

Psychological Propellers of Propensity for Business Start-ups among University Students

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Abstract

In a society plagued by inadequate employment opportunities as evidenced by relatively high unemployment rates, the youths are often the most affected. A commonly touted recourse in such situations is an inclination towards self-employment through business start-ups by university students. This entrepreneurial action is, however, likely to crystallise only if students are imbued with the right attitude, ability and perceptions about entrepreneurial venturing. Consequently, this study set out to determine the extent to which attitude towards entrepreneurship and entrepreneurial self-efficacy of university students are associated with their propensity for business start-ups, duly cognisant of the possible moderating role of their perceptions of the effectiveness of entrepreneurship courses. The study utilised a quantitative methodological approach and relied on data collected through a location intercept survey, from a sample of university students in the Gauteng Province of South Africa. Measures of central tendency and dispersion, confirmatory factor analysis and regression analysis were employed to examine the study's data. The study found that students' attitude towards entrepreneurship and their entrepreneurial self-efficacy were statistically related to propensity for business start-ups. However, the moderating role of perceived effectiveness of entrepreneurship courses was only evident for the relationship between attitude towards entrepreneurship and propensity for business start-ups. Crucially, the moderating effect is positive and directly linked to scores on the perceived effectiveness of entrepreneurship courses scale. Therefore, policy makers and other stakeholders must adopt a three-pronged approach that instigates positive shifts in attitudes, abilities and perceptions related to entrepreneurship.

Keywords: *Attitudes, Business, Entrepreneurship, Self-efficacy, Business start-up, University students.*

JEL Classification: M10, M13

1. Introduction

Entrepreneurship plays a major role in the economic development and growth of the economies of nations around the world (Coulibaly, Erbao,

& Mekongcho, 2018). Accordingly, in a developing country like South Africa, it is understandable that efforts in strategic economic planning will address the need for increased entrepreneurial aspiration within the population, which may result in a more intensive entrepreneurial culture evidenced by business start-ups. In fact, the advancement of small businesses and support for their increased participation in the mainstream economy remain focal issues for the South African government (Department of Small Business Development, 2016). Invariably, this sets the stage for fast-tracking enterprise development, as a veritable panacea for the country's economic problems, particularly the challenge of unemployment (Cant, 2017; Masutha & Rogerson, 2015). Unemployment in South Africa is estimated at 33.9% (Statistics South Africa, 2022), and this encumbers socio-economic development in the country. Disturbingly, the International Labour Organisation (2020) estimates that 53.18% of South Africa's youth population is unemployed. This estimation seems understated when compared with Herrington and Kew's (2018) observation in the Global Entrepreneurship Monitor South African Report that the rate of unemployment and underemployment is as high as 80% in some areas of South Africa and the situation is, certainly, concerning. This is perhaps especially in the light of the fact that a proportion of the pool of unemployed youths in South Africa is made up of university graduates.

This cohort of youths who are expected to be the cream of the crop of the population is produced by the country's tertiary institutions yearly, only to confront the reality of a dearth of employment opportunities in the formal labour market (Oluwajodu, Blaauw, Greyling, & Kleyhans, 2015). Clearly, the current job market is unable to provide for the economic participation of members of the group of university graduates that emerge yearly in South Africa. This explains why Premand, Brodmann, Almeida, Grunn and Barouni (2016) as well as Fatoki (2014) declare that there is growing interest in the promotion of entrepreneurship as a viable career alternative relative to paid employment among university students. Wibowo, Purwana, Wibowo and Saptona (2019) consequently assert that universities should offer more entrepreneurship programmes to equip graduates with the requisite training that can enhance their proclivity to start businesses after graduation rather than seek paid employment.

In pursuit of this, the role of entrepreneurial self-efficacy may be instructive since it is described as the degree to which individuals believe that they have the necessary skills to successfully start a new business

venture (Brice & Spencer, 2007; Piperopoulous & Dimov, 2015). However, in consideration of the social learning theory, Bandura (1977) opines that environmental factors typically influence learning and identifies perceived self-efficacy as a major determinant of intention, which directly affects performance. This position suggests that behaviours are likely to be shaped by environmental stimuli, which, according to North (2005), include formal and informal elements that impact upon the incubation of entrepreneurial intentions. Drawing impetus from this assertion, this study projects that the propensity for business start-ups among university students may be consequent upon their attitude towards entrepreneurship. Indeed, a positive assessment of entrepreneurial self-efficacy and the conviction that entrepreneurial competencies can be enhanced by available entrepreneurship courses may improve the chances of entrepreneurship being considered as a viable career option.

Notably, empirical studies that focus on investigating how the relationships between internal factors linked to university students (e.g., attitude towards entrepreneurship, entrepreneurial self-efficacy and the propensity to start a business) are moderated by an external factor such as the perceived effectiveness of entrepreneurship courses, are lacking. This is more apparent in the context of a developing economy like South Africa with high youth unemployment rates. Consequently, this study bears the potential to contribute practical and theoretical insights that would be valuable to efforts aimed at alleviating the scourge of youth unemployment through the promotion of business start-ups by university students.

2. Literature Review

2.1 Theoretical Foundation

The link between intentions and behaviour is well explained in psychology (Nwankwo, Kanu, Marire, Balogun, & Uhiara, 2012). Theories such as Shapero's (1982) Entrepreneurial Event Model (EEM) and Ajzen's (1991, 2011) Theory of Planned Behaviour (TPB) have been widely used to provide the necessary theoretical foundation for studies focused on entrepreneurial intentions (Eresia-Eke & Gunda, 2015; Krueger, Reilly, & Carsrud, 2000; Peterman & Kennedy, 2003). In the EEM, Shapero (1982) presented a process model of new venture creation. At the crux of this model are the individual level perceptions of

the desirability and feasibility of starting a new venture coupled with the proclivity to act upon emerging opportunities. In this model, three variables, namely perceived desirability, perceived feasibility and propensity to act, are highlighted (Ndaghu, Gwems, Wajiga, & Augustine, 2016). While perceived desirability is defined as the attractiveness of starting a business, perceived feasibility refers to the degree to which an individual feels capable of starting a business and propensity to act describes the likelihood to start the venture (Shapero, 1975).

The TPB by Ajzen (1991) posits that intentions reflect the motivational factors that influence behaviour and, consequently, they serve as reliable indicators of the willingness and commitment that a person embodies to behave or act in a particular manner (Adekiya & Ibrahim, 2016) in a bid to realise a desired result. This is because intentions are widely considered as powerful predictors of purposive, planned and goal-oriented behaviours (Bagozzi, Baumgartner, & Yi, 1989). Generally, the TPB argues that an individual's behavioural intentions and actual behaviours are shaped by attitudes towards behaviours, subjective norms and their perceived behavioural control (Ajzen, 2011). Attitudes towards the behaviour refer to how favourably an individual considers a particular behaviour and this often depends on expectations and beliefs that pivot around the outcomes associated with the behaviours (Ajzen, 1991). Subjective norms generally refer to perceived social pressure from influential people or referents, to perform the behaviour (Chanston & Urban, 2018) while perceived behavioural control is concerned with the individual's estimation of the level of ease or difficulty associated with the intended behaviour (Liñán & Chen, 2009).

Relying on the TPB, Ajzen (2011) argues that the more favourable the attitude towards behaviours and subjective norms are, the stronger the person's intention to perform the behaviour, given a proportionally strong perceived personal behavioural control. Specifically, with a sufficient degree of personal control over their own behaviour, people are expected to carry out their intentions whenever the opportunity arises. In the context of entrepreneurship, TPB suggests that entrepreneurial behaviour is best predicted by entrepreneurial intentions (Kautonen, van Gelderen, & Fink, 2015; Chantson & Urban, 2018), which, in the context of this study, refers to the propensity for business start-ups among university students.

2.2 Propensity for Business Start-ups

The need for business start-ups in all economies cannot be over-emphasised, but this is bound to be amplified in an economy with high unemployment rates. One of the reasons for this is the fact that business start-ups pave the way for individuals who may have been previously unemployed to become active participants in the economy. The important role of business start-ups has encouraged scholars to investigate the factors influencing the tendency to start a business which is, in itself, an interdisciplinary exercise that can yield a kaleidoscope of results, depending on the goals of the study (Fafaliou, 2012; Gartner, Shaver, Carter, & Reynolds, 2004). Contributing to the business start-up discourse, Silva and Nobre (2018) argue that variables that influence business start-ups can be broadly categorised as socio-demographic factors, perceptual factors, motivational factors and environmental factors. However, Raposo, Ferreira, Paco and Rodrigues (2008) observe that most studies tend to focus on an individual's personal characteristics as the domain for potential factors affecting disposition towards entrepreneurship. According to Fafaliou (2012), earlier studies adopted a psychological perspective to examine the possible influence of the personality traits credited to McClelland (1961) being the needs for achievement, affiliation and power on entrepreneurial propensity. Subsequently, other personal traits and characteristics that may influence entrepreneurial propensity, such as monetary factors and independence (Henderson & Robertson, 2000) as well as search for opportunity and trust in skills (Krueger et al., 2000), among others, have attracted scholarly attention.

Notably, attempts to explain an individual's inclination towards business start-ups can be found in the behavioural sciences field. As observed by Carson (1982), this inclination presents itself through functions, activities and actions that can be associated with perceptions. Shapero (1982) and Ajzen (1991) relate an individual's propensity to start a business with personal intentions and capacity. Similarly, Malebana and Swanepoel (2014) contend that the effort of initiating a business enterprise is an intentional activity that is an expression of entrepreneurial behaviour. Due to this, Krueger et al. (2000) assert that planned behaviours such as business start-ups can be predicted using intention-based models. Leveraging on these theoretical perspectives, this study examines the predisposition towards business start-ups among university students by assessing their attitude towards entrepreneurship,

entrepreneurial self-efficacy and perceived effectiveness of entrepreneurship courses.

2.3 Attitude towards Entrepreneurship

The TPB postulates that attitudes towards a particular behaviour depends on a person's appraisal of the behaviour and its collateral expectations as well as beliefs about the impact of outcomes resulting from that behaviour (Ajzen, 2005). Eagly and Chaiken (1993) view attitudes as psychological tendencies expressed by evaluating a particular entity or behaviour with some degree of favour or disfavour. According to Souitaris, Zerbinati and Al-Laham (2007), attitude towards self-employment is the difference between perceptions of personal desirability in becoming self-employed and being organisationally employed. Since its initial test in the field of entrepreneurship by Krueger et al. (2000), the TBP has proven its usefulness in predicting entrepreneurial intentions. Further, the empirical evidence provided by Chantson and Urban (2018) confirms the applicability of different antecedents in explaining the entrepreneurial intent of scientists and engineers in South Africa. Moreover, Tarek (2017) tested the validity of the TPB in clarifying the entrepreneurial intention of final-year university students in Tunisia and found that attitude towards entrepreneurship had a statistically significant relationship with intention to start a business.

Attitude towards entrepreneurship tends to account for most of the variance in entrepreneurial intentions of individuals (Tarek, 2017; Malebana & Swanepoel, 2015). Similarly, within a broad African context, literature seems to suggest that individual attitudes have substantial explanatory power with respect to entrepreneurial intentions (Chantson & Urban, 2018; Ndofirepi, Rambe, & Dzansi, 2018). Despite its predictive validity, prior research indicates that the effect of the attitude towards entrepreneurship, perceived behavioural control and subjective norms vary from one population/context to the other (Liñán, Nabi, & Krueger, 2013; Soomro, Shah, & Memon, 2018). This argument implies that the results of previous studies cannot be relied upon to determine, with convincing accuracy, how personal attitudes could affect business start-ups in a specific cohort of university students in the South African context. However, this study elects to align with suggestions in literature that link individual attitude to entrepreneurial action, and so it is hypothesised that:

H₁: Attitude towards entrepreneurship has a positive relationship with the propensity for business start-ups among university students.

2.4 Entrepreneurial Self-efficacy

Self-efficacy is based on an individual's perceptions of personal skills and abilities (Naktiyok, Karabey, & Gulluce, 2010). This concept reflects an individual's innermost thoughts on whether they have the abilities perceived to be relevant to task performance and the belief that they will be able to effectively convert those skills into a chosen outcome (Wilson, Kickul, & Marlino, 2007; Piperopoulous & Dimov, 2015). Markham, Balkin and Baron (2002) assert that people are largely motivated throughout their lives by perceived self-efficacy rather than by objective ability and so, perceptions deeply affect behaviours. Research has emphasised the importance of self-efficacy as a key factor in determining human agency and has also shown that those with high self-efficacy for a certain task are more likely to pursue and successfully execute that task (Wilson et al., 2007). Studies by Segal, Borgia and Schoenfeld (2005) as well as Tsai, Chan and Peng (2016) consider entrepreneurial self-efficacy as the conviction in one's personal abilities/skills to start up a business; a perspective consistent with the position of this study. Entrepreneurial self-efficacy is construed to consist of factors such as interpersonal and networking skills, uncertainty management skills and product development skills that are useful for executing tasks in the entrepreneurial process (Kickul & D'Intino, 2005).

Researchers (Naktiyok, Karabey, & Gulluce, 2010; Kickul & D'Intino, 2005) found that entrepreneurial self-efficacy is significantly associated with the likelihood of becoming an entrepreneur. In a study of existing entrepreneurs, Tsai et al. (2016) established a positive relationship between entrepreneurial self-efficacy and intention. Naktiyok et al. (2010) also examined the same relationship among a group of Turkish undergraduates and found that students with a high entrepreneurial self-efficacy have a high intention to become entrepreneurs. Contrarily, Piperopoulous and Dimov (2015), in a study of students in a British University, found that higher self-efficacy was associated with lower entrepreneurial intentions. In their study of undergraduate students in Nigerian universities, Akinbode, Moses, Olokundun and Adeniji (2018) found that entrepreneurial self-efficacy had a significant positive relationship with the intention to start a business venture. The apparent discordance in research findings implies

that prior research results may be inadequate for the purpose of accurately forecasting the nature of the relationship between self-efficacy and business start-up propensity among a group of university students in South Africa. Therefore, this study chooses to hypothesise that:

H₂: Entrepreneurial self-efficacy has a positive relationship with the propensity for business start-ups among university students.

2.5 Perceived Effectiveness of Entrepreneurship Courses

Although attitude as a predisposition towards self-employment seems to be established in literature (Chantson & Urban, 2018; Malebana & Swanepoel, 2015), Carr and Sequeira (2007) along with Zhang, Wei, Sun and Tung (2019) argue that an individual's attitude will be affected by many exogenous variables including prior education experience. Indeed, individual attitude that can be shaped and framed by environmental exigencies sprouts, in the opinion of Wu and Wu (2008), from a person's subjective psychological status. In the specific case of entrepreneurial contexts, entrepreneurship education plays an important role in the development of a positive attitude towards entrepreneurial behaviours (Akinbode et al., 2018; Piperopoulos & Dimov, 2015). According to Schwarz, Wdowiak, Almer-Jarz and Breiteneker (2009), this is possibly because entrepreneurial attitude is less stable than other personality traits and is, therefore, more sensitive to educational stimuli. Essentially, an individual is more likely to have a stronger and more positive attitude towards entrepreneurship when he/she is educated to become an entrepreneur (Zhang et al., 2019) and this could increase the propensity for business start-ups. Since attitudes are open to change, it may be rational to imagine that a person's attitude towards entrepreneurship and the extent to which it lends itself to business start-up propensity could be influenced by convictions about the effectiveness of entrepreneurship education.

This projection is motivated by the TPB, which posits that a positive attitude towards an action catalyses the necessary behaviour (Armitage & Conner, 2001) that ultimately results in the action. As argued by Krueger et al. (2000), a positive entrepreneurial attitude acquired through entrepreneurship courses typically enhances willingness to engage in entrepreneurial start-ups. Fayolle and Degeorge (2006) also posit that educational environments tend to change people's attitude towards entrepreneurial behaviour and this, in turn, facilitates the formation of

entrepreneurial intentions. What is instructive here is that entrepreneurship education or, indeed, a conviction about the potency of entrepreneurship education bears the potential to interfere with any relationships that entrepreneurial antecedents such as attitude towards entrepreneurship and entrepreneurial self-efficacy could have with business start-ups. It is in agreement with this argument that this study hypothesises that:

H₃: Perceived effectiveness of entrepreneurship education will moderate the relationship between attitude toward entrepreneurship and the propensity for business start-ups among university students.

H₄: Perceived effectiveness of entrepreneurship education will moderate the relationship between entrepreneurial self-efficacy and the propensity for business start-ups among university students.

2.6 Research Model / Conceptual Framework

The hypotheses for this study have been deductively derived from considerations of the positions taken by scholars, following the review of literature. Previous research undertaken with respect to entrepreneurial intentions, planned behaviour and business start-ups, have provided a veritable foundation for the hypothetical propositions that this study sets out to investigate within the specific context of a country with a developing economy like South Africa. The study's hypotheses are presented in the research/conceptual framework shown in Figure 1.

The study is inspired by the realisation that high unemployment rates among the youth in South Africa is a disturbing reality. An increased propensity for starting up businesses among the youth, principally university students, may help stem the tide of the youth unemployment scourge. Instructively, the logic upon which the study is founded is that the propensity for business start-ups among university students, as illustrated in the research model, has relationships with the students' attitude towards entrepreneurship and an estimation of their entrepreneurial self-efficacy. Furthermore, the study anticipates that the projected relationships, if they are statistically proven to exist, are likely to be moderated by the conviction of the students that entrepreneurial competencies can be developed/enhanced by entrepreneurship courses offered by different institutions.

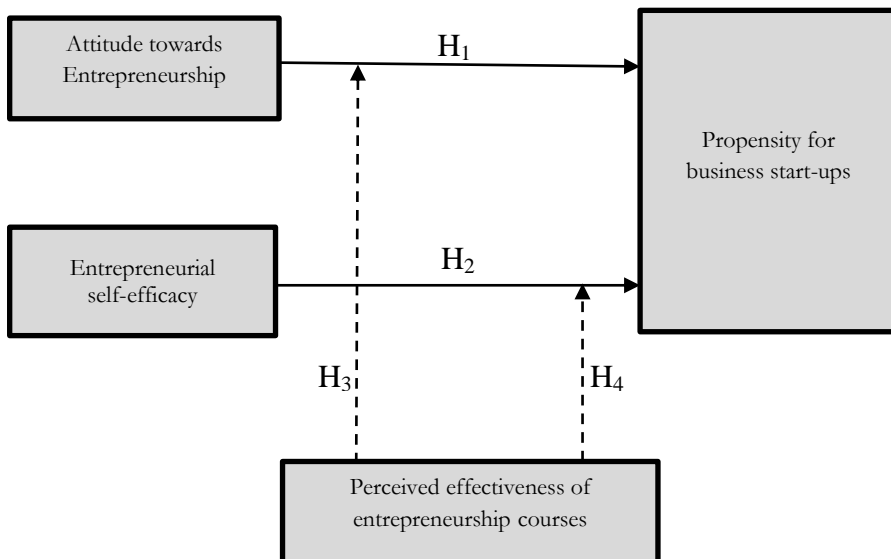


Figure 1: Research model / Conceptual framework

3. Research Methodology

This is a quantitative study which utilised the data collected in a cross-sectional manner from the study population. The study population comprised university students, regardless of their years of study. This target population was chosen for the study because, according to Gurol and Atsan (2006), university students will constitute a large portion of the pool of potential entrepreneurs in both developing and developed countries.

Recognising that the study population is large, it was not feasible to reach all members of the population and so, the study resorted to the use of a sample. The study could not utilise a random sampling method because of inaccessibility to a comprehensive sampling frame of all university students in the Gauteng Province of South Africa. Consequently, the non-probability sampling technique of quota sampling was used for the selection of respondents. The use of quota sampling allows for the selection of respondents in a way that results in specific characteristics of the population being mirrored (Daniel, 2012; Zikmund & Babin, 2010). The quota criteria used in the study were based on whether the student was enrolled for a business or a non-business degree as well as the sex of the student. The intention was to create a balanced

representation of the groups. Business students, as defined in this study, are students that were registered for Economic and Management Science-related qualifications, and all other students outside of this cohort were considered as non-business students.

A central-location intercept survey method was utilised to obtain the data from willing respondents. This approach was appealing, as Cooper and Schindler (2014) observe that it allows for data to be collected rapidly and, indeed, at relatively lower costs. A structured questionnaire, primarily comprising different scales targeted at measuring the study's constructs, was utilised for data collection purposes. The scales contained in the questionnaire were adapted from instruments that had been previously utilised in studies by Liñán and Chen (2009), Liñán, Urbano and Guerrero (2011) as well as Jaén and Liñán (2013). All scales utilised in the study contained items accompanied by 7-point Likert-type response options ranging from 'strongly disagree' to 'strongly agree' with associated numerical scores of 1-7. The independent variables of 'attitude towards entrepreneurship', 'entrepreneurial self-efficacy' and 'perceived effectiveness of entrepreneurship courses' were measured with the use of 13-item, 6-item and 5-item scales respectively, while a single item was utilised to measure the dependent variable of 'propensity for business start-up'. Confirmatory factor analysis was undertaken to determine construct validity and scale reliability. Descriptive statistical tools for the determination of central tendency and dispersion were employed to examine the data. Subsequently, regression analysis was utilised to test the relationships that were hypothesised in the study.

4. Results

In total, copies of the questionnaire from 238 students were considered usable for the purpose of data analysis, as some returned copies had incomplete information and evidence of central bias by those that filled them out. As shown in Figure 2, in the respondent-population, 112 (47%) students indicated that they were females while 126 (53%) were males.

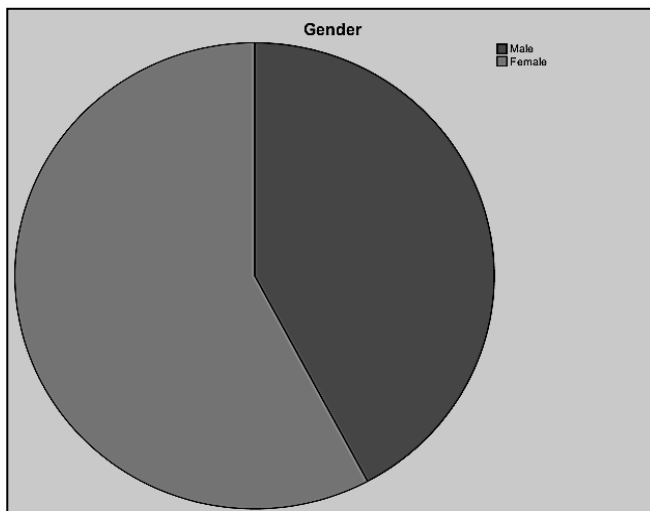


Figure 2: Sex of the respondents

Furthermore, as shown in Table 1, the respondent-population comprised 111 (46.64%) business students and 127 (53.36%) non-business students. The business students’ cohort was made up of 45 males and 66 females while the group of non-business students that participated in the study included 56 males and 71 females.

Table 1: Categorisation of respondents according to study programmes

Categorisation	Frequency	Percent	Cumulative Percent
Business students	111	46.6	46.6
Non-Business students	127	53.4	100.0

Before any measures related to the study’s four major variables, as depicted in the research model, can be presented, it was apposite to undertake a confirmatory factor analysis (CFA) to ascertain construct validity, as well as reliability tests to establish the internal consistency of the measurement items for each variable. However, given that the variable of propensity for business start-ups is measured by a single item, it was excluded from the analysis. Since the measurement scales utilised were adopted from previous studies, CFA that aims to ascertain the factor structure of a set of observed study variables was deemed appropriate.

The results of the CFA confirmed a single factor for each of the scales utilised to measure the variables of ‘attitude towards entrepreneurship’, ‘entrepreneurial self-efficacy’ and ‘perceived effectiveness of entrepreneurship courses’, given that the factor loadings associated with all the scale items were above 0.6. The reliability tests undertaken resulted in Cronbach alpha values of 0.9, 0.8 and 0.8 respectively, for the scales used to measure ‘attitude towards entrepreneurship’, ‘entrepreneurial self-efficacy’ and ‘perceived effectiveness of entrepreneurship courses’. Since these Cronbach alpha values are above the regular 0.7 threshold recommended by Nunnally (1978), they are indicative of acceptable levels of internal consistency and scale reliability.

The mean, as a measure of central tendency, and the standard deviation, as a measure of dispersion, associated with the independent variables, the moderating variable and the dependent variable of the study are presented in Table 2. Composite mean scores associated with the variables being measured, in each case, were calculated by averaging respondents’ answers to all the items contained in the scale. The results show that the mean values for each of the study’s variables as it relates to business students are consistently higher than those of non-business students. However, the differences in mean values of the variables as it concerns business and non-business students are marginal. Fundamentally, the import of this is that students’ opinions pertaining to all the study variables, including the dependent variable of propensity for business start-up, are not remarkably different.

Table 2: Descriptive statistics of the study’s variables

Study Variables	Measures	Business students n=111	Non-Business students n=127	All respondents n=238
Attitude towards entrepreneurship	Mean	5.20	4.88	5.04
	Std. Dev.	1.19	1.18	1.19
Entrepreneurial self-efficacy	Mean	5.64	5.57	5.60
	Std. Dev.	0.79	0.68	0.74
Perceived effectiveness of entrepreneurship courses	Mean	5.12	5.03	5.07
	Std. Dev.	0.93	0.97	0.95
Propensity for business start-ups	Mean	4.85	4.51	4.67
	Std. Dev.	1.66	1.76	1.72

To examine the relationships hypothesised in the study, a regression analysis was undertaken. Table 3 shows the results obtained with respect to the hypothesised relationship between ‘attitude towards entrepreneurship’ and ‘propensity for business start-ups’ and the possible moderating role that ‘perceived effectiveness of entrepreneurship courses’ plays in the aforesaid relationship. The results reveal that there is statistical support for H₁ that suggests that there is a relationship between ‘attitude towards entrepreneurship’ and ‘propensity for business start-ups’, given that its p-value is less than 0.05. The coefficient of association in this case is above 0.7, which implies that the relationship between the two variables is strong and positive. Hypothesis H₃ suggested that ‘perceived effectiveness of entrepreneurship courses’ by the students would moderate the relationship between ‘attitude towards entrepreneurship’ and ‘propensity for business start-ups’. The resultant p-value of 0.018 from the moderation analysis provides statistical support at a 95% confidence level, for the proposition expressed by H₃. In summary, H₁ and H₃ are supported, given the statistical results obtained. This implies that there is, indeed, a positive and significant relationship between ‘attitude towards entrepreneurship’ and ‘propensity for business start-ups’ among university students in the respondent population of the study and this relationship is moderated by perceived effectiveness of entrepreneurship courses.

Table 3: Regression analysis results for hypotheses H₁ and H₃

Dependent variable: Propensity for business start-ups				
Independent variables	Coefficient	Std. Error	t stat	p-value
Intercept	-0.048	0.050	-0.964	0.336
Attitude towards entrepreneurship	0.705	0.046	15.444	0.000*
Interaction term (Attitude towards entrepreneurship & Perceived effectiveness of entrepreneurship courses)	0.099	0.042	2.374	0.018*
R ²	0.501			
F statistic	77.810*			

*Significant at p<0.05

Table 4 depicts the results obtained when the hypothesised relationship between ‘entrepreneurial self-efficacy’ and ‘propensity for business start-ups’ as well as the possible moderating role that ‘perceived effectiveness of entrepreneurship courses’ could play in the relationship were examined. The results indicate that there is statistical support for H₂; this suggests that there is a relationship between ‘entrepreneurial self-efficacy’

and ‘propensity for business start-ups’. While the p-value linked to this hypothesised relationship is $0.000 < 0.05$, the coefficient of association is 0.2, and this implies that the relationship between the two variables, though statistically significant and positive, is weak. The R^2 result shows that the predictor in the regression model can explain about 50% of the variation in the dependent variable of propensity for business start-ups.

Table 4: Regression analysis results for hypotheses H_2 and H_4

Dependent variable: Propensity for business start-ups				
Independent variables	Coefficient	Std. Error	t stat	P-value
Intercept	-0.031	0.062	-0.486	0.628*
Entrepreneurial self-efficacy	0.225	0.065	3.473	0.000*
Interaction term (Entrepreneurial self-efficacy & Perceived effectiveness of entrepreneurship courses)	0.081	0.054	1.491	0.137
R^2	0.179			
F statistic	16.944*			

*Significant at $p < 0.05$

Hypothesis H_4 claimed that ‘perceived effectiveness of entrepreneurship courses’ by students would moderate the relationship between ‘entrepreneurial self-efficacy’ and ‘propensity for business start-ups’. The results of the moderation analysis returned a p-value of 0.137, which signals that there is no statistical support for hypothesis H_4 . In essence, while there is a positive relationship between ‘entrepreneurial self-efficacy’ and ‘propensity for business start-ups’ among university students in the respondent population of the study as proposed in H_2 , this relationship is not moderated by ‘perceived effectiveness of entrepreneurship courses’. The R^2 result shows that the predictor in the regression model can explain about 18% of the variation in the dependent variable of propensity for business start-ups.

The conditional effects of the moderating variable on the relationship between ‘attitude towards entrepreneurship’ and ‘propensity for business-start-ups’ are shown in Table 5. The results reveal that the effects of the moderating variable of ‘perceived effectiveness of entrepreneurship courses’ are significant regardless of whether these perceptions are low, medium or high. More importantly though, the results reveal that the strength of moderation increases with the scores obtained on the ‘perceived effectiveness of entrepreneurship courses’ scale.

Table 5: Conditional effects of the moderating variable

Moderating variable: Perceived effectiveness of entrepreneurship courses				
	Effect	Std. Error	t stat	P-value
Low	0.605	0.062	9.735	0.000*
Medium	0.705	0.046	15.444	0.000*
High	0.805	0.062	12.994	0.000*

*Significant at $p < 0.05$

The associated scores for the effects when the perceived effectiveness of entrepreneurship courses is low, medium and high are 0.605, 0.705 and 0.805 respectively. These results indicate that the variable of ‘perceived effectiveness of entrepreneurship courses’ positively moderates the relationship between ‘attitude towards entrepreneurship’ and ‘propensity for business-start-ups’ the most, when respondents have a highly favourable estimation of the effectiveness of entrepreneurship courses offered by institutions. Conversely, the effect of the moderating variable on the relationship between ‘attitude towards entrepreneurship’ and ‘propensity for business-start-up’ wanes as students’ perceptions of the effectiveness of entrepreneurship courses reduce.

5. Discussion

The study sought to determine the propensity of business start-ups among university students and establish if and to what extent this inclination is related to the antecedents of ‘attitude towards entrepreneurship’ and ‘entrepreneurial self-efficacy’. Furthermore, the study examined the possible moderating role of ‘perceived effectiveness of entrepreneurship courses’ on relationships that may exist between the study’s independent and dependent variables. The study found evidence, going by the composite mean of 4.67 on a 7-point scale, that students in the respondent population had a propensity to start-up businesses. This finding aligns with the results of Tarek’s (2017) study of final-year students in Tunisia as well as Mothibi and Malebana’s (2019) study of secondary school students in South Africa. When the respondents were disaggregated into business and non-business cohorts, based upon the degrees that they were enrolled for, it was observed that business students that participated demonstrated a higher propensity for business start-ups compared to non-business students. This is clearly indicative of a higher affinity for business venturing among business students and it was not unexpected, given their exposure to business education.

The study's research model was based upon four hypotheses, although the results obtained from the regression analysis provided statistical support for three of the four hypothesised relationships. The study found that the independent variables of 'attitude towards entrepreneurship' and 'entrepreneurial self-efficacy' had statistically significant positive correlations with the dependent variable of 'propensity for business start-ups'. Interestingly, the strength of the association between 'propensity for business start-ups' and 'attitude towards entrepreneurship' was substantially higher than that between 'propensity for business start-ups' and 'entrepreneurial self-efficacy'. This signals the important role that attitude could play, even above entrepreneurial self-efficacy, in the quest for university students to become more inclined to start-up businesses rather than seeking paid employment. This finding suggests that business venturing may be more a derivative of university students' attitude than it is of the students' aptitude. This is understandable as business start-ups typically involve making a tacit decision to venture into characteristically uncertain environments. Therefore, personal attitude may be a defining catalyst of such a decision. This finding is corroborated by the results of the study conducted by Chanston and Urban (2018) which revealed that attitude towards entrepreneurship plays a dominant role compared to subjective norms and perceived behavioural control in predicting entrepreneurial intention.

Concerning the possible moderating role of 'perceived effectiveness of entrepreneurship courses' as expressed in hypotheses H₃ & H₄, contrasting results were obtained. In the case of the relationship between 'entrepreneurial self-efficacy' and 'propensity for business start-ups', results show that the moderating role of 'perceived effectiveness of entrepreneurship courses' was not statistically significant and so hypothesis H₄ was not supported. However, when the relationship between 'attitude towards entrepreneurship' and 'propensity for business start-ups' was considered, results indicate that the moderating role of 'perceived effectiveness of entrepreneurship courses' was statistically significant, signalling support for H₃. The results of the moderation analysis imply that conviction about the 'effectiveness of entrepreneurship courses' seems meaningful only for the association between 'attitude towards entrepreneurship' and 'business start-up propensity'. Conversely, this moderating role played by 'perceived effectiveness of entrepreneurship courses' is not statistically meaningful in the association between 'entrepreneurial self-efficacy' and 'propensity

for business start-ups'. The finding could be because students with existing favourable estimations of self-efficacy would place scant premium on entrepreneurship courses that are aimed at aiding the development of competencies that these students already imagine they have. Notably, however, this result contrasts with the findings of Wilson et al. (2007) who investigated the same relationships among MBA students from selected business schools in the United States of America.

6. Conclusion and Recommendations

6.1 Conclusion

The findings of this current study bear important implications for stakeholders with an interest in promoting recourse to business start-ups by university students as opposed to encouraging these students to search for paid employment in a developing economy like that of South Africa already burdened by very high levels of youth unemployment.

6.2 Recommendations

It is imperative that efforts should be invested in nurturing a favourable attitude towards entrepreneurship and reinforcing entrepreneurial self-efficacy among members of the student population as this may crystallise into a higher propensity for business start-ups. Additionally, there is a need to advertise the effectiveness of entrepreneurship courses within universities in a way that targets a homogeneous group of students with lower levels of entrepreneurial self-efficacy, driven by the awareness of the positive moderating role that conviction about the effectiveness of entrepreneurship courses could play in the equation of business start-ups.

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