strategies into productive activities (Wu & Huarng, 2015). Thus, the literature suggests that, in order to create successful ventures, entrepreneurial marketing activities should be driven by a dimension of 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 organization and to contribute towards the organization'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 et al., 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; Allah & Nakhaie, 2011). 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 some students' entrepreneurial intentions.

#### **Perceived Educational Support**

Perceived educational support refers to the support from professional education, such as that provided by universities, in providing students with the necessary knowledge and skills pertaining to entrepreneurship (Turker & Selcuk, 2008). Universities are required to encourage students' entrepreneurial intentions (Shi et al., 2019). A recent study conducted by Barba-Sanchez & Atienza-Sahuquillo (2017) explored the role that education plays in motivating a sample group of university students' intentions to become entrepreneurs. Some studies have reported on the positive impact of education on entrepreneurship, while other studies have found evidence that 'adequate education' is statistically insignificant in terms of correlation with the intentions of students to become entrepreneurs (Barba-Sanchez & Atienza-Sahuquillo, 2017). Block et al., (2013) conducted a study on more than 10000 individuals from 27 European

countries and from the USA. Their study found that the effect of education on entrepreneurial intention is found to be strongly positive, for example, the higher the respondent's level of university education the more likely they were to start a business and become an entrepreneur (Block et al., 2013). On the other hand, Oosterbeek et al., (2010) researched the effect of entrepreneurial education programs on college students' motivations to become business owners. The results revealed that this kind of education program had an insignificant and even adverse effect on the students' intentions to become entrepreneurs (Oosterbeek et al., 2010; Reininger et al., 2003).

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, 2008). Overall, earlier studies found a positive relationship between students' perceived university support and entrepreneurial intentions (Shi et al., 2019) 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 some students' entrepreneurial intentions.

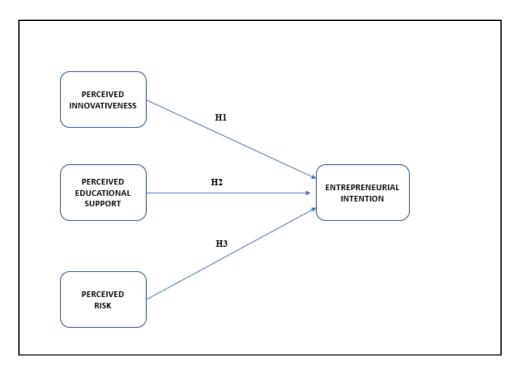
# **Perceived Risk**

In the context of this study, perceived risk is identified as risk-taking as it relates to entrepreneurial decisions. One of the core personality traits of any entrepreneur has been found to be that of risk-taking (Van Praag & Cramer, 2001). Risk factors go hand in hand with entrepreneurial decision-making process and is essential in general theory of entrepreneurship (Chen, et al., 2020). The spectrum of risk taking as a personality trait spans from a person being risk averse and risk seeking (Van Praag & Cramer, 2001). This means that they have less of a chance of becoming an entrepreneur (Agarwal & Teas, 2001; Van Praag & Cramer, 2001).

Thus, it is important to understand what leads students from having the intention to take a risk, to taking the risk. Entrepreneurship is associated with a certain level of risk (Havierniková & Kordoš, 2019). 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 some students' entrepreneurial intentions.

Figure 1 below displays the conceptual model which guides this research's design. The entrepreneurial intention is modelled as a construct influenced by three hypotheses. The perceived educational support factor is based on a model developed by Turker & Selcuk (2008), the perceived innovativeness factor is based on a model developed by Hurt, Joseph and Cook (1977) and, finally, the perceived risk factor is based on a model developed by Weber et al., (2002). For this study, the dependent variable of the model is Entrepreneurial Intention, while the independent variables are Perceived Innovativeness, Perceived Educational Support, and Perceived Risk.



# FIGURE 1 THE IMPACT OF PERCEIVED INNOVATIVENESS, PERCEIVED EDUCATIONAL SUPPORT AND PERCEIVED RISK ON ENTREPRENEURIAL INTENTION.

# 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. A conclusive research design is used to test specific hypotheses and relationships using quantitative methods of data analysis (Malhotra, 2010). This study used a single cross-sectional research design as it was intended to collect data from the given sample population only once (Malhotra, 2010). Furthermore, this research made use of a research method adapted from Turker & Selcuk (2008) that employs an online survey distributed to the sample from the relevant target population. This questionnaire was distributed through an online platform named Qualtrics. Qualtrics is a cost-effective, easy to use and understandable software capable of reaching many respondents at once and affording them the opportunity to complete the survey conveniently (Malhotra, 2010). The target population for this study was male and female students from the University of Cape Town, specifically from the Commerce and Law faculties, aged between 18 and 25.

The type of sampling technique used was cluster probability sampling. Cluster sampling is a type of sampling method that separates the target population into separate groups and then randomly selects respondents (Malhotra, 2010). This technique was used because the study focused on two specific faculties instead of the entire university. Convenience sampling is affordable and simple to conduct in that it relies exclusively upon the ease of obtaining the sample (Malhotra, 2010). The sample size was 300 respondents in total, which included students

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from the Law and Commerce faculties. More specifically samples of 150 students each from each faculty were used in the study to create a more accurate response. A sample size of 300 respondents is an appropriate sample size for this study as a similar research study conducted by Turker and Selcuk (2008), which examined factors affecting entrepreneurial intentions of university students made use of the same number of respondents with the aim of ensuring as far as maximum accuracy of responses and range of respondents.

The 5-item scale used to measure entrepreneurial intention was based on scales developed by Linan & 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 et al. (1977). The scale used to measure perceived risk was based on a scale developed by Weber et al., (2012) which used five-point Likert scale items to measure risk perceptions and risk behaviours of university students.

#### RESULTS

This study uses Partial Least Squares Structural Equation Modelling (PLS-SEM). SmartPLS 3 software was used to run these PLS-SEM tests and 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.

Table 1 CONSTRUCT RELIABILITY AND VALIDITY						
Construct	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)			
Entrepreneurial Intention	0.969	0.975	0.888			
Perceived Educational Support	0.834	0.899	0.748			
Perceived Innovativeness	0.841	0.873	0.535			
Perceived Risk	0.659	0.695	0.686			

The Cronbach Alpha values should be greater than 0.7 for constructs to be deemed internally consistent (Wong, 2013). 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. 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). This value is found in Table 5 above. 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.

Table 2       DISCRIMINANT VALIDITY (FORNALL-LARCKER CRITERION)						
	Entrepreneurial	Perceived Educational	Perceived	Perceived		
	Intention	Support	Innovativeness	Risk		
Entrepreneurial Intention	0.942					
Perceived Educational Support	0.199	0.865				
Perceived Innovativeness	0.147	0.098	0.732			
Perceived Risk	0.594	0.110	0.154	0.828		

Discriminant validity is measured by the Fornall-Larcker Criterion (Wong, 2013). Table 6 above shows the discriminant validity indicators for the measurement model. The constructs correlations with themselves should be the highest in the table (Wong, 2013). The grey shaded region illustrates these correlations, and they all appear to be the highest correlations amongst the table. This indicates that the model's discriminant validity is sound.

# MODEL FIT

The PLS-SEM measurement model is used to assess the goodness-of-fit of the model and to test the relationship significance (path values) of each of the constructs (Wong, 2013). 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 et al., 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).

# Path Values and Effect Sizes

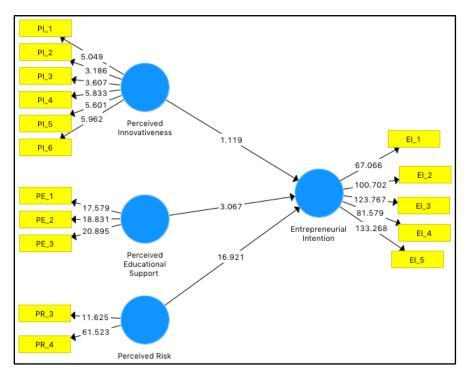
Table 3   PATH VALUES (PATH COEFFICIENTS)					
	Entrepreneurial Intention	Entrepreneurial Intention			
Perceived Educational Support	0.132	0.027			
Perceived Innovativeness	0.062	0.003			
Perceived Risk	0.591	0.507			

The PLS-SEM structural model is used to test path values and effect sizes (Wong, 2013).

Table 9 above shows the path coefficients for each construct measuring Entrepreneurial Intention. Path values should be greater than 0.2 to show significance and strength (Hair et al., 2017). Perceived Risk is the only construct with significant strength, showing a path value of 0.573. Effect sizes between 0.02 - 0.15 are considered weak, between 0.15 - 0.35 moderate and greater than 0.35 strong (Nitzl et al., 2016). The effect sizes are weak for Perceived Educational Support and Perceived Innovativeness, while the effect size for Perceived Risk is quite strong.

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## **Model Hypotheses**





The output in Figure 2 above can be used to test the 3 hypotheses that guide this research paper. 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.

#### H1: Perceived Innovativeness positively influences a students' entrepreneurial intentions.

This hypothesis has a fairly weak path value of 0.062, suggesting a positive but weak relationship between the two constructs. However, we fail to reject H0 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 sampled groups of Law and commerce students' entrepreneurial intentions at the University of Cape Town.

The second hypothesis (H2) below 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.

#### H2: Perceived educational Support positively influences students' entrepreneurial intentions.

This hypothesis has a moderately strong path value of 0.132, suggesting a positive, but moderate relationship between the two constructs. We can reject H0 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) below assess the effect of Perceived Risk on the entrepreneurial intentions of sampled groups of Commerce and Law students at the University of Cape Town.

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

This hypothesis has the strongest path value of 0.591, suggesting a positive and substantial relationship between the two constructs. We can reject H0 at the 5% significance level with a t-statistic of 16.921. 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.

Table 4						
PATH COEFFICIENTS (COMMERCE FAULTY MODEL)       Original Sample     Sample Mean     Standard Deviation     T Statistics     P Values						
Denne ing d Educational Comment	0.088	1		1.259	0.208	
Perceived Educational Support - > Entrepreneurial Intention	0.088	0.098	0.070	1.259	0.208	
Perceived Innovativeness - > Entrepreneurial Intention	0.137	0.079	0.168	0.816	0.415	
Perceived Risk - > Entrepreneurial Intention	0.606	0.600	0.064	13.200	0.000	

# **Commerce Faculty Model**

The output in Table 4 above provides the path coefficients used to measure the strength of the relationships from respondents in the Commerce faculty only. Perceived Risk is the strongest factor that leads to Commerce students' Entrepreneurial Intentions. The other two factors have no impact. Perceived Risk had a significant t-statistic of 13.200, while Perceived Educational Support and Perceived Innovativeness had t-statistics of 1.259 and 0.816 respectively, which are not statistically significant.

# Law Faculty Model

TABLE 5     PATH COEFFICIENTS (LAW FAULTY MODEL)					
	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
Perceived Educational Support - >	0.034	0.043	0.115	0.297	0.766
Entrepreneurial Intention					
Perceived Innovativeness - >	0.143	0.115	0.128	1.119	0.263
Entrepreneurial Intention					
Perceived Risk - >	0.513	0.508	0.063	8.090	0.000
Entrepreneurial Intention					

The output in Table 5 above provides the path coefficients used to measure the strength of the relationships from respondents in the Law faculty only. Likewise, Perceived Risk was the strongest factor that was shown to lead to Law students Entrepreneurial Intentions. The other two factors, like the Commerce faculty model, had no impact. Perceived Risk had a significant t-statistic of 8.090, while Perceived Educational Support and Perceived Innovativeness had t-statistics of 0.297 and 8.090 respectively, which are not statistically significant.

#### CONCLUSIONS

The primary objective of this study was to determine which factors influence entrepreneurial intentions of a sampled group of student respondents at the University of Cape Town. Based on the statistical output provided by SmartPLS 3, a clear understating of the relevance of each of the 3 factors driving entrepreneurial intention was uncovered as well as differences between each faculty.

After looking at the path values, test-statistics, and p-values for the combined model of 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 (2008) 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 et al., (2013), also supports these findings. The study found the effect of education on respondents' entrepreneurial intention to be strongly positive. The relationship between 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 & 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.

Insights can also be drawn from the separate models measuring the 150 Commerce respondents and the 150 Law respondents independently. While Perceived Educational Support was not statically significant in influencing Entrepreneurial Intention in the smaller sub-models of each faculty, conclusions can be drawn from the construct's relative path values across each faculty. The Commerce faculty respondents had a higher path value for perceived educational support's effect on entrepreneurial intention than those respondents from the Law faculty, suggesting that Commerce students receive, on average, more educational support to pursue entrepreneurial activities than do Law students. perceived risk's effect on entrepreneurial intention was statistically significant across both sub-models of each faculty. The perceived risk construct showed a higher path value in the Commerce faculty. It can therefore be assumed that Commerce students have a higher level of positivity in terms of attitude towards risk than do Law students. Based on the findings from the sampled group of student respondents, this could indicate that Commerce students, or those in participating in the research study, were more likely to take risks and pursue entrepreneurial endeavours.

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. 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. A few key managerial implications of these results are unpacked in the next section, including, what kind of support and guidance for potential entrepreneurs could usefully be created for higher education students in South Africa to encourage them to implement entrepreneurial marketing in their start-ups and business ideas.

# MANAGERIAL IMPLICATIONS

The conclusions from the findings of the study show that Perceived Risk and Perceived Educational Support had a significant effect on student respondents' entrepreneurial intention at UCT. Perceived Innovativeness was not found to influence students' respondents' entrepreneurial intention. Thus, the focus of this section is on perceived educational support and ways of assisting and guiding the managing of risk in courses for students to promote entrepreneurship. If one accepts, or were to generalize, the findings from the current study, and from views expressed in opinion pieces, one could venture to say that Commerce students are more likely to become entrepreneurs than are Law students. Nevertheless, although, according to some views, Law students tend to display entrepreneurial intention, this does tend not to be supported or nurtured in Law faculties to the extent that it is in Commerce faculties This leads to the first managerial implication: that educational support structures in Law faculties focus narrowly on the study of law without offering or providing support for entrepreneurship.

University faculties tend to teach in such a way that encourages or directs students to advance in careers in linear ways in terms of their tertiary curricula (Gordon & Bursuc, 2018). Thus, for many students the option of entrepreneurship is not seen as a viable career choice due to a lack of support and information. Many students with entrepreneurial qualities may feel ill equipped to start a business with little or insufficient knowledge of what this entails (Allard, 2013). However, the literature, together with the experience and perceptions of the authors of the current research study, suggest that Commerce students are offered a curriculum with a comprehensive and in-depth focus on general business knowledge that renders the option of entrepreneurship as a career more feasible (Gordon & Bursuc, 2018). The precise number of students who take up entrepreneurship after graduation is yet to be established.

Different faculties focus in their curricula on different skills, and business skills are important in terms of becoming a successful and committed entrepreneur. However, they tend not to be encouraged to consider entrepreneurship as a career. The literature has shown that becoming a successful entrepreneur is directly related to a person's personality (Gordon & Bursuc, 2018). Thus, a potentially successful entrepreneur could exist and be fostered in any faculty, not only in the Commerce faculty, whether the Humanities, Science, Engineering, or Health faculties. Entrepreneurship is an alternative route for any student and this possibility should be encouraged and made feasible for all students in higher education. Thus, what should be recommended to university faculties is that entrepreneurial support and knowledge should be available for all students, irrespective of their specific faculties. We see this as being achieved in several ways.

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.

Through such initiatives, universities such as the University of Cape Town could have a direct and positive effect on growing South Africa's presently ailing economy and decreasing the unemployment rate. This could be achieved if they were to utilize their educational platforms and curricula to teach entrepreneurship. As has been mentioned, South Africa faces a high unemployment rate and slow economic growth (Freidrich, 2017). The literature has shown entrepreneurship to be a significant factor in reducing poverty in developing countries, fuelling economic growth and alleviating unemployment (Freidrich, 2017). Government therefore needs to encourage youth innovation and positive risk behaviour to inspire entrepreneurship in youth. One strategy is to increase government spending on the youth. One initiative would be entrepreneurial hubs implemented across South Africa, including in rural areas, to encourage investment in youth run businesses to sustain them. For government investment in youth and entrepreneurial support to happen, there needs to be a shift in the mindsets of educationalists and universities need to initiate the change in these mind-sets. Specific recommendations for South Africa universities in terms of achieving these goals are discussed in the following section.

Current entrepreneurial courses should focus on a 'learning-by-doing' approach rather than a theoretical one. Entrepreneurial education differs from business management as it focuses on innovation, risk management and personal initiative whereas business management focuses on other technical/skills-based factors. Thus, such courses should be practical and teach students how to become entrepreneurial. Secondly, international models can inspire and guide South African universities in implementing more successful and practical entrepreneurial courses.

#### LIMITATIONS AND 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 Therefore, in future similar research, more channels, or a range of communication channels, including face-to-face distribution and explanation of the research and of the questionnaire, and/or interviews, should be used to collect data to have a more accurate representation of the target population and of their views and experiences.

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 (Malhotra, 2010). Thus, future research should include a larger sample size d 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. For future research about student's entrepreneurial intention, it could be beneficial to increase the number of faculties used in the study. This would allow for a more substantial understanding of the relationship between students' entrepreneurial intention and their respective faculties and curricula.

Using only three constructs to measure for entrepreneurial intention could be seen as a limitation. 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 statues, and values could or should be used to measure entrepreneurial intention in more depth. This would allow researchers to understand in more depth and complexity, and in a broader context, the range of (interrelated) factors that affect entrepreneurial intention.

The study also has a methodological limitation due to the research being restricted to quantitative research only. The respondents have a limited option of responses and this restricts unpacking or probing the experiences and perceptions of students' entrepreneurial intention. It is recommended that future researchers include qualitative research, in a mixed method research design, in order to unpack various nuances that quantitative research is unable to do.

Lastly, only using students from UCT limits this study because it does not include other students from across the country in different higher education institutions. Increasing and widening the scope of the target population to include students from all over South Africa would have benefited the results of this study. Regional and demographic differences, or lifestyle differences, were not factored into the current study. A great opportunity exists for researchers to study South African students from every region and from all types of institutions. This would allow for more meaningful and useful results on comparing the effect of different regions, institutions and faculties on students' entrepreneurial intentions, and in turn provide useful information to curriculum designers and economic policy makers to equip students who do have entrepreneurial intentions with appropriate knowledge, skills and motivation to embark on successful entrepreneurial careers. As has been mentioned, this in turn has the strong potential to contribute significantly to our country's much-needed economic growth, and its economic sustainability into the future.

#### REFERENCES

- Agarwal, S., & Teas, R. (2001). Perceived Value: Mediating Role of Perceived Risk. *Journal of Marketing Theory* and Practice, 9(4), 1-14.
- Alan, A., Kabadayi, E., Bakis, S., Can, Y., & Sekerin, M. (2017). Generating and Assessing Consumer's Innovation Adoption through Consumer Innovativeness, Innovation Characteristics and Perceived Brand Innovativeness. *International Journal of Marketing Studies*, 9(6), 68.
- Allah, M.A., & Nakhaie, H. (2011). Entrepreneurship and Risk-Taking. International Conference on E-Business, Management and Economics IPEDR, 25(2), 77-79.
- Ambad, S.N.A. & Damit, D.H.D.A. (2016). Determinants of Entrepreneurial Intention Among Undergraduate Students in Malaysia. *Procedia Economics and Finance*, *37*, 108-114.

- Amjad, T., Rani, S.H.B.A., & Sa'atar, S.B. (2020). Entrepreneurship development and pedagogical gaps in entrepreneurial marketing education. *The International Journal of Management Education*, 18(2), 100379.
- Barba-Sanchez, V., & Atienza-Sahuquillo, C. (2017). Entrepreneurial intention among engineering students: The role of entrepreneurship education. *European Research on Management and Business Economics*, 24(1), 53-61.
- Block, J. H., Hoogerheide, L., & Thurik, R. (2013). Education and Entrepreneurial Choice: An Instrumental Variables Analysis. *International Small Business Journal: Researching Entrepreneurship*, 31(1), 3-22.
- Bults, M. (2011). Perceived risk, anxiety, and behavioural responses of the general public during the early phase of the Influenza A (H1N1) pandemic in the Netherlands: results of three consecutive online surveys. BMC Public Health, 11(2), 1471-2458.
- Chen, Q., Li, X., Wang, J., Liu, K., & Li, L. (2020). Psychological perception-based analysis on the influence of entrepreneurship education on entrepreneurial intention. *Revista Argentina de Clínica Psicológica*, 29(1), 117-130.
- Chiloane-Tsoka, G. (2016). Factors influencing the Perceptions of youth entrepreneurship development in South Africa. *Problems and Perspectives in Management*, 14(3), 556-563.
- Datta, A. (2013). Commercialization of Innovations: An Overarching Framework and Research Agenda. *American Journal of Business*, 28(2), 147-191.
- Gordon, J., & Bursuc, V. (2018). Law and Entrepreneurship Education: A Proposed Model for Curriculum Development. *Journal of Legal Studies Education*, 35(1), 123-141.
- Hacioglu, G., Eren, S., Eren, M., & Celikkan, H. (2012). The Effect of Entrepreneurial Marketing on Firms' Innovative Performance in Turkish SMEs. *Procedia - Social and Behavioral Sciences*, 58(1), 871-878.
- Hair, J., Hult, G., Ringle, C., Sarstedt, M., & Thiele, K. (2017). Mirror, mirror on the wall: A comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, 1(1), 1-17.
- Hamali, S., Suryana, Y., Effendi, N., & Azis, Y. (2016). Influence of Entrepreneurial Marketing toward Innovation and Its Impact on Business Performance: A Survey on Small Industries of Wearing Apparel in West Java, Indonesia. *International Journal of Economics, Commerce and Management*, 5(8), 101-114.
- Havierniková, K., & Kordoš, M. (2019). Selected risks perceived by SMEs related to sustainable entrepreneurship in case of engagement into cluster cooperation. *Entrepreneurship and Sustainability Issues*, 6(4), 1680-1693.
- Hurt, H., Joseph, K., & Cook, C. (1977). Scales for The Measurement of Innovativeness. *Human Communication Research*, 4(1), 58-65.
- Ismail, K., Anuar, M.A., Wan Omar, W.Z., Aziz, A.A., Seohod, K., & Akhtar, C.S. (2015). Entrepreneurial Intention, Entrepreneurial Orientation of Faculty and Students towards Commercialization. *Proceedia - Social and Behavioral Sciences*, 181(3), 349-355.
- Jena, R.K. (2020). Measuring the impact of business management Student's attitude towards entrepreneurship education on entrepreneurial intention: A case study. *Computers in Human Behavior*, 107, 106275.
- Krueger, J.N.K. & Carsrud, A.L. (1993). Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship & Regional Development*, 5(4), 315-330.
- Malebana, M. (2014). The Effect of Knowledge of Entrepreneurial Support on Entrepreneurial Intention. *Mediterranean Journal of Social Sciences*, 5(20), 1020-1028.
- Malhotra, N.K. (2010). Marketing Research: An Applied Orientation (6th Edn.). New Jersey, Pearson, USA.
- Mort, G.S., Weerawardena, J., & Leisch, P. (2012). Advancing entrepreneurial marketing: Evidence from born global firms. *European Journal of Marketing*, 46(3/4), 542-561.
- Nitzl, C., Roldan, J., & Cepeda, G. (2016). Mediation analysis in partial least squares path modeling: Helping researchers discuss more sophisticated models. *Industrial Management & Data Systems*, 116(9), 1849-1864.
- Nurcan, E., & Kaya, H. (2017). Investigating the Individual Innovativeness Profiles and Barriers to Innovativeness in Undergraduate Nursing Students. *Journal of Education and Research in Nursing*, 14(3), 192-198.
- Oosterbeek, H., Praag, M.V., & Ijsselstein, A. (2010). The Impact of Entrepreneurship Education on Entrepreneurship Skills and Motivation. *European Economic Review*, 54(3), 442-454.
- Reininger, B., Evans, A.E., Griffin, S.F., Valois, R.F., Vincent, M.L., Parra-Medina, D., Taylor, D.J., & Zullig, K.J. (2003). Development of a Youth Survey to Measure Risk Behaviors, Attitudes and Assets: Examining Multiple Influences. *Health Education Research*, 18(4), 461-476.
- Schmid, S., Grosche, P., & Mayrhofer, U. (2016). Configuration and coordination of international marketing activities. *International Business Review*, 25(2), 535-547.

- Shi, L., Yao, X., & Wu, W. (2019). Perceived university support, entrepreneurial self-efficacy, heterogeneous entrepreneurial intentions in entrepreneurship education. *Journal of Entrepreneurship in Emerging Economies*, 12(2), 203-230
- Shrivastava, U., & Acharya, S.R. (2020). Entrepreneurship education intention and entrepreneurial intention amongst disadvantaged students: An empirical study. *Journal of Enterprising Communities: People and Places in the Global Economy*. Retrieved from: https://doi.org/10.1108/JEC-04-2020-0072.
- Soriano, D.R., & Huarng, K.H. (2013). Innovation and entrepreneurship in knowledge industries. *Journal of business research*, 66(10), 1964-1969.
- Tominc, P. (2019). Perceived Innovativeness and Competitiveness of Early-Stage Entrepreneurs. *Croatian Economic Survey*, 21(1), 87-108.
- Van Praag, C.M., & Cramer, J.S. (2001). The Roots of Entrepreneurship and Labour Demand: Individual Ability and Low Risk Aversion. *Economica*, 68(269), 45-62.
- Weber, E.U., Blais, A.R. & Betz, N.E. (2002). A Domain-Specific Risk-Attitude Scale: Measuring Risk Perceptions and Risk Behaviours. *Journal of Behavioral Decision Making*, 15(4), 263-290.
- Wong, K. (2013). Partial Least Squares Structural Equation Modelling (PLS-SEM) Techniques Using SmartPLS. *Marketing Bulletin*, 24(1), 1-32.
- Yurtkoru, S.E., Acar, P., & Teraman, B.S. (2014). Willingness to Take Risk and Entrepreneurial Intention of University Students: An Empirical Study Comparing Private and State Universities. *Procedia - Social and Behavioral Sciences*, 150, 843-840.