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# Pre-enrolment factors influencing the academic performance of entrepreneurship students in higher education

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#### Abstract

In South Africa, most students who complete secondary education are underprepared for higher education. Most of those who make it into higher education do not complete their programme on time. Thus, it is essential to study each cohort and understand what would influence their academic performance. The objective of this study is to determine the pre-enrolment factors influencing the academic performance of entrepreneurship students at a tertiary institution in the Western Cape, South Africa. A quantitative approach is followed in this study using a questionnaire to understand the students' profiles as well the pre-enrolment factors that influence their academic performance. Data was captured and analysed using the latest version of the Statistical Package for Social Sciences (SPSS) Version 26. The top three factors with the highest means relate to lack of career guidance, study material and financial resources. The chi square tests of association confirmed the statistical significance of frequencies. This study has significant implications for both policy development and implementation in basic school education. It also has significant implication for universities in the sense that sufficient support must be in place for the students who come from a not-so-good basic education. Suggestions for further studies are flagged.

#### Keywords

Pre-enrolment factors; career guidance; entrepreneurship students; academic success; academic failure.

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# Introduction

Research has indicated that a sizeable proportion of those who complete post-primary education in South Africa is not prepared for higher education. Worryingly, they still find their way to tertiary institutions, owing to the calls by the government to improve access, success, and throughput rates in tertiary education (Department of Higher Education and Training (DHET), 2013). Thus, institutions of higher learning admit and must deal with students who are often underprepared for higher education (Leshoro and Jacobs, 2019). A significant consequence of this is that some students take longer to complete their qualifications (Van Broekhuizen, Van der Berg and Hofmeyr, 2016). In line with the DHET call to institutions, identifying preenrolment and post-enrolment factors that influence academic performance is essential to provide the necessary support to students.

The necessity for entrepreneurship education cannot be underestimated especially in a country like South Africa that continues to experience soaring levels of youth unemployment, high inequality levels and poverty. South African higher education institutions (HEIs) produce more than 150 000 graduates, excluding non-South Africans each year (PowerHEDA n.d.). The number of jobs available for graduates each year is low. For example, South Africa had a net gain of 61 000 jobs from 2019 quarter one to 2020 quarter one (Stats SA, 2020). What this suggests is that available jobs will not sufficiently serve products of HEIs. Consequently, graduates should seek self-employment. A common avenue for this is entrepreneurship (Thrikawala 2011; Shambare 2013; Fatoki and Oni 2014). Gwija, Eresia-Eke and Iwu (2014) decried the low level of interest in entrepreneurship among the youth who indicated that the factors responsible for this included among others poor exposure to entrepreneurship.

Entrepreneurship literacy furthers knowledge of setting up a business and the boldness to take on complex business ideas and problems for society's good. Higher education institutions form part of the entrepreneurial ecosystem (Mazzarol 2014) thus suggesting that a thriving economy is achieved partly through quality education. Quality education improves pass rates and helps to reduce dropout rates (Iwu, Ezeuduji, Iwu, Ikebuaku and Tengeh 2018). The value of this study straddles the domains of academic performance of higher education students and entrepreneurship. As such, it supports the calls by governments and several international agencies to address the United Nations goals of reducing poverty (goal #1), achieving quality education (goal #4) and the realisation of decent work and economic growth (goal #8).

## **Background and problem statement**

Academic discourse (for example Schmelzer, Schmelzer, Figler, and Brozo 1987; Killen, 1994; Campbell and Dickson 1996; Ditcher and Tetley 1999; Fraser and Killen 2003; Karimi 2009; Harding 2012; Aturupane, Glewwe, and Wisniewski 2013; Sibanda, Iwu and Benedict 2015a; Sibanda, Iwu and Benedict 2015b) has paid much attention to post-enrolment factors that influence the academic performance of students. This is seen as a rational trend considering the necessity for understanding throughput rates at primary, secondary and tertiary levels. What we find missing in academic discourse is sufficient coverage of pre-enrolment factors influencing the academic performance of entrepreneurship students within the context of pass rates and throughput rates (Woods, Woods, and Sullivan 2012; Pather 2015; Burger 2017).

It is every institution's goal to ensure high throughput rates (DHET, 2020) hence the call by the DHET through the University Capacity Development Programme (UCDP) for all universities to offer interventions aimed at supporting students. In line with the DHET call to institutions, identifying pre-enrolment and post-enrolment factors that influence academic performance is essential to provide the necessary support to students. Through the UCDP, institutions should analyse data informing key risk factors in student populations, then design interventions that are targeted at ensuring better course choices and support for students entering their programmes. Afterall, access to higher education should be matched with a reasonable chance of success (DHET 2020).

Astin (2005) posits that the pre-enrolment attributes profile of students reflects the students' academic success rates. Letshwene (2019) highlighted several issues relating to academic success rates. These are underprepared students who struggle to read and write at final year of high school, poor performance in secondary schools due to the weakness of primary education system, the low standard pass mark of 30% in secondary education and lack of appropriate textbooks at some under-resourced high schools. These and other related aspects that make up the pre-enrolment profile of students should be considered for students to be smoothly integrated at a higher education institution. Fatoki and Oni (2014) posit that entrepreneurship education has two effects on students. Firstly, it encourages students to take entrepreneurship as a career and secondly, it provides students with the essential skills to be entrepreneurial. Letsoalo and Rankhumise (2020) found a positive relationship between studying entrepreneurship courses and starting a business among non-first year students. Letsoalo and Rankhumise also found that entrepreneurial intention grows as students further their studies. Mbuya and Schachtebeck (2016) suggest higher education institutions nurture

entrepreneurship. Their suggestion is based on their findings, which revealed a strong desire to start a business after the completion of studies among entrepreneurship students compared to non-entrepreneurship qualifications. Therefore, it is essential to establish the pre-enrolment factors influencing the academic performance of entrepreneurship students, hence the following research question:

To what extent would the pre-enrolment factors influence the academic performance of entrepreneurship students at a tertiary institution in the Western Cape, South Africa?

#### **Theoretical framework**

Student retention is a longitudinal process with various interacting variables leading to a decision to continue or terminate studies (Tinto 1993). According to Tinto's 1993 model, students' persistence is influenced by various aspects including pre-entry, post enrolment factors and interactions within the institution. This study focuses on the predisposing factors, identified in Tinto's model, which influence academic goals and commitment, namely individual attributes, pre-college schooling, and family background. Descriptive and inferential statistics were derived from the views of the students on the pre-enrolment factors. Knowing these is beneficial to students, lecturers, and academic institutions.

## Literature review

Research concerning pre-enrolment factors that influence academic performance has been ongoing in developed countries for several decades. Young (1989) for instance noted that owing to high failure rates at universities; studies began to identify factors such as study habits, motivation, personality traits, counselling, and school background when considering students at risk of failing. Developing country studies for instance in South Africa, have focused on the problem of academic performance and attrition (Mead and Liedhom 1998) and Van Zyl, Gravett, and De Bruin (2012) realising that a better way to understand matters of academic performance and attrition of students' demography, socioeconomic status, choice clarity, study attitude and support and academic disposition. Pre-enrolment factors influencing academic performance

A study that focused on post-graduate students conducted by Beneke and Beeming (2011) suggested that the following demographic variables influence students' academic performance: age, culture group, employment status, English language proficiency, and gender. Potgieter and Van Schoor (2011) similarly discussed students' entry characteristics pinpointing

the following: gender, occupation status, school performance in English, and general school performance. As part of the circles of progression, Jama, Mapesela and Beylefeld (2008) classified family background, school background, language, and finance as pre-entry factors influencing student success. A study that was done by Van Zyl et al. (2012) with almost 7 800 participants indicated that 30 of the 33 pre-entry attributes of first-year studies are strong predictors of students' success in the South African context. Burger (2017) investigated the contribution of pre-enrolment and post-enrolment factors to students' academic success.

As students transition from high school into higher education, they take a set of characteristics they have inherited from secondary school into the new environment. Non-traditional students pursue tertiary studies with varying life situations such as family responsibility, job responsibility and lack of spousal support towards their studies (Keith 2007). However, despite the above issues, studies show that traditional students may need greater academic support compared to non-traditional ones (Dupeyrat and Marine 2005) contrary to an earlier study by Young (1989) who found traditional students with higher academic scores than non-traditional students. Non-traditional students may be adult students, working part-time or working college students, widening participation students, new wave students, millennial students or undocumented (February 2016). In this study, we examined, through descriptive statistics, the influence of the following on the academic performance of the students: financial resources, study material, family support, family commitment, job commitment and pre-enrolment attributes of the participants (Young 1989; Pather 2015; Burger 2017). Students may drop out due to under-preparedness, financial difficulties, incorrect qualification choices, unresponsive teaching and/or poor living conditions (DHET 2020).

## Demographic factors

Due to enlarged access to tertiary education, students' age tends to vary per new cohort per institution (McKenzie and Schweitzer, 2001). As a result, late teenagers and adults are commonly found in South African tertiary institutions. Understanding if their age is critical to their success is important. For example, Young (1989) found that students in the early teens and mid-twenties were at high risk of failure because they were likely to have matriculated in two sittings. Burger (2017) found a higher score for the academic success of students younger than 23 years compared to those older than 23 in a science and educational faculty.

Gender is one of the predictors of academic performance (Van Zyl et al 2012). In fact, recently, the DHET (2020) emphasised the need to investigate the reasons for significant differential performance; with male students not doing as good as their female counterparts.

Bass (2019) found that female students were more likely to be successful than males at university. Interestingly, Potgieter and Van Schoor (2011) found out that owing to their oftenmultiple life roles, more female students cancelled their studies.

## Academic/choice of discipline

Thrikawala (2011) and Shambare (2013) found out that candidates for university education hardly consider entrepreneurship as a discipline and consequently do not take up entrepreneurship as a career but instead favour premium qualifications such as law (Viviers, Solomon and Venter, 2013). Entrepreneurship education can increase students' interest in choosing entrepreneurship as a viable career choice as well as enhancing participant's levels of self-efficacy (Herrington and Kew, 2016; Fatoki and Oni, 2014). Interestingly, several entrepreneurs do not think entrepreneurship education is that important (Kabengele, 2019).

Students who are exposed to professional subjects at high school tend to do better than others during university studies. Cunningham (1997) describes matriculants as individuals who have shown interest and enrolled at a higher education institution. For example, individuals who are interested in enrolling at a tertiary institution but do not enrol are termed as nonmatriculants. This is the argument of Young (1998) who identified matriculants performance during a professional exam as a pre-eminent predictor of success among the other factors investigated. An almost similar finding was also made in Australia by McKenzie and Schweitzer (2001). They found that during university studies, if someone continues with a subject that was learnt at high school, there is a good chance that the person will perform better. Essentially, one can link a student's performance at university to the foundation they had while at high school. For example, students who did Business Studies at high school are more likely to have a better understanding of business/entrepreneurship terminologies such as business plan, and feasibility analysis. The Global Entrepreneurship Monitor (GEM) in the 2015-2016 report suggest that schools should actively promote entrepreneurship as a career path, which would considerably help when introduced in primary or secondary school level (Herrington and Kew 2016).

## Methodology

This study utilised an empirical method to investigate the pre-enrolment factors influencing the academic performance of students. This study took a positivist research philosophy based on the rationale that it makes use of highly structured methods to facilitate replication, resulting in certain generalisations (Saunders and Lewis 2012). It follows a deductive research approach which fits with the positivist research philosophy of previous studies (e.g. Garcia, Moizer, Wilkins and Haddoud 2019; Kaur 2020).

A questionnaire consisting of statements for gathering quantitative data was developed for the study. For each of the six statements (see Table 1) addressing this study, a four-point Likert scale was used (SD = Strongly Disagree, D = Disagree, A = Agree and SA = Strongly Agree). These (SD, D, A, SA) were then assigned numbers from 1 to 4 respectively, to facilitate the capturing of the participant's responses enabling data analysis (Zikmund, Babin, Carr and Griffin 2010). The deductive research approach will provide a summary of the views needed to address the research objectives. Two of the critical characteristics of the deductive approach are that it helps to explain the causal relationships between variables; and secondly, there is a need to collect and analyse data to answer the research question. Thus, using a quantitative approach answers coded in numeric terms can be measured statistically (Babbie and Mouton 2001; Cooper and Schindler 2003). The questionnaire was administered to all the registered students of the Diploma in Entrepreneurship.

Sta	tements
1	Lack of career guidance support negatively influenced my performance
2	Lack of study material negatively influenced my performance
3	Lack of financial resources negatively influenced my performance
4	Lack of family support negatively influenced my performance
5	Family commitment negatively affected my performance
6	Job commitment negatively affected my performance

 Table 1 - Pre-enrolment factors influencing the academic performance of students

The Diploma in Entrepreneurship has four groups of students, namely Extended Curriculum Programme<sup>3</sup> cohort (Extended Year/Ex-Yr 1/2), first year mainstream cohort (Mainstream Year 1/Main-Yr 1), and second (Mainstream Year 2/Main-Yr 2) and third year (Mainstream Year 3/Main-Yr 3) students.

<sup>&</sup>lt;sup>3</sup> The Extended Curriculum Programme (ECP), designed by South Africa's Department of Higher Education and Training, aims to improve graduation and throughput rates of students in South African Universities. ECP is designed in such a way that the first year is spread over two years, after which they proceed with the normal programme. ECP students receive additional support such as augmented lectures, practicals and fieldtrips; as well as various key skills needed for success at university level.

Data was captured and analysed using the latest version of the Statistical Package for Social Sciences (SPSS) Version 26. Various statistical tests were performed on the data, such as Cronbach's Alpha to measure the consistency of the variables. Descriptive analysis was carried out to determine the means, standard deviations, and medians of the variables of the study. The above helped to better understand the data and thereby answer the research question. In observing ethical practice, letters of permission to conduct research, as well as consent letters, were sought from the students, the department and the faculty. Participants were informed that their participation was voluntary; their responses confidential, and their identities were not required. They were further advised that they were free not to answer any question they felt uncomfortable with. We made it clear to the participants that the data would only be used for research purposes.

# **Results and discussion**

The table below provides respondents' demographic information relating to gender, level of study, nationality, and age.

	Frequency	Percentage
Male	81	39.9%
Female	122	60.1%
Study level	Frequency	Percentage
Extended Year 1 (Ex-Yr 1)	21	10.3%
Extended_Year_2 (Ex-Yr 2)	19	9.3%
Mainstream Year 1 (Main-Yr 1)	68	33.3%
Mainstream_Year_2 (Main-Yr 2)	54	26.5%
Mainstream_Year_3 (Main-Yr 3)	42	20.6%
Nationality	Frequency	Percentage
South African	178	89.9%
Non-South African	20	10.1%
Age group	Frequency	Percentage
16-20 years	94	47.7%
21-25 years	92	46.7%
26-30 years	9	4.6%
31 years and above	2	1.0%

## **Table 2: Respondents' information**

Table 2 shows a higher proportion of female students (60% to 40% of males) on the program. A higher proportion of female students is common in most tertiary institutions in South Africa (Van Zyl et al 2012; Viviers et al 2013). This pattern was noted in the 2018 GUESSS survey, which had about 55% female students of the 208 000 participants (Sieger, Fueglistaller, Zellweger and Braun 2018).

The sample was a diverse one, as about a tenth of the participants were foreign nationals. Of the 197 respondents, the age ranged from 17 to 37 years. Two major age groups were identified, and these are 16-20 (48%) and 21-25 (47%). The institution attracts foreign nationals, as 10.1% of those who participated in this study were non-South Africans.

# Table 3: Test of normality - Shapiro-Wilk

Items	Statistic	df	Significance
Lack of career guidance support during high school	0.855	182	0.000
Lack of financial resources negatively influenced my performance	0.868	182	0.000
Lack of study material negatively influenced my performance	0.879	182	0.000
Lack of family support negatively influenced my performance	0.854	182	0.000
Family commitment negatively affected my performance	0.830	182	0.000
Job commitment negatively affected my performance	0.829	182	0.000

All variables have a very small significance of close to zero as per the table above. Therefore, the data is not normally distributed hence nonparametric tests are applicable.

# Findings

The next table presents means of the views of every sub-group on the factors that influenced their performance in high school. The internal consistency of the six statements had a Cronbach's alpha of 0.736 higher than the widely accepted ratio of 0.7 (Foxcroft and Roodt 2009).

Table 4: Ranked pre-enrolment factors of respondents' views

		Ex-Yr 1	Ex-Yr 2	Main-Yr 1	Main-Yr 2	Main-Yr 3	Overall
1	Lack of career guidance support negatively influenced my performance	2.60	2.89	2.35	2.96	2.63	2.65
2	Lack of study material negatively influenced my performance	2.24	2.61	2.19	2.75	2.53	2.45
3	Lack of financial resources	2.33	2.78	2.03	2.56	2.39	2.35

	negatively influenced my performance						
4	Lack of family support negatively influenced my performance	2.57	2.39	1.73	2.17	2.28	2.11
5	Family commitment negatively affected my performance	2.43	2.11	1.75	2.02	1.95	1.97
6	Job commitment negatively affected my performance	2.33	1.89	1.63	2.04	2.00	1.92

Since the data is not normally distributed, the Kruskal-Wallis Test was used to justify

the differences in the means in the previous table.

# Table 5: Independent-Samples Kruskal-Wallis Test

Null Hypothesis	Sig. <sup>a,b</sup>
The distribution of Lack of career guidance support during high school is the same across categories	0.016
of Study Level.	
The distribution of Lack of financial resources negatively influenced my performance is the same	0.018
across categories of Study Level.	
The distribution of Lack of study material negatively influenced my performance is the same across	0.026
categories of Study Level.	
The distribution of Lack of family support negatively influenced my performance is the same across	0.001
categories of Study Level.	
The distribution of Family commitment negatively affected my performance is the same across	0.046
categories of Study Level.	
The distribution of Job commitment negatively affected my performance is the same across categories	0.012
of Study Level.	
a The significance level is 0.050	

a. The significance level is 0.050.

b. Asymptotic significance is displayed.

# Table 6: Chi square results

	Chi-	df	Asymp.
Lack of career guidance support negatively influenced my performance	39.597	3	0.000
Lack of financial resources negatively influenced my performance	10.082	3	0.018
Lack of study material negatively influenced my performance	14.454	3	0.002
Lack of family support negatively influenced my performance	29.904	3	0.000
Family commitment negatively affected my performance	55.244	3	0.000
Job commitment negatively affected my performance	56.292	3	0.000

The chi square results in the below table will be discussed in detail.

All cells have expected frequencies more than 5.

## Top three pre-enrolment factors

Agree

Total

Missing

Total

Strongly Agree

From the six statements directly questioning the influence of the pre-enrolment factors on the participants' performance in high school, the top three factors with highest means are lack of career guidance, study material and financial resources (see Table 4 above).

The following was found regarding respondents' views of the factors that influenced their performance in high school. Of the six pre-enrolment factors, three of them, with mean below 2 were identified as having made a slightly negative contribution to participants' performance in high school, namely job commitment, family commitment and family support.

(*a*) *Career guidance* – about 63% of the respondents agreed that the career guidance received during high school influenced their performance in high school. Table 7 and Figure 1 show that participants from all groups pointed out a lack of career guidance as a significant negative contributor to their performance in high school. Kroon, De Klerk and Dippenaar (2003) recommend that career guidance should be provided for all high school students. Its absence meant that students were not clear on what to pay much attention to in preparation for tertiary education. The means for different study levels on the career guidance item ranged from 2.35 to 2.96, with an average of 2.65.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	31	15.2	16.2	16.2
	Disagree	40	19.6	20.9	37.2

85

35

191

13

204

41.7

17.2

93.6

100.0

6.4

44.5

18.3

100.0

81.7

100.0

Table 7: Respondents' views on the lack career guidance support during high school

A chi-square test for association was conducted. There was a statistically significant association between level of study and the variable "lack of career guidance support negatively influenced my performance",  $X^2(3) = 39.597$ , p < 0.05. All expected cell frequencies were greater than five.



Figure 1: Respondents' views on the career guidance support during high school

(b) Study material - almost half (47% - refer to Table 8 and Figure 2) of the respondents highlighted the negative influence of the lack of study material on their performance in high school. The mean for all levels of study is 2.45. This could relate to the socio-economic backgrounds of some of the participants, despite about 80% of them having completed their high school studies in urban areas.

Table 8	: Lack	of study	material	negatively	v influenced	my	performance
		•				•	

				Valid	
		Frequency	Percent	Percent	<b>Cumulative Percent</b>
Valid	Strongly Disagree	38	18.6	19.6	19.6
	Disagree	64	31.4	33.0	52.6
	Agree	59	28.9	30.4	83.0
	Strongly Agree	33	16.2	17.0	100.0
	Total	194	95.1	100.0	
Missing		10	4.9		
Total		204	100.0		

A chi-square test for association was conducted. There was a statistically significant association between level of study and the variable "lack of study material negatively influenced my performance",  $X^2$  (3) = 14.454, p = 0.002. All expected cell frequencies were greater than five.



Figure 2: Lack of study material negatively influenced my performance

(c) Financial resources – close to half (44% - refer to Table 9 and Figure 3) of the participants indicated that the lack of financial resources had a negative influence on their performance high school. The mean for all study levels is 2.35 for this factor, the third highest. It could also imply that students were not able to supplement their study material resources and could not afford to attend the much-needed career fairs. At the tertiary level, financial funding positively influences academic performance. Students who were funded NSFAS had lower dropout and higher throughput rates compared with the national cohort (DHET 2020).

				Valid	
		Frequency	Percent	Percent	<b>Cumulative Percent</b>
Valid	Strongly Disagree	49	24.0	25.0	25.0
	Disagree	60	29.4	30.6	55.6
	Agree	56	27.5	28.6	84.2
	Strongly Agree	31	15.2	15.8	100.0
	Total	196	96.1	100.0	
Missing		8	3.9		
Total		204	100.0		

Table 9: Lack of financial resources negatively influenced my performance

A chi-square test for association was conducted. There was a statistically significant association between level of study and the variable "lack of financial resources negatively influenced my performance",  $X^2$  (3) = 10.082, p = 0.018. All expected cell frequencies were greater than five.



Figure 3: Lack of financial resources negatively influenced my performance

# Influence of family support

Some of the participants also reported that family support influenced their performance. About 32% (refer to Figures 4 and 5) of the respondents and less than half across all cohorts indicated the lack of family support had a negative influence on their performance in high school. This could mean that family support – parent and overall family support - is critical to the positive completion of a qualification (Gaffoor 2018).

A chi-square test for association was conducted. There was a statistically significant association between level of study and the variable "lack of family support negatively influenced my performance",  $X^2$  (3) = 29.904, p < 0.05. All expected cell frequencies were greater than five.



Figure 4: Lack of family support negatively influenced my performance



Figure 5: Lack of family support negatively influenced my performance (per study level)

# Influence of family commitment

About 25% (refer to Figures 6 and 7) of the respondents and less than half across all cohorts agreed that their academic performance had been negatively influenced by family commitment. Considering the age distribution of almost half of the respondents being below 21 years, this suggests that most are yet to start their own families.



Figure 6: Family commitment negatively affected my performance

A chi-square test for association was conducted. There was a statistically significant association between level of study and the variable "family commitment negatively affected my performance",  $X^2$  (3) = 55.244, p < 0.05. All expected cell frequencies were greater than five.



Figure 7: Family commitment negatively affected my performance (per study level) Influence of job commitment

About 26% of the respondents (refer to Figures 8 and 9) highlighted the negative influence of job commitment on their high school performance. Juggling work and study can be challenging as many students are unable to sufficiently attend to their studies.



Figure 8: Job commitment negatively affected my performance

A chi-square test for association was conducted. There was a statistically significant association between level of study and the variable "job commitment negatively affected my performance",  $X^2$  (3) = 56.292, p < 0.05. All expected cell frequencies were greater than five.



Figure 9: Job commitment negatively affected my performance (per study level)

# **Summary of findings**

In summary, the top three pre-enrolment factors identified from this study based on ranking their means, which were viewed to have influenced students' high school performance are:

- (a) Lack of career guidance students were not clear on what to emphasise in preparation for tertiary studies hence were underprepared for tertiary education;
- (b) Lack of study material certain socio-economic factors have been linked to this considering that most of the students in this study were from previously disadvantaged backgrounds;
- (c) Lack of financial resources the lack of financial resources limited the students in preparing for higher education, such as attending career fairs.

### Recommendations

This study recommends the promotion of career guidance at high school level by stakeholders. As alluded to in other studies such as Adam, Backhouse, Baloyi and Barnes (2010), this study has revealed that the participants were underprepared for higher education. Underpreparedness of students has also been highlighted in a study conducted by Leshoro and Jacobs (2019). Basically, because they were underprepared for higher education, they did not qualify to study what they wanted to but were instead offered places to study other qualifications that did not directly meet their career aspirations, such as finding employment after graduation, a trend among South African students (Kroon and Meyer 2001). Thus, career guidance should be promoted at an early stage, such as in high school, so that students prepare adequately for tertiary level education. This suggestion is in line with Kroon et al (2003) and would assist in increasing the chances of pursuing desired qualifications at tertiary level.

As pointed out earlier, the lack of career guidance could be attributed to the lack of financial resources to visit career fair events as indicated by the participants. One way to promote this is a collaboration with the private sector to sponsor schools to attend university career fairs for learners to become familiar with the possible options they can pursue at tertiary level. Alternatively, institutions should also consider sponsoring schools within their catchment area to attend their career fairs. Considering a catchment area for the current institution, there is a need to promote career fairs at a provincial level to help matriculants to make an informed decision before commencing higher education studies. It is more likely that students lacking financial resources are more likely to have inadequate study material. Thus, the top three factors revealed in this study interlink. Even though family support was ranked fourth, students across all cohorts identified it as critical throughout students' educational journey. Support from parents and family makes a positive contribution to the completion of qualifications (Gaffoor 2018). This study recommends different admission criteria to be developed to enable those with the interest to study entrepreneurship access the programme. Lastly, student-focused agencies such as NSFAS can start looking at contributing to entrepreneurship growth in South Africa by introducing schemes that prepare learners for entrepreneurship.

#### Limitations

The research findings cannot be generalised to all entrepreneurship students in the province or country as only one institution was used for the study. Also, it should be noted that this study focused on full-time undergraduate students, a category identified by the DHET as having the highest dropout rates and lowest throughput rates in the 2000 to 2017 cohort tracking (DHET 2020). It should also be noted that this study omitted race, which, in our view, limits the generalisability of the results.

### **Conclusion and suggestion for future research**

Considering the momentum on research that focuses on entrepreneurship due to its benefits such as employment creation, this study sought to focus on the pre-enrolment factors influencing the academic performance of entrepreneurship students and possible interventions. More specifically, the study focused on the pre-enrolment factors that influence the academic performance of entrepreneurship students at a tertiary institution in the Western Cape, South Africa. Other studies may further expand the scope by including other disciplines such as engineering and humanities or conduct a similar study at more than one institution. Since this was quantitative in nature, further study could utilise a qualitative methodology to gain deep insights from the students. Furthermore, a future study could include race/ethnicity as part of the analysis to gain insights into how the different races/ethnic groups perceive the various factors. Future research may take the form of a comparative analysis among several departments.

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