

Perceived barriers influencing the formation of entrepreneurial intention

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Abstract

The underlying research for this article investigates the barriers to starting a business among 329 final-year commerce students in Limpopo. The study uses the theory of planned behaviour to determine the relationship between perceived barriers, entrepreneurial intention and the determinants of entrepreneurial intention, namely the attitude towards becoming an entrepreneur and perceived behavioural control.

The study was carried out by means of a survey using a structured questionnaire. SPSS was used to analyse the data. The findings revealed 12 top barriers to starting a business among the respondents. Perceived barriers had a significant but very weak relationship with entrepreneurial intention, the attitude towards becoming an entrepreneur and perceived behavioural control. The results revealed significant differences in perceived barriers between the respondents who had high and low entrepreneurial intention, positive and negative attitude towards becoming an entrepreneur and high and low perceived behavioural control.

The study contributes to the body of knowledge by moving beyond the identification of perceived barriers to demonstrating the relationship between these barriers and entrepreneurial intention and its antecedents. Therefore, it has extended the applicability of the theory of planned behaviour in examining how perceived barriers influence the formation of entrepreneurial intention in a South African context.

Key phrases

barriers to entrepreneurship; entrepreneurial intention; Limpopo; South Africa

1. INTRODUCTION

Entrepreneurial intention research has grown rapidly in recent years due to the fact that entrepreneurial intentions precede entrepreneurial action and influence the creation of new ventures (Delanoë 2013:393; Douglas 2013:637; Kautonen, Van Gelderen & Fink 2013a:11-12; Kautonen, Van Gelderen & Tornikoski 2013b:16; Rauch & Hulsink 2015:196). However,

researchers indicate that people do not always act on their intentions as a result of various impediments they encounter while trying to make their intentions a reality (Ajzen 2005:104; Carsrud & Brännback 2011:17-18).

The performance of the behaviour can be hindered by personal deficiencies and external obstacles that limit an individual's control over the behaviour (Ajzen 2005:110). The development of entrepreneurial intentions can be hampered by high opportunity costs and the link between entrepreneurial intention and action could be affected by the availability of resources and institutional forces (Rauch & Hulsink 2015:200). The performance of the behaviour can therefore be enhanced by providing individuals with the requisite resources and removing potential barriers (Ajzen 2005:107 & 125; Ajzen 2014:4; Gnyawali & Fogel 1994:55). Perceived barriers do not only hinder the implementation of entrepreneurial intentions but they also impact negatively on the realisation of growth intentions (Doern 2011:496).

A limited number of studies have examined the barriers associated with entrepreneurial intention and its antecedents (for example, Adjei, Broni-Pinkrah & Denanyoh 2014:33; Hadjimanolis & Poutziouris 2011:179; Pruett, Shinnar, Toney, Llopis & Fox 2009:557; Schwarz, Wdowiak, Almer-Jarz & Breitnecker 2009:287). On that note South Africa has a shortage of studies that link perceived barriers to the determinants of entrepreneurial intention and entrepreneurial intention. In addition, Liñán and Fayolle (2015:12) observed an underdevelopment of research that examines the effect of perceived barriers on entrepreneurial intention.

Since entrepreneurial activity is an intentionally planned behaviour (Krueger, Reilly & Carsrud 2000:425), an investigation of the relationship between perceived barriers and entrepreneurial intention and its determinants would provide a better understanding of the precursors to the entrepreneurial behaviour. This is particularly vital in view of the high unemployment rate in South Africa that is about 25% (Statistics South Africa 2015:8), low total entrepreneurial activity rate of 7.0% and the percentage of individuals who have entrepreneurial intentions of 11.8% (Herrington, Kew & Kew 2015:22).

The success of the efforts to stimulate and support new generations of entrepreneurs is dependent on identifying and reducing the barriers to entrepreneurial intention (Herrington *et al.* 2015:23). Therefore, an understanding of how perceived barriers influence

entrepreneurial intention is vital in helping policymakers to design relevant programmes for entrepreneurship development, especially those directed at stimulating entrepreneurship in rural areas. It has been found that rural areas experience significantly lower entrepreneurial activity rates than their urban counterparts (Herrington, Kew & Kew 2010:42).

This study investigates perceived barriers to starting a business and determines whether these barriers are significantly related to entrepreneurial intention and the antecedents of entrepreneurial intention among final-year commerce students at a rural university in Limpopo using the Theory of planned behaviour (TPB). The study is the first in a South African context to examine the relationship between perceived barriers to starting a business and entrepreneurial intention based on the TPB. In addition, the study determines whether or not perceived barriers differ between the respondents with high and low entrepreneurial intentions, positive and negative attitude towards becoming an entrepreneur, and high and low perceived behavioural control.

2. LITERATURE REVIEW

2.1 Theory of planned behaviour

According to the theory of planned behaviour, entrepreneurial intention is determined by the attitude towards the behaviour, subjective norms and perceived behavioural control (Ajzen 2005:117-118; Ajzen 2012:438; Ajzen 2014:1-2). The attitude towards the behaviour refers to how positively or negatively an individual evaluates the performance of a particular behaviour (Ajzen 2005:118). The adoption of positive or negative attitudes by individuals depends on how they evaluate the outcomes associated with the performance of the behaviour.

Subjective norms involve the perceived social pressure to perform or not to perform the behaviour. Individuals are more likely to perceive the social pressure to perform a particular behaviour when they think their significant others would approve of their decision to perform the behaviour and when these social referents engage in the same behaviour (Ajzen 2005:124).

Perceived behavioural control is an individual's perceived sense of self-efficacy or ability to perform a particular behaviour (Ajzen 2005:118). Perceived behavioural control can be enhanced by the availability of second-hand information about the behaviour, by observing

the consequences of the actions of acquaintances and friends and the presence of factors that can facilitate the performance of the behaviour (Ajzen 2005:125).

Based on the theory of planned behaviour individuals will intend to engage in a particular behaviour depending firstly, on how favourable or unfavourable they evaluate that behaviour. Secondly, they should believe in their ability to perform the behaviour. Lastly, they should perceive the social pressure to perform or not to perform the behaviour and be motivated to comply with the expectations of significant others or their social referents should be engaged in the same behaviour (Ajzen 2005:123-125; Ajzen 2012:448). Since approval or disapproval of a particular behaviour by significant others can be a facilitating or inhibiting factor with regard to the performance of that behaviour (Bandura 1986:235; Katono, Heintze & Byabashaija 2010:12-13; Krueger 2008:4), subjective norms will not be included in the analysis of the relationship between perceived barriers and the determinants of entrepreneurial intention.

2.2 Barriers to the formation of entrepreneurial intention and entrepreneurial activity

The formation and translation of entrepreneurial intention into the establishment of a new venture can be enhanced or hindered by various factors. Entrepreneurial intention and entrepreneurial activity require a socially supportive environment that is characterised by socio-cultural practices, values and norms that support and legitimise entrepreneurship (Kibler, Kautonen & Fink 2014:14; Singer, Amorós & Moska 2015:34; Stephan & Uhlaner 2010:1355-1356). The absence of these aspects can make individuals to view entrepreneurship with suspicion. This in turn will impact negatively on entrepreneurial intention and its antecedents and ultimately entrepreneurial activity.

Entrepreneurial activity can be inhibited by the lack of skills (Hadjimanolis & Poutziouris 2011:176; Muhanna 2007:101; Smith & Beasley 2011:731), lack of finance (Muhanna 2007:101; Smith & Beasley 2011:731), lack of opportunities (Arenius & Minitti 2005:239; Zhang & Yang 2006:167 & 169), risk aversion (Muhanna 2007:101) and fear of failure (Mitchell & Shepherd 2011:205; Singer *et al.* 2015:34). Barriers impacting negatively on entrepreneurial activity have been categorised into the lack of support structure and fiscal or administrative costs; lack of knowledge and experience, economic climate and lack of

entrepreneurial competencies; lack of self-confidence and risk aversion (Giacomin, Janssen, Pruett, Shinnar, Llopis & Toney 2011:234).

Moreover, Choo and Wong (2006:57-58) suggested that barriers to business formation may be categorised into the lack of capital, lack of skills, hard reality, lack of confidence and compliance costs. Lack of capital includes the difficulty in obtaining finance, lack of own savings or assets and lack of support from family or friends. Lack of skills comprised lack of marketing skills, lack of managerial or financial expertise and lack of information about business start-ups. Hard reality involves risks being greater than expected, the uncertainty of the future and bad economic indicators in general. Lack of confidence includes the fear of failure and the difficulty in convincing others to support one's idea. Compliance with government regulations, high taxes and fees and the difficulty in finding suitable labour constituted compliance costs (Choo & Wong 2006:58). Other barriers to entrepreneurial intention and business formation that were identified include the task being more difficult than expected, difficulty in finding the right partner and lack of suitable premises (Choo & Wong 2006:56; Volery, Doss, Mazzarol & Thein 1997:Internet).

Prior research has shown that the ability to cope with ambiguity and uncertainty and to make decisions under uncertainty and risk are measures of entrepreneurial self-efficacy which have a significant relationship with entrepreneurial intention (Chen, Greene & Crick 1998:305 & 308; De Noble, Jung & Ehrlich 1999:Internet; Malebana & Swanepoel 2014:18-19). Entrepreneurial self-efficacy refers to individuals' beliefs in their own abilities to perform on the various skills requirements necessary to create a new venture (De Noble *et al.* 1999:Internet). Entrepreneurial self-efficacy with regard to the ability to cope with ambiguity and uncertainty and to make decisions under uncertainty and risk can be enhanced by entrepreneurship education (Chen *et al.* 1998:313; De Noble *et al.* 1999:Internet; Malebana & Swanepoel 2014:12-15; Nabi & Liñán 2013:649). Entrepreneurship education that provides students with the opportunity to take risks on their own or be exposed to people who have taken risks and learn from their experiences can prepare these students for entrepreneurial risks (Collins, Hannon & Smith 2004:460).

The formation of entrepreneurial intention can be negatively impacted by the lack of knowledge, operating risks and start-up risks (Pruett *et al.* 2009:585); risk aversion, fear of failure, lack of social networks, lack of resources, avoidance of hard work and stress

(Sandhu, Sidique & Riaz 2011:440); lack of capital, lack of entrepreneurial expertise, the adversity and willingness costs (Iskandarini 2014:171-172).

Researchers indicate that high levels of entrepreneurial intentions are more likely to be evident among individuals who have a positive attitude towards risk (Dawson & Henley 2013:7) and that fear of failure can deter opportunity start-ups (Lee, Wong & Foo 2007:18-19). In addition, perceiving risk as a threat could negatively affect the attitude towards becoming an entrepreneur and perceived behavioural control (Nabi & Liñán 2013:643).

Nasution (2007:Internet) reported that hard reality and compliant costs are significantly related to entrepreneurial intention while Volery *et al.* (1997:Internet) found that lack of resources, compliance costs and hard reality can prevent intending entrepreneurs from implementing their intentions. However, some researchers did not find any relationship between perceived barriers and entrepreneurial intention (Adjei *et al.* 2014:33; Ismail, Khalid, Othman, Rahman, Kassim & Zain 2009:57; Schwarz *et al.* 2009:285).

These findings could possibly be explained by the fact that perceived barriers differ between countries in terms of their importance and their relationship with entrepreneurial intention (Şeşen & Pruett 2014:252-255). The strength of perceived barriers also differs between those who intend to start a business and those who do not have such intentions and by personality type (Sharma & Madan 2013:26-27).

A number of barriers that have been discussed in this section can be reduced by having both entrepreneurial role models and access to entrepreneurial and social support. These aspects are discussed in detail in the next subsections with a specific focus on how they can impact on entrepreneurial intention and the antecedents of entrepreneurial intention.

2.2.1 Lack of entrepreneurial role models as a barrier to the formation of entrepreneurial intention

Lack of exposure to entrepreneurial role models and exposure to bad experiences of family entrepreneurship can be an obstacle to the formation of entrepreneurial intention (Frazier & Niehm 2006:Internet; Smith & Beasley 2011:731; Zhang, Duysters & Cloudt 2014:634-636). The attitude towards entrepreneurship and entrepreneurial self-efficacy (Díaz-García & Jiménez-Moreno 2010:275; Geissler & Zanger 2013:8; Uygun & Kasimoglu 2013:33-34), perceived behavioural control and subjective norms (Karimi, Biemans, Lans, Chizari, Mulder

& Mahdei 2013:208) can be influenced positively by observing others who are entrepreneurs.

Lack of exposure to entrepreneurial role models can prevent the acquisition of the know-how and know-who (Dohse & Walter 2012:890), entrepreneurial experience (Aslam, Awan & Khan 2012:122; Uygun & Kasimoglu 2013:34), opportunity identification (Geissler & Zanger 2013:8) and observational learning from taking place (Bandura 1989:23; Karimi *et al.* 2013:211).

2.2.2 Lack of entrepreneurial and social support as barriers to the formation of entrepreneurial intention

The availability of entrepreneurial and social support is vital to enable entrepreneurs to cope with high levels of uncertainty and ambiguity that characterise the start-up phase (Hanlon & Saunders 2007:634). Entrepreneurial and social support can play a vital role in assisting intending entrepreneurs to overcome the barriers that prevent them from implementing their intentions (Smith & Beasley 2011:733 & 735). Perceived availability and knowledge of entrepreneurial support influence the antecedents of entrepreneurial intention (Saeed, Yousafzai, Yani-De-Soriano & Muffatto 2015:1137) and the formation of entrepreneurial intention (Malebana 2012:476-483; Malebana 2014a:1025). In addition, entrepreneurial support can enhance entrepreneurial motivation (Malebana 2014b:721) and facilitate the creation of new ventures (Delanoë 2013:393; Zanakis, Renko & Bullough 2012:20). On the contrary, Schwarz *et al.* (2009:285) found that environmental support and barriers are not significantly related to entrepreneurial intention.

Individuals would unlikely intend to start a business when they perceive a lack of social support from others in their efforts to do so (Chen & He 2011:153-154; Dohse & Walter 2012:890; Pruett, Shinnar, Toney, Llopis & Fox 2007:Internet; Sequeira, Mueller & McGee 2007:286; Smith & Beasley 2011:731). Social support in the form of encouragement from others can enable an individual to overcome doubt and act on the identified opportunity (McMullen & Shepherd 2006:141). Individuals who believe that they would receive social support from their close ones are more likely to have high self-esteem, high general self-efficacy and high job search self-efficacy (Maddy III, Cannon & Lichtenberger 2015:92). This simply means that social support enhances individuals' confidence that they can surmount whatever obstacles they may encounter while pursuing a particular activity.

3. PROBLEM INVESTIGATED

Barriers to starting a new venture have been investigated in a number of studies (for example Choo & Wong 2006:48; Giacomini *et al.* 2011:220; Katono *et al.* 2010:12-13; Shinnar, Pruett & Toney 2009:154; Smith & Beasley 2011:723). Some studies have even indicated the existence of relationships between these barriers and entrepreneurial intention (Iskandarini 2014:171-172; Lüthje & Franke 2003:142; Nasution 2007:Internet; Pruett *et al.* 2009:585; Şeşen & Pruett 2014:254-255). While the findings of these studies are not conclusive, it is also not known how these barriers are related to entrepreneurial intention and its antecedents in a South African context. For this reason this study examines, based on the theory of planned behaviour the relationship between perceived barriers, entrepreneurial intention and the antecedents of entrepreneurial intention, namely, the attitude towards becoming an entrepreneur and perceived behavioural control.

4. RESEARCH OBJECTIVES

The objectives of this study were namely:

- to identify the barriers to starting a business among final-year commerce students in Limpopo;
- to determine the relationship between perceived barriers, the attitude towards becoming an entrepreneur, perceived behavioural control and entrepreneurial intention among final-year commerce students in Limpopo;
- to assess the differences in perceived barriers between the respondents with high and low entrepreneurial intentions, positive and negative attitude towards becoming an entrepreneur, and high and low perceived behavioural control among final-year commerce students in Limpopo.

5. RESEARCH METHODOLOGY

5.1 Research design

The study is descriptive in nature and followed a quantitative research approach. It was conducted by means of a cross-sectional survey. The chosen research design, approach and method were suited to this study for two reasons. First, they allowed for the collection of data on the demographic characteristics, beliefs, perceptions and attitudes from a large number of individuals so that they can be analysed statistically and be used to describe the

individuals studied. Second, they were appropriate for establishing relationships between perceived barriers and entrepreneurial intention and its antecedents and for determining the differences in perceived barriers among the respondents.

5.2 The sample

The sample for this study was 329 final-year commerce students at a rural university in Limpopo. Final-year student samples are common in entrepreneurial intention research (for example Krueger *et al.* 2000:421; Liñán & Chen 2009:602; Maes, Leroy & Sels 2014:788; Zapkau, Schwens, Steinmetz & Kabst 2015:643) as they are facing important career decisions upon completion of their studies and entrepreneurship could be one of their options.

5.3 Data collection instrument

The instrument for data collection was designed based on structured and validated questionnaires that were used in previous studies on the barriers to starting a business (Choo & Wong 2006:56) and entrepreneurial intention (Guerrero, Lavín & Alvarez 2009:90; Liñán & Chen 2009:612-613).

The questionnaires comprised questions measuring entrepreneurial intention (four questions), the attitude towards becoming an entrepreneur (five questions), perceived behavioural control (seven questions) and perceived barriers (21 questions) that were based on a seven-point Likert scale ranging from 1 = Totally disagree to 7 = Totally agree. Data on biographical details were measured as dummy variables (1 = Male and 0 = Female; 1 = Yes and 0=No).

Questionnaires were distributed to students during their lectures. These students were informed about the purpose of the research and were asked to freely participate in the study by completing the questionnaire. Students completed the questionnaires in the presence of the researcher and returned them afterwards.

5.4 Data analysis

The Statistical Package for the Social Sciences (SPSS) was used to analyse the data. Descriptive statistics were used for the sample characteristics while hierarchical multiple regression analysis was used to test the relationship between perceived barriers and the dependent variables. The Mann-Whitney *U* test was used to test the differences in perceived

barriers between the respondents who had high and low entrepreneurial intention, positive and negative attitude towards becoming an entrepreneur and high and low perceived behavioural control.

The differences in perceived barriers based on whether the respondents were currently running their own businesses and whether they had tried to start a business before were also tested by means of the Mann-Whitney *U* test. Prior to data analysis, reliability analysis and factor analysis were conducted to determine the reliability and validity of the measuring instrument. The reliability of the measuring instrument was tested by means of Cronbach's alpha. Cronbach's alpha values ranged from 0.750 to 0.918, suggesting that it was a reliable instrument for use in this study (Field 2013:712).

Principal component analysis extracted a four factor solution constituting perceived barriers with eigenvalues greater than one that in combination accounted for 57.6% of variance. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.924, which was well above the acceptable limit of 0.5 (Field 2013:695). Bartlett's Test of Sphericity was highly significant ($p < 0.001$).

Overall, the results suggest that factor analysis was appropriate for the data. Data were tested for the independence of errors and multicollinearity. The values of the Durbin-Watson statistic ranged from 1.676 to 1.890, which were well within the acceptable range from 1 to 3 as suggested by Field (2013:337). Therefore, the data did not violate the assumption of independence of errors.

The tolerance values for all the dependent variables were 1.000 and since they were larger than 0.2, this means that multicollinearity was not a problem. All the dependent variables had variance inflation factors (VIF) of 1.000, which were also highly satisfactory since they were below 10.

6. RESULTS

6.1 Characteristics of the sample

Of the 329 respondents 57.1% was female and 41.9% was male (the other percentage could not indicate gender). In terms of age 24.6% was in the age category between 18 and 21 years, 61.1% of the respondents was in the age category between 22 and 25 years, 7.6%

was in the age category between 26 and 30 years, 2.7% was in the age category between 31 and 35 years, while 2.7% was above 36 years.

In terms of prior exposure to entrepreneurship, 42.9% of the respondents were registered for a one year entrepreneurship module, 7% was running their own businesses, 32.8% had tried to start a business before while 28.6% came from the families with members who were running businesses. Just above 3% of the respondents were employed at the time of the survey.

6.2 Perceived barriers influencing entrepreneurial intention among the respondents

The results (Table 1) revealed 12 top barriers that impacted on students' entrepreneurial intention, their attitude towards becoming an entrepreneur and perceived behavioural control.

These barriers were in their order of importance finding the right partner, difficulty in obtaining finance, high risk involved in starting a new business, lack of saving or assets, lack of financial skills, difficulty in convincing others to support one's idea, high taxes and fees, lack of suitable premises, lack of general management skills, the uncertainty of the future, compliance with government regulations and fear of failure. The least barriers were the lack of human resource management skills, bad economic indicators and lack of support from family/friends.

6.3 The relationship between perceived barriers and the antecedents of entrepreneurial intention

The regression results (Table 2) show that perceived barriers to starting a business had a significant but very weak relationship with entrepreneurial intention in Model 1 ($\beta = 0.107$, $p < 0.10$). Perceived barriers to starting a business accounted for just over 1% of variance in entrepreneurial intention ($F(1, 327) = 3.79$; $p < 0.10$).

Perceived barriers had a significant but very weak relationship with the attitude towards becoming an entrepreneur in Model 2 ($\beta = 0.189$, $p < 0.001$). Perceived barriers explained over 3.6% of variance in the attitude towards becoming an entrepreneur ($F(1, 327) = 12.11$; $p < 0.01$). A significant but also very weak relationship was found between perceived barriers and perceived behavioural control in Model 3 ($\beta = 0.119$, $p < 0.05$).

TABLE 1: Perceived barriers to entrepreneurial intention

	Mean	Std. deviation
Difficulty in finding the right partner	4.60	2.119
Difficulty in obtaining finance	4.52	2.335
There is high risk in starting a new business	4.47	2.161
Lack of savings or assets	4.44	2.287
Lack of financial skills	4.41	2.346
Difficulty in convincing others to support your idea	4.35	2.226
High taxes and fees	4.33	2.206
Lack of suitable premises	4.27	2.169
Lack of general management skills	4.19	2.302
The uncertainty of the future	4.19	2.053
Compliance with government regulations	4.18	2.185
Fear of failure	4.18	2.274
Lack of business planning skills	4.13	2.307
Lack of operations skills	4.12	2.251
Lack of information about business start-ups	4.11	2.248
Lack of marketing skills	4.11	2.309
Difficulty in finding suitable labour	4.10	2.174
Lack of knowledge about where to obtain support	4.09	2.329
Lack of human resource management skills	4.03	2.280
Bad economic indicators in general	4.00	2.288
Lack of support from family/friends	3.68	2.280

Source: Author's compilation from analysis

Perceived barriers accounted for 1.4% of variance in perceived behavioural control ($F(1, 327) = 4.69; p < 0.05$). The findings suggest that perceived barriers have a negligible effect on the attitude towards becoming an entrepreneur, perceived capability for starting a business and on the formation of entrepreneurial intention. This means that the effect of perceived barriers is more likely to be realised after the formation of entrepreneurial intention when an individual attempts to translate the intention into action. The results have shown

that the TPB could be a valuable model for investigating the relationship between perceived barriers and entrepreneurial intention in South Africa.

TABLE 2: The relationship between perceived barriers, entrepreneurial intention and the antecedents of entrepreneurial intention

Independent variable	Dependent variables		
	Entrepreneurial intention	Attitude towards becoming an entrepreneur	Perceived behavioural control
	Model 1	Model 2	Model 3
	β	β	β
Perceived barriers to starting a business	0.107†	0.189**	0.119*
Multiple R	0.107	0.189	0.119
R Square (R ²)	0.011	0.036	0.014
Δ Adjusted R ²	0.008	0.033	0.011
Δ F-Ratio	3.791	12.113	4.696
Significance of F	0.052†	0.001**	0.031*

†P < 0.10 * P < 0.05 ** P < 0.01

Source: Author's compilation from analysis

6.4 Differences in perceived barriers based on entrepreneurial intention and the antecedents of entrepreneurial intention

The Mann-Whitney *U* test results (Table 3) revealed that perceived barriers differ significantly between the respondents who have high and low entrepreneurial intention with regard to the high risk associated with starting a new business ($p < 0.05$), the difficulty in finding the right partner ($p < 0.05$), lack of information about business start-ups ($p < 0.10$) and the difficulty in obtaining finance ($p < 0.10$).

The results show that the respondents who had high entrepreneurial intention and those with low entrepreneurial intention perceived the other 17 barriers more or less similarly. In addition, the findings indicate that the high risk associated with starting a new business, the difficulty in finding the right partner, lack of information about business start-ups and the

TABLE 3: Perceived barriers based on differences in entrepreneurial intention and the antecedents of entrepreneurial intention

Variables	Mean rank		p-value
	High entrepreneurial intention	Low entrepreneurial intention	
Perceived barriers based on entrepreneurial intention			
There is high risk in starting a new business	169.22	144.09	0.016*
Lack of information about business start-ups	166.41	148.54	0.087†
Difficulty in finding the right partner	167.80	146.34	0.039*
Difficulty in obtaining finance	166.93	147.73	0.064†
Perceived barriers based on the attitude towards becoming an entrepreneur	Positive attitude	Negative attitude	p-value
Bad economic indicators in general	164.54	142.76	0.034*
There is high risk in starting a new business	173.39	129.06	0.000***
The uncertainty of the future	164.51	142.82	0.035*
Lack of information about business start-ups	170.11	134.14	0.000***
Lack of financial skills	164.02	143.58	0.045*
Lack of operations skills	163.78	143.94	0.054†
Lack of general management skills	163.01	145.14	0.082†
Difficulty in obtaining finance	169.16	135.61	0.001**
Lack of savings or assets	168.22	137.07	0.002**
Difficulty in finding suitable labour	164.42	142.96	0.038*
High taxes and fees	163.53	144.34	0.062†
Compliance with government regulations	164.86	142.28	0.029*
Lack of suitable premises	167.89	137.58	0.003**
Difficulty in convincing others to support your idea	167.07	138.85	0.006**
Perceived barriers based on perceived behavioural control	High perceived behavioural control	Low perceived behavioural control	p-value
Lack of information about business start-ups	170.43	143.88	0.009**
Difficulty in obtaining finance	166.51	148.68	0.078†
High taxes and fees	167.81	147.10	0.042*
Lack of suitable premises	167.32	147.69	0.054†
Lack of support from family/friends	166.52	148.67	0.080†

† P < 0.10 * P < 0.05 ** P < 0.01 *** P < 0.001

Source: Author's compilation from analysis

difficulty in obtaining finance could inhibit the implementation of entrepreneurial intention among the respondents who had high entrepreneurial intention.

Of the 21 barriers the respondents who had positive attitudes towards becoming an entrepreneur differed significantly from those with negative attitudes on 14 perceived barriers. These barriers include the high risk associated with starting a new business ($p < 0.001$), lack of information about business start-ups ($p < 0.001$), the difficulty in obtaining finance ($p < 0.01$), lack of savings or assets ($p < 0.01$), lack of suitable premises ($p < 0.01$), difficulty in convincing others to support your idea ($p < 0.01$), bad economic indicators in general ($p < 0.05$), the uncertainty of the future ($p < 0.05$), lack of financial skills ($p < 0.05$), difficulty in finding suitable labour ($p < 0.05$), compliance with government regulations ($p < 0.05$), lack of operations skills ($p < 0.10$), lack of general management skills ($p < 0.10$) and high taxes and fees ($p < 0.10$).

The findings suggest that these 14 barriers can impact negatively on the attractiveness of the entrepreneurial career among the respondents who have positive attitudes towards becoming an entrepreneur. This means that despite the attractiveness of the positive outcomes of being an entrepreneur, positive attitudes towards entrepreneurship can change and become negative when individuals encounter several barriers that stand in their way to achieving these outcomes.

Furthermore, the findings showed significant differences in perceived barriers between the respondents who had high and low perceived behavioural control in terms of the lack of information about business start-ups ($p < 0.01$), high taxes and fees ($p < 0.05$), the difficulty in obtaining finance ($p < 0.10$), lack of suitable premises ($p < 0.10$) and lack of support from family or friends ($p < 0.10$).

The findings indicate that these barriers could have a negative effect on perceived capability for starting a business among the respondents who have high perceived behavioural control since these barriers would limit the respondents' control over the behaviour in their efforts to start a business.

6.5 Differences in perceived barriers based on start-up experience

Since 7% of the respondents were running their own businesses and 32.8% had tried to start a business before, the Mann-Whitney U tests were conducted to determine whether the

respondents who had these start-up experiences perceived barriers differently from those who did not have these experiences. The findings (Table 4) indicate that the respondents who were currently running their own businesses differed from those who were not running their own businesses only on the lack of information about business start-ups ($p < 0.10$).

The respondents who had tried to start their own businesses before differed significantly from those who did not try to start their own businesses on nine perceived barriers.

These barriers include bad economic indicators in general ($p < 0.01$), lack of suitable premises ($p < 0.01$), the high risk in starting a new business ($p < 0.05$), the uncertainty of the future ($p < 0.05$), difficulty in obtaining finance ($p < 0.05$), lack of savings or assets ($p < 0.05$), difficulty in convincing others to support your idea ($p < 0.05$), difficulty in finding the right partner ($p < 0.10$) and compliance with government regulations ($p < 0.10$). The findings suggest these barriers could threaten the survival of new start-ups and even lead to premature closure as a result of entrepreneurs not being able to overcome these barriers.

TABLE 4: Perceived barriers based on start-up experience

Variables	Mean rank		p-value
	Yes	No	
Perceived barriers based on current ownership of the business			
Lack of information about business start-ups	202.43	162.45	0.059†
Perceived barriers based on having tried to start a business before			p-value
Bad economic indicators in general	184.20	155.62	0.009**
There is high risk in starting a new business	181.33	157.02	0.027*
The uncertainty of the future	179.92	157.71	0.044*
Difficulty in finding the right partner	177.44	158.92	0.091†
Difficulty in obtaining finance	180.16	157.59	0.039*
Lack of savings or assets	182.44	156.48	0.018*
Compliance with government regulations	179.28	158.02	0.054†
Lack of suitable premises	184.33	155.55	0.009**
Difficulty in convincing others to support your idea	179.53	157.90	0.05*

† $P < 0.10$ * $P < 0.05$ ** $P < 0.01$ *** $P < 0.001$

Source: Author's compilation from analysis

7. IMPLICATIONS

Entrepreneurial intention is vital for the emergence (Delanoë 2013:393; Douglas 2013:637; Kautonen *et al.* 2013a:11-12; Kautonen *et al.* 2013b:16; Rauch & Hulsink 2015:196) and growth of new ventures (Doern 2011:498). The findings of this research have implications for policymakers and entrepreneurship educators in Limpopo. Prior research has shown that confidence in one's skills increases the likelihood of engaging in the efforts of starting a new business (Arenius & Minniti 2005:239) while the fear of failure and uncertainty impact negatively on entrepreneurial action (McMullen & Shepherd 2006:139; Mitchell & Shepherd 2011:205).

Entrepreneurship educators should equip students with the skills to execute the entrepreneurial process and to successfully manage the new venture after it had been established. An appropriately designed entrepreneurship education that is offered in a less restrictive higher education environment could help in enhancing entrepreneurial self-efficacy in terms of the ability to cope with ambiguity and uncertainty and to make decisions under uncertainty and risk. Douglas (2013:648) indicates that such type of education could also be vital in changing students' attitudes towards risk. Experiential entrepreneurship education that provides students with the opportunity to experiment with their ideas is vital for students to learn to overcome the uncertainty, to learn from their mistakes, and to take risks. Exposure to entrepreneurs who have taken risks and failed, but later managed to overcome their failure, could prepare students in learning to take risks and to accept failure as part of the entrepreneurial process. Nabi and Liñán (2013:643) indicate that perceiving risk as an opportunity enhances perceived behavioural control and engenders positive entrepreneurial attitudes.

The government and its support institutions should increase awareness of and access to entrepreneurial support in rural areas. By so doing, intending entrepreneurs and entrepreneurs who have recently started new ventures would know about the types of support that are available, where to find them and how to access them. This knowledge would help in reducing the uncertainty and other barriers faced by intending entrepreneurs and owners of new start-ups during the pre-start-up and early stages of the new venture creation process. Increasing awareness of and access to entrepreneurial support would create positive perceptions about the supportiveness of the government towards entrepreneurship. This would also contribute positively towards the formation of

entrepreneurial intention (Malebana 2012:476-483; Malebana 2014a:1025), possibly increase the number of new start-ups (Delanoë 2013:393; Zanakis *et al.* 2012:20) and even promote the survival of new start-ups.

Policymakers should consider and try to lessen the effect of compliance with regulations and high taxes and fees on entrepreneurial intention and the creation of new ventures. Information sessions that educate people about compliance with regulations and tax benefits for new ventures could help in alleviating the negative effect of perceived barriers on the antecedents of entrepreneurial intention and entrepreneurial intention.

The government and its support institutions should also increase access to funding and ensure that their training programmes enhance the skills of attendees in the areas of financial management, marketing, business planning, general management, human resource management and operations management. The study contributes to the body of knowledge by being the first in a South African context to investigate the relationship between perceived barriers and entrepreneurial intention using the TPB. The study has shed light on the barriers perceived by those who are running their own businesses and those who had previously tried to start their own businesses. It has contributed towards addressing the underdevelopment of research on the effect of perceived barriers on entrepreneurial intention as highlighted by Liñán and Fayolle (2015:12).

8. LIMITATIONS AND FUTURE RESEARCH

The shortcomings of this study include its cross-sectional nature and the use of a convenient student sample. It is therefore impossible to determine whether perceived barriers would in fact impact negatively on the start-up efforts of the respondents who had high entrepreneurial intentions than those with low entrepreneurial intentions. Longitudinal research would shed more light on whether perceived barriers have an influence on the implementation efforts of translating entrepreneurial intentions into action and entrepreneurial activity.

The findings could not be generalised to all final-year commerce students at higher education institutions in other rural provinces of South Africa. Future research should investigate the effects of perceived barriers on growth intentions and small business growth.

9. CONCLUSION

The purpose of this study was to investigate the barriers to starting a business and to determine whether or not these barriers are significantly related to entrepreneurial intention, the attitude towards becoming an entrepreneur and perceived behavioural control among final-year commerce students in Limpopo. The study also determined whether perceived barriers vary between the respondents with high and low entrepreneurial intentions, positive and negative attitudes towards becoming an entrepreneur, and high and low perceived behavioural control. Top 12 barriers that impacted on students' entrepreneurial intention, their attitude towards becoming an entrepreneur and perceived behavioural control were finding the right partner, difficulty in obtaining finance, high risk involved in starting a new business, lack of saving or assets, lack of financial skills, difficulty in convincing others to support one's idea, high taxes and fees, lack of suitable premises, lack of general management skills, the uncertainty of the future, compliance with government regulations and fear of failure.

The findings concur with those of Volery *et al.* (1997:Internet) on the lack of savings and assets, difficulty in obtaining finance and the high risk involved in starting a new business as the main barriers to starting a business. However, they differed on the difficulty in finding the right partner as the top barrier to starting a business perceived by the respondents. The results corroborate previous research in terms of the high risk involved in starting a new venture, lack of capital and competence (lack of financial skills and lack of general management skills) (Muhanna 2007:101; Pruett *et al.* 2009:588; Shinnar *et al.* 2009:154; Smith & Beasley 2011:731). The fact that finding the right partner emerged as the top barrier among the respondents indicates the importance of having the right partners in the start-up process. Business partners provide emotional support and encouragement which facilitate the start-up process (Smith & Beasley 2011:733).

Perceived barriers had a significant relationship with the attitude towards becoming an entrepreneur, perceived behavioural control and entrepreneurial intention. The results are in line with previous research that reported a significant relationship between perceived barriers and entrepreneurial intention (Lüthje & Franke 2003:142; Nasution 2009:Internet; Pruett *et al.* 2009:585; Şeşen & Pruett 2014:254-255). Sandhu *et al.* (2011:440) found that perceived barriers have a negative influence on entrepreneurial inclination. The findings on the relationship between perceived barriers and entrepreneurial intention suggest that the

respondents who had intentions to start their own businesses could on the basis of anticipated barriers decide not to start their own businesses anymore or even postpone the implementation of their intentions until such a time that they could manage these barriers. The findings support those of Doern (2011:500) which indicated that perceived barriers could hinder, undermine, postpone and even slow down the process of realising growth intentions.

The findings indicated a very weak effect of perceived barriers on entrepreneurial intention, the attitude towards becoming an entrepreneur and perceived behavioural control. Similarly, Iskandarini (2014:171-172) reported a very weak relationship between perceived barriers and entrepreneurial intention. The results suggest that perceived barriers are not so important in the formation of entrepreneurial intention but possibly in the implementation stage when individuals think about how to perform the intended behaviour. The findings contradict previous research that did not find a significant relationship between perceived barriers and entrepreneurial intention (Adjei *et al.* 2014:33; Hadjimanolis & Poutziouris 2011:179; Ismail *et al.* 2009:57; Schwarz *et al.* 2009:285).

Moreover, the results revealed significant differences in perceived barriers between the respondents who had high and low entrepreneurial intention, positive and negative attitudes towards becoming an entrepreneur and high and low perceived behavioural control. They concur with Sharma and Madan (2013:26-27) who indicated that the strength of perceived barriers differs between those who intend to start a business and those who do not have such intentions.

Individuals are more likely to implement their intentions when they have confidence in their ability to succeed in their efforts (Ajzen 2005:94). Efforts that are directed at reducing perceived barriers to starting a business are vital in stimulating entrepreneurial intention and positive attitudes towards entrepreneurship and enhancing perceived behavioural control. These efforts could also help in promoting the survival of new start-ups. The study has advanced the entrepreneurial intention theory by showing that perceived barriers have a significant relationship with entrepreneurial intention, the attitude towards becoming an entrepreneur and perceived behavioural control.

Acknowledgements

The researcher would like to thank the National Research Foundation for the partial funding of this study and Professor F. Liñán (University of Seville, Spain) for the Entrepreneurial Intention Questionnaire.

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