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The effect of entrepreneurial selfefficacy, experience, and education on entrepreneurial intention among black South African female youth

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The effect of entrepreneurial self-efficacy, experience, and education on entrepreneurial intention among black South African female youth

A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management in Entrepreneurship and New Venture Creation

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Johannesburg, 2020

ABSTRACT

In order to advance the study of entrepreneurship, this quantitative study assessed the impact of prior entrepreneurial exposure, entrepreneurship education, and entrepreneurial self-efficacy on the entrepreneurial intention of female, black South African youth.

The moderating impact of entrepreneurial self-efficacy on the relationship between entrepreneurship education and intention as well as between prior entrepreneurial exposure and intention were assessed.

The data was collected among 278 female, black South African youth, using a questionnaire that was scripted on Qualtrics. Regression analysis was conducted to assess the hypotheses.

The results revealed that both entrepreneurship education and prior entrepreneurial exposure had a direct significant positive impact on entrepreneurial intention. Entrepreneurial self-efficacy did not significantly moderate the relationship between both entrepreneurship education and intention as well as between prior entrepreneurial exposure and entrepreneurial intention.

The key message from this study was that entrepreneurial intention is dependent on whether one had a positive prior entrepreneurial exposure and was also exposed to entrepreneurship education. It was concluded that the impact of entrepreneurship education and prior entrepreneurial exposure is not dependent on one's entrepreneurial self-efficacy.

Keywords: Entrepreneurial intention, Entrepreneurship education, Prior Entrepreneurial exposure, Entrepreneurial self-efficacy

DECLARATION

I, **Honest Muchabaiwa**, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Management in Entrepreneurship and New Venture Creation at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination to this or any other university.

Name: *Honest Muchabaiwa* **Signature:** 

Signed at ……*Randburg***……..**

On the ……*23rd***…….. day of ……***August***…… 20***20***

DEDICATION

To my better half, Abigail and children, Nicole Paidamoyo and Nathan Panashe without whom this report would not have been completed.

ACKNOWLEDGEMENTS

I would like to offer my most noteworthy thanks to each of the individuals who made it possible for me to finish this report. I am exceptionally grateful to my supervisor, Dr Jabulile Msimango-Galawe, who supported me with her clear direction and constructive criticism, without which this report would not have been a success. To Professor Boris Urban, Dr McEdward Murimbika, Dr Diran Soumonni, thank you for your assistance during the entire course and for the direction you have given me on the best way to hone my final report. The research panels that you conducted were extremely insightful.

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To the female, black South African youth who responded to my survey, I greatly appreciate the time you took out of your busy schedules to complete my questionnaire.

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LIST OF ACRONYMS

EE - Entrepreneurship Education

EFA - Exploratory Factor Analysis

EI - Entrepreneurial Intention

ESE - Entrepreneurial Self-Efficacy

KMO - Kaiser-Meyer-Olkin Measure of Sampling Adequacy

PEE - Prior Entrepreneurial Exposure

PEES - Prior Entrepreneurial Exposure Scale

TPB - Theory of Planned Behaviour

VIF - Variance Inflation Factor

CHAPTER 1. INTRODUCTION

1.1 Purpose of the study

This quantitative study assessed the impact of prior entrepreneurial exposure, entrepreneurship education, and entrepreneurial self-efficacy on the entrepreneurial intention of female, black South African youth.

1.2 Context of the study

According to Business Environment specialists (2013), female entrepreneurs constituted between 25% and 33% of the global formal business owners. Worldwide, the proportion of female-owned businesses has been growing significantly in the past decade (Herman, 2018). In contrast to this global trend, there has been very slow growth in the number of female-owned businesses in South Africa, with 24% of the formal businesses being owned by women in 2015 and of this, only 8.4% were owned by black females (Ndlovu & Makgetla, 2017). This is a very low level of participation considering that black females constitute 35.7% of the economically active people in South Africa (Statistics South Africa, 2018).

The very low participation rates in entrepreneurship by South African black females is despite the South African government allocating funding towards entrepreneurial training, grants and advice-giving support structures, to promote black female-owned businesses through the Department of Trade and Industry (DTI, 2007).

Tomorrow's entrepreneurs will emerge from the current youth. This study will thus assess whether entrepreneurial self-efficacy, entrepreneurship education, and prior entrepreneurial exposure are key determinants of entrepreneurship intentions among South African black female youth.

According to the South African Government (2008), more female graduates are being produced by both universities and technical colleges, compared to male graduates. Ncanywa (2019) indicated that the South African Department of Higher Education introduced a programme to sensitise university and TVET college students about entrepreneurship. Thus, the lack of entrepreneurship education is highly unlikely to be the reason for low participation in entrepreneurship activities by women. It can also be argued that low participation in entrepreneurial activities by women, has nothing to do with family background since both males and females come from the same communities. The 2019 mid-year population estimates indicated that there were 49% males compared to 51% females in South Africa (Statistics South Africa, 2019).

Scherer, Brodzinski, & Wiebe (1990) found in their research on career selection and gender, that women have lower self-efficacy due to lack of personal and vocational training. Fast forward to 2008, the South African Government, (2008), reported that more female graduates were being produced by both universities and technical colleges, which is is an improvement from the findings by (Scherer et al., 1990). More recent studies were inconclusive about the differences in entrepreneurial self-efficacy by gender (Mueller & Dato-on, 2008).

Huston (2018) indicated that women are associated with low entrepreneurial intention in general. This stimulated the researcher to investigate the possible moderating impact of entrepreneurial self-efficacy on the relationship between entrepreneurship education and entrepreneurial intention among black female youths, as well as the moderating impact of entrepreneurial self-efficacy on the relationship between prior entrepreneurial exposure and entrepreneurial intention among black female youth. This is in a bid to establish the weather entrepreneurial education, prior entrepreneurial exposure and entrepreneurial self-efficacy have an effect on the low participation in entrepreneurship by black South African females.

1.3 Theoretical foundation of Entrepreneurial Intentions

Four theories are discussed in this section, these are; Ajzen's theory of Planned Behaviour, Entrepreneurial-Self-Efficacy theory, Social learning theory and the Human Capital theory.

Entrepreneurial intentions originated from the psychology field of study. It is a depiction of forthcoming action to start a business (Niljinda, 2017). According to Barreira, Botha, Oosthuizen, & Urban, (2011), where there is an intention, there is likely to be an action. This implies that when there is an explanation of intention, then the drivers of participation in entrepreneurial activities will be deduced. This is also supported by the Theory of Planned Behaviour (TPB) (Ajzen, 1991), which recognises entrepreneurial self-efficacy as a vital contributor to entrepreneurial intention (Soomro & Honglin, 2018). This explains why the current study will focus on entrepreneurial intentions among female, black South African youth in an attempt to understand the behaviour of black South African women, with regards to entrepreneurship.

The Social Learning theory suggests that a person's behaviour can be acquired by examining and imitating others, in this case it can be parents, relatives or friends (Zapkau, Schwens, Steinmetz, & Kabst, 2015).

The Human Capital theory by Becker (1964) suggests that investing in learning, skills and experiences improves one's intellectual capabilities. This in turn will lead to eagerness to start an enterprise or venture into entrepreneurship (Paré, Rédis, & Hikkerova, 2011).

Entrepreneurial Self-efficacy (ESE) theory, which is grounded on the premise that a person's entrepreneurial intention is dependent on how they perceive the task to be doable, feasible and also the individual's propensity to act, will be used (Barreira et al., 2011). Hardy (2016) pointed out that a person who is confident

in the execution of tasks associated with new venture creation is more likely to start a business.

Women entrepreneurs are recognised as very important for the economic development of economies (Ng & Fu, 2018). Despite this importance, in South Africa, the black woman is still under-represented in the entrepreneurship space (Ndlovu & Makgetla, 2017). This study will thus focus on female, black South African youth to try and understand the drivers of entrepreneurial intentions.

1.4 Problem Satement

The low participation rates of women in entrepreneurship means that a significant proportion of South African population is left out in building the nation. A literature search for possible reasons for the low participation rates of female entrepreneurs in the South African economy, resulted in a limited number of papers attempting to investigate the reasons such as (Ojiaku, Nkamnebe, & Nwaizugbo, 2018; Irene, 2017), who explored the role of competencies in understanding women entrepreneurship in South Africa. Most of the literature available is about research that was done in developed countries such as China (Ng & Fu, 2018), Portugal, and the United States of America.

Carter, Hughes, Jennings, Welter, & Brush (2012) indicated that research in a different national and/or cultural context can potentially expose different phenomenon and their possible impact on entrepreneurial intentions, hence, the need to study this topic in a female, black South African youth context.

1.5 Research questions and aims of the study

The primary research question is: “What is the impact of entrepreneurial self-efficacy on the relationship between prior entrepreneurial exposure, entrepreneurship education, and the intention to venture into entrepreneurship?

The aims of the study are to:

i. Determine the impact of entrepreneurship education on entrepreneurial intention among female, black South African youth,
ii. Establish the impact of prior entrepreneurial exposure on entrepreneurial intention among female, black South African youth,
iii. Investigate the influence of entrepreneurial self-efficacy - searching on the relationship between entrepreneurship education and entrepreneurial intention among female, black South African youth, and
iv. Examine the influence of entrepreneurial self-efficacy-searching on the relationship between prior entrepreneurial exposure and entrepreneurial intention among female, black South African youth.

1.6 Significance of the study

This research has two vital contributions. The first contribution is the addition of new knowledge to the entrepreneurship field as there is currently limited research done on whether self-efficacy has a moderating effect on the relationship between entrepreneurship education and entrepreneurial intention, as well as on the relationship between prior entrepreneurial exposure and entrepreneurial intentions among female, black South African youths. Previous research was mainly about the direct impact of self-efficacy on intention (Soomro & Honglin, 2018), or the direct impact of education and prior entrepreneurial exposure on intention (Mueller, Zapkau, & Schwens, 2014).

The second contribution would be the application of components of Ajzen's theory in a South African context, specifically among female, black South African youth.

In practice, the government can potentially get guidance in terms of policymaking. Policymakers can potentially tap into the findings of this study and draft policies that would consider the impact of self-efficacy among female, black South African youth.

1.7 Delimitations of the study

This study was limited to assessing the impact of entrepreneurship education and prior exposure to entrepreneurial intention and the moderating effect of entrepreneurial self-efficacy on these relationships. The study did not explore other possible determinants of entrepreneurial intention. The study only focused on South African black female youth, the effect of the variables on other races and male youths was not covered in this study. This study only focused on respondents who were not active entrepreneurs but did not establish whether these respondents engaged in any form of entrepreneurship at some point in their life.

There are five dimensions to the Mcgee, Peterson, Mueller, & Sequeira (2009), entrepreneurial self-efficacy instrument but only one dimension, searching, was used.

According to Ladd & Kendall (2017), the searching component of ESE is the most appropriate dimension when assessing ESE in relation to entrepreneurial intention. The component is about the development and fine-tuning of new ideas to seize new opportunities, unlike the other components of ESE; namely planning, marshalling, implementing human resources and implementing finances, which are about activities that happen after launching an enterprise (Ladd & Kendall, 2017).

The researcher suggests that future research can be conducted to assess whether self-efficacy varies significantly depending on the dimension used.

1.8 Assumptions

The assumptions made in this research are;

- ✓ The low participation of black females in entrepreneurship can be attributed to low entrepreneurial intention (Ajzen, 1991).
- ✓ Entrepreneurial intention is in turn explained by entrepreneurship education, and prior entrepreneurial exposure (Israr & Saleem, 2018).
- ✓ The effect of both entrepreneurship education and prior entrepreneurial exposure on entrepreneurial intention is moderated by entrepreneurial self-efficacy (Ahlin, Drnovšek, & Hisrich, 2014).

1.9 Definition of terms

Entrepreneurship: The definition of entrepreneurship has been a subject for debate for a long time (Olinsson, 2017). The definition by Henry, Hill, & Leitch (2003), which states that entrepreneurship is a process of recognising marketplace opportunities, organising resources to take advantage of the opportunities, and making a plan to exploit the opportunities in the long term, was used in this study.

Entrepreneurial Intention: The definition by Herman (2018) which states that entrepreneurial intention is the proportion of adults who are currently not owning any business, but with an intention to venture into business within a period of 3 years was adopted in this study.

Entrepreneurial Self-efficacy: It is defined as the belief that one has within them the ability to go through the business start-up process without any problems (Tsai, Chang, & Peng, (2016) ; Arafat, Saleem, Dviwedi, & Khan, 2018).

Entrepreneurship Education: In this study, entrepreneurship education was defined as the process of preparing students with an improved ability to generate new ideas and exploit opportunities (Heywood, 2015; Darnihamedani, 2016).

Prior Entrepreneurial Exposure: In this study, prior entrepreneurial exposure is defined as a person's individual history associated with entrepreneurship activities. The history can be through parents or friends who owned a business, or previously have worked for a small or newly started firm (Krueger, 1993; Johara, 2017).

South African black Female youth: In this study, South African Black female youth is defined as a black, coloured, or Indian person (Republic of South Africa, 2004), who identifies themselves as female irrespective of their designated sex at birth (Trujillo, 2019), and were aged between 18 and 34 years (The Republic of South Africa, 2015) at the time of the study. Although, The Republic of South Africa (2015), defined a youth in South Africa as a person between the ages of 14 and 34 years, for the purposes of this study only youths above the age of 18 years were considered since speaking to youths below 18 would have required approval from their legal guardians.

CHAPTER 2. LITERATURE REVIEW

2.1 Introduction

Although various authors have written on different theories that explain entrepreneurship intention, this review will concentrate on the moderating effect of entrepreneurial self-efficacy on the relationship between entrepreneurship education and prior entrepreneurial exposure on the intentions of female, black South African youth to venture into entrepreneurship.

This section discusses literature (that is, theories, frameworks and models) that explain the effect of entrepreneurial self-efficacy on the relationship between prior entrepreneurial exposure and entrepreneurial intention as well as the relationship between entrepreneurship education and entrepreneurial intention among female, black South African youth.

2.2 Entrepreneurial intention

According to Tefula & Tefula (2017), entrepreneurship is defined as the multi-faceted concept that incorporates starting a new venture, leading and being innovative. It also involves recognising opportunities and exploiting the opportunities (Tefula & Tefula, 2017).

Every single entrepreneurship thought begins with an intention (Dinc & Hadzic, 2018; Bird, 1988). Intention can be defined as a rational state of mind centered on achieving some mission or attaining some goal (Dinc & Hadzic, 2018).

Combining the two definitions, the one for entrepreneurship and that for intention, entrepreneurial intention, is a pivotal first step in understanding the process of setting up another business (Olokundun, Moses, Iyiola, Ogunaike, Ibidunni, Kehinde, & Motilewa, 2018; Nguyen, 2017; Nasip, Amirul, Sondoh, & Tanakinjal; 2017; Salamzadeh & Kirby, 2017; Zapkau et al. 2015). It is defined as the desire

to start a business or participating in self-employment (Nguyen, 2017; Nasip et al., 2017).

According to Ajzen (1991); Nguyen (2017) entreprenurerial intention is the best predictor of entrepreneurial behaviour. Herman (2018) asserts that entrepreneurial intention is the proportion of adults who are currently not owning any business but with an intention to venture into business within a period of 3 years. The definition by Herman (2018) will be used in this study.

Cardoso, Cairrão, Petrova, & Figueiredo (2018) indicated that the discussion about entrepreneurial intention will be incomplete without mentioning the Theory of Planned Behaviour, also referred to as TPB. The TPB postulated that entrepreneurial intention is dependent on one's attitude towards their behaviour, their subjective norms, and their perceived behavioural control (Ajzen, 1991; Barreira et al., 2011).

Niljinda (2017) found that there was a significant correlation between attitude towards entrepreneurship and entrepreneurial intention. Miralles, Giones, & Riverola (2016) went further and concluded in their study that it was not only about the attitude but also that the individual's perception of entrepreneurship has more influence on entrepreneurial intention than the influence of entrepreneurial knowledge.

Letsoalo & Rankhumise (2019) defined entrepreneurial intention as the intention to start a business rather than seeking employment for people who are currently not active entrepreneurs. This is the definition that was employed in this study. Thus, this study did not seek to establish whether the people who are currently entrepreneurs where at some point involved in some form of entrepreneurship.

2.3 Factors Affecting Entrepreneurial Intention

In this section, literature on factors affecting entrepreneurial intention is reviewed. Entrepreneurship education, prior entrepreneurship exposure and entrepreneurial self-efficacy are discussed.

2.3.1 *Entrepreneurship Education*

The teaching of entrepreneurship is referred to as entrepreneurship education (Matlay, 2011). According to Baručić & Umihanić (2016) entrepreneurship education can be formal, non-formal or informal. The formal entrepreneurship education involves going through formal courses, this is the one that is taught at schools, universities and business schools (Baručić & Umihanić, 2016). The informal entrepreneurship education involves the development of oneself through organised learning, normally practiced at institutions such as adult education centres, incubation centres and similar centres while informal entrepreneurship education is learning entrepreneurship through every day live, this could be through family, friends or mentors, as long as there is leaning of new thinks to do with entrepreneurship (Baručić & Umihanić, 2016).

Piperopoulos & Dimov (2015) defined entrepreneurship education as a higher education course designed to develop students' entrepreneurial attitudes, abilities and skills with the intention of influencing their entrepreneurial intentions. Çera & Çera (2019) defined entrepreneurship education as any educational course which prepares an individual with abilities and capabilities to venture into entrepreneurship. According to Heywood (2015), entrepreneurship education is the process of providing learners with improved ability to generate concepts and the dexterities to see them to fruition.

Human Capital theory (Becker, 1975; Bae, Qian, Miao, & Fiet, 2014) states that entrepreneurial education and entrepreneurial intention are positively correlated. This is also supported by the theory of entrepreneurial self-efficacy by Chen, Greene, & Crick (1998). Ratten & Jones (2018) indicated that entrepreneurship

education is the transfer of knowledge on how to start a business, with what effects, how to identify opportunities to create goods and services, evaluate opportunities as well as how to exploit the opportunities.

For this study, the definition by Çera & Çera (2019) will be applied. That is entrepreneurship education being any educational course, or education which prepares an individual with abilities and capabilities to venture into entrepreneurship, irrespective of whether it is in primary school, high school or university.

According to Israr & Saleem (2018), in their study among university students in Italy, they indicated that entrepreneurship education was associated with higher levels of entrepreneurial intention. Piperopoulos & Dimov (2015) concluded that the relationship between entrepreneurship education and entrepreneurial intention is moderated by pedagogy, with the relationship being negative in theory-oriented courses and positive in practical-oriented courses. Cardoso et al. (2018) furthermore claimed that entrepreneurial experience in vocational schools had a greater and more comprehensive impact on entrepreneurial intention than classes in entrepreneurship. This supports work by Piperopoulos & Dimov (2015) where pedagogy moderated the association between entrepreneurship education and entrepreneurial intention.

Based on the literature reviewed in this section, it was hypothesised that;

H1: Entrepreneurship education has a significant positive impact on entrepreneurial intention of female, black South African youth.

2.3.2 *Prior Entrepreneurial Exposure*

Prior entrepreneurial exposure is a person's individual history associated with entrepreneurship such as entrepreneurial parents or previous work experience in a small or newly started firm (Krueger Jr., 1993; Johara, 2017). The components of prior entrepreneurial exposure are:

(i) having been exposed to entrepreneurial parents (Zapkau et al., 2015),

(ii) having worked in a small business (Peterman & Kennedy, 2003),
(iii) having started a new business Mcgee et al., (2009), and
(iv) having relatives or friends who have started a new business (Mcgee et al., 2009).

The Entrepreneurial Cognitive theory argues that the heuristics-based is inspired by principles that come from everyday practices and exposure to entrepreneurial experience (Zhang, Duysters, & Cloodt, 2014). This theory explains the addition of prior entrepreneurial exposure to this study. The Social Learning theory suggests that a person's behaviour can be acquired by examining and imitating others, in this case it can be parents, relatives or friends (Zapkau et al., 2015). These theories suggests that extrepreneurial exposure is vital in shaping an individials intention to start a business.

Israr & Saleem (2018); Malebana & Zindiye (2017); Zapkau et al. (2015); Mueller et al. (2014); and Peterman & Kennedy (2003) concluded in their studies that prior entrepreneurial exposure had a positive impact on an individual's entrepreneurial intention. Miralles et al. (2016) also found there to be a positive significant impact of Prior Entrepreneurial Exposure on entrepreneurial intention. Tarek (2016); Malebana & Swanepoel, 2014) did not find any relationships between Prior Entrepreneurial Exposure and entrepreneurial intention, in other words, the relationship was insignificant.

Zhang, Duysters, & Cloodt (2014) on the other hand, concluded that Prior Entrepreneurial Exposure had a significant negative impact on entrepreneurial intention.

In this study, based on overwhelming evidence it was hypothesised that;

H2: Prior entrepreneurial exposure has a significant positive impact on entrepreneurial intention of female, black South African youth.

2.3.3 *Entrepreneurial Self-Efficacy (ESE)*

Arafat et al. (2018) defined self-efficacy as a person's confidence in their own skill and ability to execute an activity or behaviour. Entrepreneurial Self-Efficacy is the belief that one has the ability to go through the business start-up process without any problems (Tsai, Chang, & Peng, 2014).

According to Mcgee et al (2009), entrepreneurial self-efficacy is made up of four dimensions namely; searching, planning, marshalling and implementation. The searching dimension assesses confidence in the development of unique ideas by the entrepreneur. The author continued and indicated that the panning phase is about confidence in converting the idea into a workable business plan while the marshalling component is about confidence in assembling resources to breathe life into the new venture, and the implementation measures confidence in growing the venture (Mcgee et al., 2009).

Similar to the study by Laviolette et al. (2012), only the searching dimension of entrepreneurial self-efficacy was used in this study since the instrument was administered among youths who may not comprehend the other four dimensions of entrepreneurial-self efficacy.

According to Arafat et al. (2018); Krueger, Reilly, & Carsrud (2000), Segal, Borgia, & Schoenfeld (2002); Odumosu (2014) there is a significant positive relationship between ESE and entrepreneurial intention. Piperopoulos & Dimov (2015) found in their study that entrepreneurial self - efficacy moderates the relationship between entepreneurship education and entrepreneurial intention. Their findings were that entrepreneurial intention was high in practical oriented couses and low in theoretical courses. Ahlin et al. (2014) indicated that entrepreneurial self-efficacy can also be used as a moderating variable, as the confidence in ones' abilities can go a long way in influencing the impact of other variables on entrepreneurial intention.

Based on literature revised in this section, the following two hypotheses were fomulated.

H3: Entrepreneurial self-efficacy significantly moderates the relationship between entrepreneurship education and entrepreneurial intention of female, black South African youth.

H4: Entrepreneurial self-efficacy significantly moderates the relationship between prior entrepreneurial experience and entrepreneurial intention of female, black South African youth.

Table 1: Summary of entrepreneurial intentions

Author(s)	Focal entrepreneurial phenomenon	Locus of entrepreneurship	Relationship between entrepreneurship phenomenon and Entrepreneurial Intention
Miralles et al. (2016)	Entrepreneurial Intention	Individual Level	Attractiveness of an entrepreneurial career was significant in predicting Entrepreneurial Intention
Niljinda (2017)	Entrepreneurial Intention	Individual Level	Attitude towards entrepreneurship has a positive correlation with Entrepreneurial Intention
Odumosu (2014)	ESE, Entrepreneurial Intent	Not specified	ESE was significant in predicting Entrepreneurial Intention.
Zhang et al. (2014)	Ajzen's theory of planned behaviour, Shapero's Entrepreneurial Event Model, Entrepreneurial Cognition Theory	Individual/ organizational members	Prior Entrepreneurial Exposure had a negative impact on Entrepreneurial Intention.

Author(s)	Focal entrepreneurial phenomenon	Locus of entrepreneurship	Relationship between entrepreneurship phenomenon and Entrepreneurial Intention
Peterman & Kennedy (2003)	Prior Entrepreneurial Exposure, Entrepreneurial Intention	Individual	Prior Entrepreneurial Exposure has a positive impact on Entrepreneurial Intention
Mueller et al. (2014)	Prior Entrepreneurial Exposure, Entrepreneurial Intention	Individual	Prior Entrepreneurial Exposure has a positive impact on Entrepreneurial Intention
Israr & Saleem (2018)	Entrepreneurship Education, Prior Entrepreneurial Experience, Entrepreneurial Intention	Individual	Gender, Prior Entrepreneurial Exposure, Entrepreneurship Education has a positive impact on Entrepreneurial Intentions.
Piperopoulos & Dimov (2015)	Entrepreneurship Education, Entrepreneurship Self-Efficacy Entrepreneurial Intention	Individual	Entrepreneurship self-efficacy moderates the relationship between Entrepreneurship Education and Entrepreneurial Intention
Cardoso et al. (2018)	Entrepreneurship Education, Entrepreneurial Intention	Individual	Type of course moderates the relationship between Entrepreneurship education and Entrepreneurial Intention
Arafat et al. (2018)	ESE, Entrepreneurial Intention	Individual / Organisational	ESE has a positive impact on Entrepreneurial Intention

Source: Adapted from Ireland, Covin, & Kuratko, (2009).

2.4 Conceptual Framework

Based on the Human Capital theory (Becker, 1975), the Entrepreneurial Self-efficacy theory (Chen et al., 1998), the Entrepreneurial Cognition theory (Zhang et al., 2014), and the Social Learning theory (Zapkau et al., 2015) the hypotheses and conceptual framework show in Figure 1 were developed.

Literature resulted in the formulation of the following hypotheses.

2.4.1 Hypothesis 1

Entrepreneurship education has a significant positive impact on entrepreneurial intention among Female, black South African youths.

2.4.2 Hypothesis 2

Hypothesis 2: Prior entrepreneurial exposure has a significant positive impact on entrepreneurial intention among Female, black South African youths.

2.4.3 Hypothesis 3

Hypothesis 3: Entrepreneurial Self-Efficacy significantly moderates the relationship between entrepreneurship education and entrepreneurial intention among Female, black South African youths.

2.4.4 Hypothesis 4

Hypothesis 4: Entrepreneurial Self-Efficacy significantly moderates the relationship between prior entrepreneurial exposure and entrepreneurial intention among Female, black South African youths.

The Conceptual Framework is summarised below.

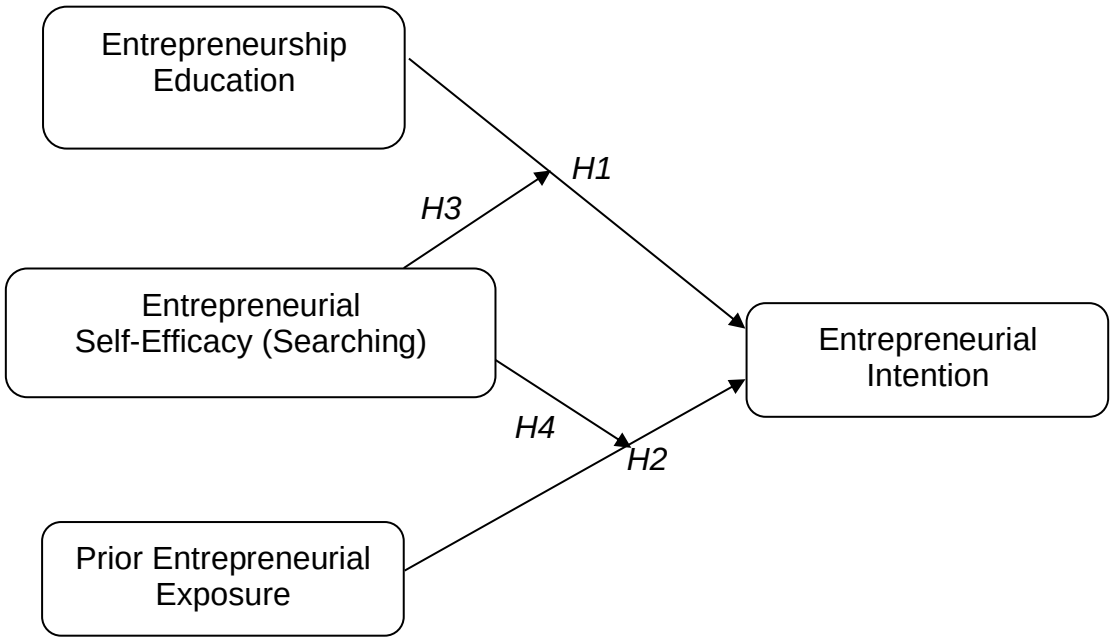


Figure 1: Conceptual model

Source: Mueller et al. (2014); Cardoso et al. (2018); Israr & Saleem (2018)

2.5 Conclusion of literature review

The literature that was reviewed in this chapter culminated in Table 2, which summarises the research objectives and hypotheses as a consistency table.

Table 2: Consistency table: research questions

RQ #	State Research Question or Objective	Prop / hyp #	State Hypothesis
1	Determine whether entrepreneurship education has an impact on entrepreneurial intention among female, black South African youth	1	Entrepreneurship education has a significant positive impact on entrepreneurial intention among female, black South African youth
2	Establish whether prior entrepreneurial exposure has an impact on entrepreneurial intention among female, black South African youth	2	Prior entrepreneurial exposure has a significant positive impact on entrepreneurial intention among female, black South African youth
3	Investigate the influence of entrepreneurial self-efficacy on the relationship between entrepreneurship education and entrepreneurial intention among female, black South African youth	3	Entrepreneurial Self-Efficacy significantly moderates the relationship between entrepreneurship education and entrepreneurial intention among female, black South African youth
4	Examine the influence of entrepreneurial self-efficacy on the relationship between prior entrepreneurial exposure and entrepreneurial intention among female, black South African youth	4	Entrepreneurial Self-Efficacy significantly moderates the relationship between prior entrepreneurial exposure and entrepreneurial intention among female, black South African youth

CHAPTER 3. RESEARCH METHODOLOGY

3.1 Introduction

This section presents the methodology that was followed to address the research aims and answer the hypotheses of the study. The section considers the research design, data collection and sampling. This is then followed by a section on the measurement instrument, data analysis techniques and ethical considerations.

3.2 Research approach

The study employed a quantitative research approach, which is based upon deductive reasoning and uses quantitative analysis. Quantitative research approach emphasises the quantification of the relationship among variables (Bryman, 2015). Unlike qualitative research that is based on social science principles when the problem is still unclear and one still needs to develop theory, quantitative research is applied in cases like this study, where scientific principles are applied and where proof of a fact is required to assess relationships among variables (Kolb, 2010). This study used already established theory such as the Human Capital theory (Becker, 1975), the Entrepreneurial Self-efficacy theory (Chen et al., 1998), the Entrepreneurial Cognition theory (Zhang et al., 2014), and the Social Learning theory (Zapkau et al., 2015) to establish the impact of entrepreneurial self-efficacy, prior exposure and education on entrepreneurial intention.

The positivist approach to quantitative research, which works on the premise of the existence of a social reality out there (Bryman, 2015), was applied.

3.3 Research design

Cross-sectional data, which involves the collection of data on several cases at a single point in time (Bryman, 2015), was used. This approach was appropriate for this study because there was no time to conduct a longitudinal study, which requires data collection for extended periods (Cooper, Blumberg, & Schindler, 2014).

Primary data was collected rather than using secondary data, because primary data was current and was collected solely for this study, unlike secondary research where the information could be outdated (Krueger, 1993).

3.4 Data collection methods

A questionnaire was used for data collection. As stated by Hussein & Corresponding (2016), a questionnaire is a structured instrument that allows for quantitative data to be easily collected among a large number of subjects. This was the most appropriate tool because there was a need to collect data from a large group of people, using the same standardised instrument for data to be analysed quantitatively. Another advantage of using a questionnaire, is that it allows for collection of data which allows for statistical analysis to be conducted (Suliman & Al-Ghadeer, 2015).

3.5 Population and sample

3.5.1 *Population*

The population for this study was made up of black female youth in South Africa who have not yet decided on their career path. Black female youth was defined, according to the Republic of South Africa (2004), where it included, the black African, coloured, and Indian/Asian. The only exclusion in terms of race were whites. According to Statistics South Africa (2019), the 2019 mid-year population

estimates indicated that there were 8.80 million female youth aged between 18 – 34 years in South Africa. The study did not exclude potential respondents on the basis on locations, as long as they where black female South African citizens.

3.5.2 *Sample size*

According to Islam (2018), the formula for calculating the sample size is given by;

Sample Size = $n = \frac{N(0.5^2)}{(N-1)\left(\frac{Eror\ Rate}{(1.96)}\right)^2 + 0.5^2}$

Where n is sample size and N is the size of the target population.

A representative sample of the 8.8 million black female youths aged 18 – 34 at 5% error rate is given by;

$\frac{8800000(0.5^2)}{(8800000-1)\left(\frac{0.05}{(1.96)}\right)^2 + 0.5^2}$ = 384.14 ≈ 384 youths

Table 3 shows the respondent type and sample size that was being targeted in the study.

Table 3: **Profile of respondents**

Description of respondent type	Number to be sampled
Female Youths aged between 18 – 34	384

The desired demographic profile of the respondents is as summarised in the table 4 below:

Table 4: Female, black South African youth universe

Race	Proportion
black	89%
coloured	9%
Indian/Asian	2%
Total	**100%**

Source: Statistics South Africa (2019).

3.6 The research instrument

The survey instrument had 5 sections namely;

(i) Demographics with 5 questions,
(ii) Entrepreneurship education with 5 questions rated on a 7-point Likert scale,
(iii) Prior Entrepreneurial exposure with 4 items each with 7 different levels, the 4 items were based on 8 questions,
(iv) Entrepreneurial self-efficacy scale, which had 7 items rated on a 7-point Likert scale,
(v) Entrepreneurial intention scale with 3 items rated on a 7-point Likert scale.

The scales used are explained further in this section.

3.6.1 *Entrepreneurial intention*

Entrepreneurial intention was measured using an instrument adopted from Laviolette, Lefebvre, & Brunel (2012). Laviolette et al. (2012) applied this measurement scale among French students and it had a very high-reliability level (Cronbach's Alpha was 0.84).

3.6.2 *Entrepreneurial Self-Efficacy*

Entrepreneurial Self-Efficacy was assessed using a scale that was developed by Mcgee et al. (2009). Similar to the study by Laviolette et al. (2012), only the searching dimension of entrepreneurial self-efficacy was used in this study since the instrument was administered among youths who may not comprehend the other four dimensions of entrepreneurial-self efficacy.

3.6.3 *Entrepreneurship Education*

Entrepreneurship education was assessed using 5 items rated on a 7-point Likert scale. The scale was adopted from a construct that was used by Parboteeah, Walter, & Block (2015), and also by Darnihamedani (2016).

3.6.4 *Prior Entrepreneurial Exposure Scale*

The Prior Entrepreneurial Exposure Scale (PEES) by Krueger (1993); Odumosu (2014) was used to assess prior entrepreneurial exposure. The instrument measured facets such as having started a new business, having a family member or friend or person that they know who have started a business and also having worked for an entrepreneur. A typical question was to ask if ever they had started a business of any kind. If the response was yes, a follow-up question was asked to determine whether they have had a positive or a negative experience when they ran their own business. The negative or positive experience was rated on a 7-point Likert scale ranging from *extremely negative* (1) to *extremely positive* (7). A person who had never had an experience was rated as neutral in terms of the experience. The overall PEES score was computed by adding up the four (4) scores for the four (4) items.

According to Krueger (1993), the “Cronbach’s alpha coefficients for the PEES ranged from 0.78 to 0.80, with test-retest reliability of 0.81”.

Table 5: Measures used in the study

Construct	Literature sources	Dimensions	Comment on Instrument
Entrepreneurship education (IV1) Measured on 7-point Likert scale: "1 = strongly disagree and 7 = strongly agree"	Darnihamedani, (2016); Parboteeah et al. (2015)	1.Entrepreneurship education	Cronbach's Alpha of 0.82 (Parboteeah et al., 2015)
Prior Entrepreneurial Exposure (IV2). Measured on a 7-point Likert scale: "1 = entremely negative experience and 7 = entremely positive experience"	Krueger (1993); Odumosu (2014)	2.Prior Entrepreneurial Exposure	"Cronbach's alpha coefficients for the PEES ranged from 0.78 to 0.80, with a test-retest reliability of 0.81" (Odumosu 2014, p.83)
Entrepreneurial Self-efficacy (M). Measured on 7-point Likert scale: '1= strongly disagree Little' to 5 = 'Strongly agree'	Mcgee et al. (2009); Laviolette et al. (2012).	3. Searching	Cronbach alpha was found to be 0.77 by Laviolette et al. (2012).
Entrepreneurial Intention (DV) Measured on 5-point Likert scale: '1= Strongly disagree' to 5 = 'Strongly agree'	Laviolette et al. (2012)	4. Entrepreneurial Intention	Cronbach alpha was found to be .84 by Laviolette et al. (2012).

IV1: Independent variable 1, IV1: Independent variable 2,
M: Moderating variable, , DV: Dependent variable

3.7 Procedure for data collection

Qualtrics, an online data collection portal was used to send a structured questionnaire to the prospective respondents. Qualtrics was the preferred data collection method for this study because it is easy to use. Youth also have better access to technology compared to older people. This makes the target population accessible through an online platform. One of the advantages of using online surveys is that it is cheap to collect data (Rada, Ariño, & Blasco, 2016).

The main disadvantage is, however, that there is generally a low response rate when using online surveys (Rada et al., 2016). This was countered by sending the survey link to a bigger sample of eligible youths, hence increasing the chance of achieving the minimum required sample size. The questionnaire was mainly distributed through links that were sent via email. The links were also made available on popular social media platforms such as Facebook, LinkedIn and Twitter.

3.8 Data analysis and interpretation

After data collection, the data was downloaded from Qualtrics in an IMB SPSS Statistics format. The data was analysed using IBM SPSS statistical software and SAS IMB SPSS statistics software which has the advantage of using drop-down menus when conducting analysis, this makes it very easy to use (Capatina, Olaru, & Balan, 2012).

Descriptive statistics were used to summarise the sample demographics (Field, 2013). Histograms with superimposed normal distribution curves were used to assess whether variables were normally distributed (Pintar, Jereb, Čudanov, & Urh, 2016). Inferential statistics such as correlation analysis were used to assess the relationships among the variables, while regression was applied to assess the impact of the independent variables on the dependent variable (Field, 2013). Correlation analysis measures the degree to which two variables are related, without indicating whether there is a causal relationship or not (Martin, 2019).

Pearson's correlation was applied since the data was normally distributed (Mukaka, 2012). The correlation coefficient ranges from -1, where there is a perfect negative correlation among variables to 1, where there is a perfect positive correlation (Martin, 2019). Schober & Schwarte (2018) specified that the correlation coefficients are classified as shown in table 6.

Table 6: Interprating the correlation coefficient

Absolute Value of the Pearson's Correlation	Interpretation of the strength of the relationship
0.000 - 0.10	Negligible
0.10 - 0.39	Weak
0.40 - 0.69	Moderate
0.70 - 0.89	Strong
0.90 - 1.00	Very strong

Source: Schober & Schwarte (2018)

Multiple regression was the most appropriate analysis for hypotheses testing for this study, because it is designed to assess the impact of more than one independent variables on one dependent variable, which was the case with this study (Munir, 2015).

3.9 Limitations of the study

There was limited time to conduct the research and therefore, there was a time constraint. If there were more time, the researcher would have collected more data and would have also done a qualitative research component to try and get the reasoning behind the rating of the four constructs.

There are approximately 8.8 million black female youth in South Africa (Statistics South Africa, 2019), yet a sample of 278 respondents was achieved to represent these youth. This was a huge limitation, as the sample fell short of the targeted sample of 384 as was indicated in section 3.5.2. The data was collected using

Qualtrics, an online portal. This has a limitation of excluding youths that do not have access to the internet. This exclusion mearnt that the sample was not entirely representative of the target population.

3.10 Validity and reliability

3.10.1 *Internal Validity*

Internal validity is defined as the extent to which the results found are a true reflection of the real causes or relationships that exist (Cooper et al., 2014). The questionnaire for this study was short and therefore eliminating an instrumentation threat to internal validity that may result from boredom and fatigue due to the questionnaire being too long (Cooper et al., 2014).

3.10.2 *External Validity*

Cooper et al. (2014) defined external validity as the degree to which the results of a research study can be generalised, in different settings, over time and when dealing with other people. The sample was big enough (>30) to allow for generalisation of the results for the entire target population (Field, 2013).

3.10.3 *Construct Validity*

Construct validity is a measure used to ascertain whether the items within a construct are measuring what they intended to measure (Hornsby, Kuratko, Holt, & Wales, 2013). Since the scales were adopted from other researchers, they were already found to be valid and reliable. Structural validity of the scales was assessed using Exploratory Factor Analysis (EFA) (Hornsby et al., 2013). EFA is applied to determining the degree to which statements/ items measured on a questionnaire reflect an underlying construct (Hornsby et al., 2013). In this study, EFA was used to assess whether the items hypothesised to be in each of the four constructs; education, prior entrepreneurial exposure, entrepreneurial self-

efficacy and entrepreneurial intention, converge to their respective constructs (Field, 2013). EFA also assessed a concept called divergence validity, where items hypothesised to be in different constructs diverge from each other.

3.10.4 *Reliability*

The reliability of the constructs deals with how closely correlated items within a construct are to each other, this is also referred to as internal consistency (Cooper et al., 2014; Field, 2013). The scales were assessed when they were used in the previous studies and they had Cronbach's Alpha values greater than 0.7 (Mcgee et al., 2009; Krueger, 1993; Odumosu, 2014; Laviolette et al., 2012; and Zhang et al., 2014). The reliability of the scale for each construct was assessed for the data collected specifically for this study using Cronbach's Alpha (Trivedi, 2016).

3.11 Ethical considerations

The word ethics has its origins from the Greek word ethos, which means, nature, character or custom (Venter & Urban, 2015). In research, it is about the moral way of conducting research in a correct or appropriate way from research design to reporting (Lawan, 2017). According to Shamoo & Resnik (2009), ethical considerations for research is about being objective, honest, open, careful, maintaining integrity, respecting intellectual property rights, responsible mentoring, non-discrimination, competency, taking social responsibility, ensuring confidentiality, responsible publication, respect for colleagues, legality, and ensuring that care is taken for animals and that human subjects are protected.

This study was conducted in compliance with these ethics and also making sure that all ethical standards set by the University of Witwatersrand were observed. The researcher made sure that the purpose of the research was clearly outlined to the respondent. The respondents voluntarily gave their consent to do the survey. No harm was posed to the research participants in any way or form, and

there was confidentiality and no name of respondents were published in the research report (Shamoo & Resnik, 2009).

The inclusion and exclusion criteria was clearly outlined, and the selection of respondents was just and fair (Shamoo & Resnik, 2009). The research was not sponsored, thus eliminating any external influence. No material gain was awarded to the respondents and the respondents were given an option to provide their contact details if they would want to see the end product.

CHAPTER 4. PRESENTATION OF RESULTS

4.1 Introduction

This chapter presents the results of the research conducted. It commences with presenting the data screening, followed by sample characteristics and then descriptive statistics for the rating attributes. Construct validity and reliability of scale results are also presented in the chapter before hypothesis testing is conducted. The chapter concludes with a summary of the findings.

4.2 Data Quality / Screening

The data was collected using Qualtrics and then downloaded into SPSS for analysis. A total of 278 responses were received. Of the 278 responses, 30 cases were eliminated for further analysis because they were incomplete. This implies that a total sample of 248 responses was analysed. There were no missing values. Four variables were negatively worded and the scale was reversed (7=1, 6=2, 5=3, 4=4, 3=5, 2=6, 1=7) in SPSS before data analysis.

The data was collected using the same instrument and almost the same type of respondents. Exploratory factor analysis (EFA) with principal component analysis and specifying one factor was conducted to assess whether there was no common method bias. The one factor explained 24.495% of the variance in the items, thus there was no common method bias since the total variance explained by the one factor was less than 0.5 (Field, 2009).

4.3 Sample Characteristics

The sample was made up of South African black female youth. Their age, population group and highest attained level of education are presented in this section.

The age distribution of the respondents is illustrated in Figure 2.

It can be noted that the sample was mainly made up of youths in the 18 – 24 years age group (32%) while the other 47% were 25 – 34 years old.

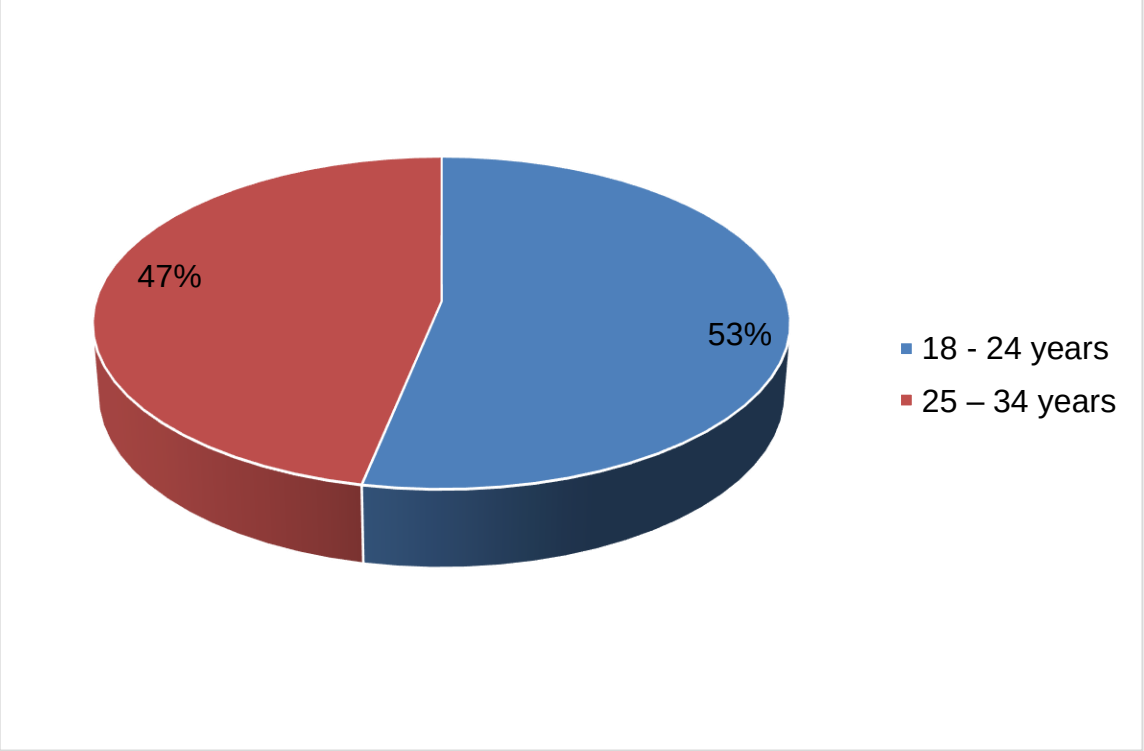


Figure 2: Respondent age

The population is summarised in the bar graph presented in **Figure 3** below. Although the sample was made up of blacks as per the Republic of South Africa (2004) where blacks imply black, coloured and Indian South Africans. The respondents were black African (87%), Indian (8%) and coloured (5%). White/ Caucasian people were excluded from the sample.

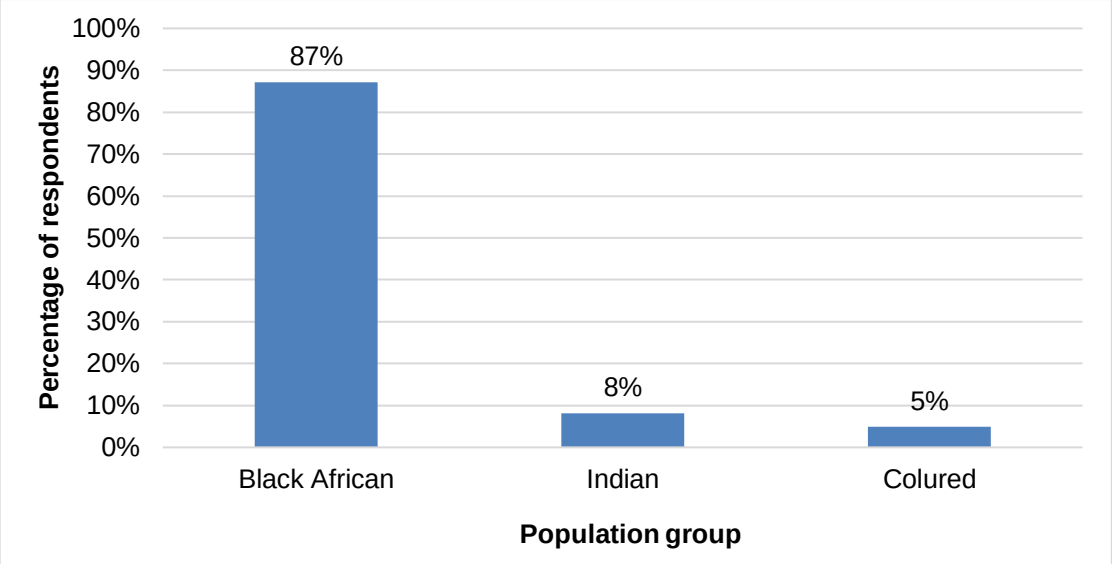


Figure 3: Population group

The highest attained level of education is summarised in the chart in **Figure 4**. It can be noted from the sample that 36% of the respondents in the sample had a matriculation certificate as their highest attained level of education, 8% had diplomas, 40% had degrees while 15% had postgraduate degrees or diplomas. There was 0.4% that had below matric as their highest attained level of education.

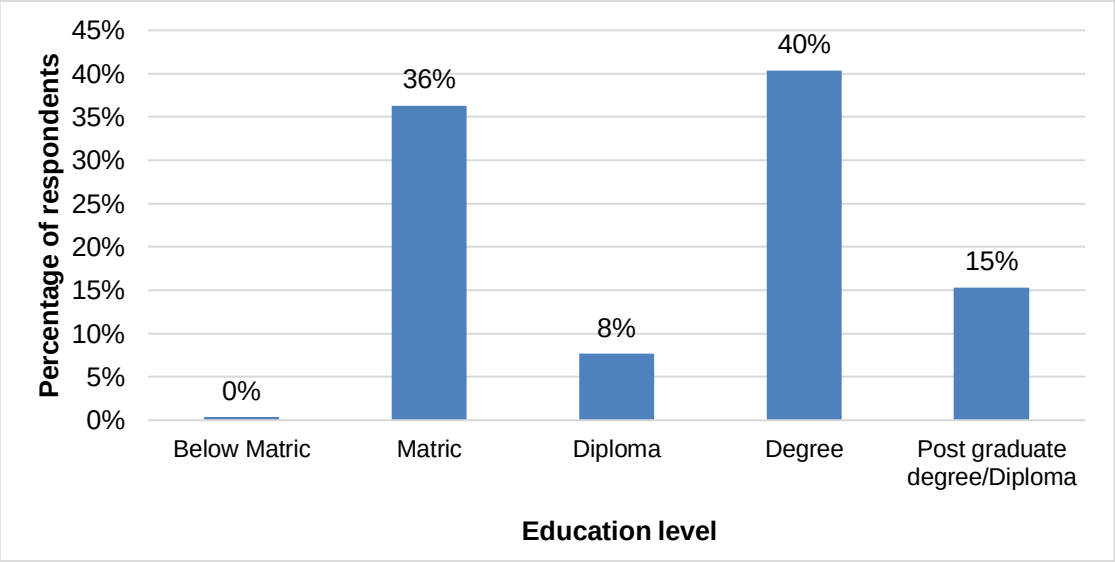


Figure 4: Level of education

4.4 Descriptive Statistics

Descriptive statistics for the items rated for each construct were assessed and the results are presented in this section.

4.4.1 *Entrepreneurial Intention*

The descriptive statistics for entrepreneurial intention (the dependent variable) are summarised in Table 7. The results revealed that the highest-rated attribute was that the respondents intended to set up a firm in the future (mean = 5.42) with 65% of the respondents either agreeing or strongly agreeing with the statement. On the other hand, the respondents agreed the least with the statement that they had never searched for business opportunities (mean = 3.55).

Table 7: Entrepreneurial intention descriptive statistics

	n	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	Mean	Std. Deviation
EI1 I intend to set up a company in the future	248	4%	9%	6%	7%	9%	28%	37%	5.42	1.83
EI5 I search for information on how to set up a firm	248	9%	20%	8%	6%	12%	29%	17%	4.45	2.07
EI7 I spend time learning about starting a firm	248	10%	23%	7%	11%	17%	21%	13%	4.13	1.99
EI3 I am saving money to start a business	248	11%	26%	6%	12%	12%	22%	11%	3.98	2.03
EI4 I don't read any books on how to set up a firm	248	19%	23%	7%	8%	11%	20%	11%	3.73	2.14
EI2 I have never searched for business start-up opportunities	248	21%	24%	10%	5%	9%	21%	9%	3.55	2.13

1 = strongly disagree, 7 = Strongly agree

4.4.2 *Entrepreneurship education*

Table 8 has results on how the respondents rated the items within the entrepreneurship education construct. It can be noted that the respondents agreed the most with the statement that their school or university education helped them to better understand the role of entrepreneurs in society (mean = 4.61) with 44% either agreeing or strongly agreeing with the statement.

The respondent agreed the least with the statement that they learnt nothing about entrepreneurship at school or university (mean = 3.36).

Table 8: Entrepreneurship education descriptive statistics

	n	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	Mean	Std. Deviation
EE2 My school /university education helped me to better understand the role of entrepreneurs in society	248	10%	10%	10%	8%	17%	27%	17%	4.61	1.96
EE1 My school /university education helped me to develop my sense of initiative – a sort of entrepreneurial attitude	248	9%	10%	10%	7%	26%	25%	13%	4.60	1.84
EE5 My school /university education gave me skills and know-how that enable me to run a business	248	13%	21%	9%	6%	20%	19%	13%	4.06	2.04
EE4 My school /university education made me interested to become an Entrepreneur	248	10%	23%	8%	11%	19%	18%	11%	4.04	1.96
EE3 I learnt nothing about entrepreneurship at school/university	248	21%	23%	15%	12%	10%	13%	8%	3.36	1.95

1 = strongly disagree, 7 = Strongly agree

4.4.3 *Entrepreneurial Self-Efficacy*

The descriptive statistics for entrepreneurial self-efficacy are illustrated in Table 9. All three statements on self-efficacy were rated above the mid-point of the scale (4). The highest-rated statement was that the respondents were very confident of their ability to identify the need for a new product or service (mean = 5.56).

Table 9: Entrepreneurial self-efficacy descriptive statistics

	N	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	Mean	Std. Deviation
ESE2 Identify the need for a new product or service	248	0%	2%	4%	6%	26%	43%	18%	5.56	1.15
ESE1 Brainstorm and come up with a new idea of product or service	248	2%	3%	5%	6%	29%	37%	19%	5.44	1.30
ESE3 Design a new product or service that would satisfy the customers' wants or needs	248	1%	6%	6%	15%	25%	32%	14%	5.10	1.41

1 = strongly disagree, 7 = Strongly agree

4.4.4 *Prior Entrepreneurial Exposure*

The respondents were firstly asked whether they had former exposure to entrepreneurship either through their parent (s), family members, friends or themselves starting a business or working for an entrepreneur. If no, the answer was allocated as being neutral, that is neither a negative experience nor a positive experience. If they had an experience, the experience was rated on a 7-point Likert scale, where 1 = *extremely negative* experience to 7 = *extremely positive* experience. Descriptive statistics on prior entrepreneurial exposure are summarised in Figure 5 and Table 10.

The results shown in the bar graph in Figure 5 indicates that most respondents had prior entrepreneurial exposure through relatives or friends who have started a business (76%), while 48% had parents who started a business or were self-employed, 43% had exposure through working for an entrepreneur while 34% started a business before.

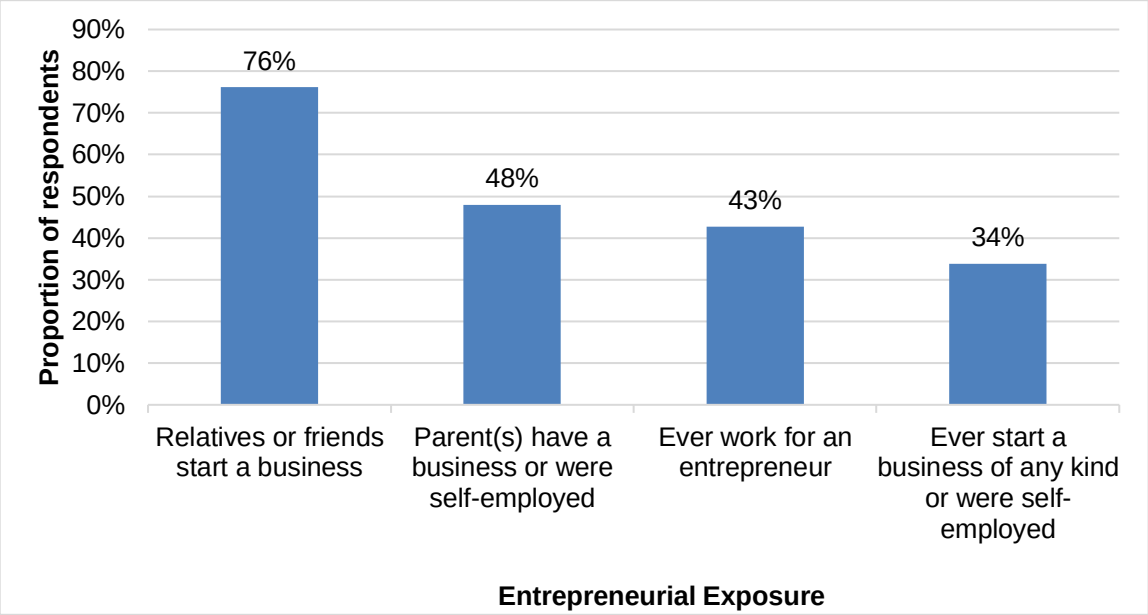


Figure 5: Prior entrepreneurial exposure

Table 10 shows results on how prior entrepreneurial experience were rated among the black female youth. It can be noted that all four types of exposure were rated slightly above the mid-point of the scale (4). The most positive experience was through parents having started a business or were self-employed (mean = 4.55) followed by having other relatives or friends that started a business (mean = 4.40). The least positive experience was through having worked for an entrepreneur (mean = 4.35).

Table 10: Prior entrepreneurial exposure descriptive statistics

	n	Extremely negative	Negative	Somewhat negative	Neither positive nor negative	Somewhat positive	Positive	Very Positive	Mean	Std. Deviation
PEE2 Parent(s) have a business or were self-employed	248	1%	2%	4%	58%	10%	18%	7%	4.55	1.17
PEE1 Started a business before	248	0%	0%	3%	73%	11%	5%	8%	4.40	0.94
PEE4 Other relatives or friends started a business	248	2%	10%	7%	38%	23%	11%	8%	4.36	1.40
PEE3 Worked for an entrepreneur	248	2%	2%	6%	64%	9%	13%	4%	4.35	1.08

1 = Extremely negative experience, 7 = Extremely positive experience

4.5 Validity of the Constructs

Exploratory factor analysis (EFA) was conducted to assess the validity of the constructs. EFA with principal axis factoring extraction and promax rotation was conducted with all the items measuring Entrepreneurial Intention, Entrepreneurship education, self-efficacy and prior entrepreneurial exposure were included to assess for both convergent and divergent validity. The items EE3 under entrepreneurship education, EI2, EI4, and EI6 under the entrepreneurial intention had their scale reversed (that is 7=1, 6=2, 5=3, 4=4, 3=5, 2=6, 1=7) before conducting EFA. This was done because they were negatively worded in comparison to other items in the same constructs. The items with reversed scales were labelled EE3_R, EI2_R, EI4_R, and EI6_R respectively.

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity tests for checking the adequacy of the sample are presented in Table 11. A KMO value of 0.836 indicates that the sample was good to perform factor analysis since it was greater than the minimum acceptable value of at least 0.5 (Field, 2009). The Bartlett's Test of Sphericity was significant (p-value = 0.000 < 0.05). This

means that the items were sufficiently correlated to exploratory factor analysis to be used (Field, 2009).

Table 11: KMO and Bartlett's test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.836
Bartlett's Test of Sphericity	Approx. Chi-Square	1927.981
	Df	153
	Sig.	.000

The communality for the EFA is shown in Table 12. It can be noted from the results that all items had a communality of at least 0.3. The item, 'EE3_R "*I learnt nothing about entrepreneurship at school/university*" was eliminated from the entrepreneurship education construct, because it had a communality less than 0.3 and was therefore deemed not to fit well with the other items in the construct (Duru, Ehidiamhen, & Chijioke, 2018). This is because less than 30% of the variance in the item was being explained by the retained factors.

Table 12: Communalities

Communalities		
	Initial	Extraction
EE1 My school /university education helped me to develop my sense of initiative – a sort of entrepreneurial attitude	.605	.694
EE2 My school /university education helped me to better understand the role of entrepreneurs in society	.626	.735
EE4 My school /university education made me interested to become an Entrepreneur	.465	.495
EE5 My school /university education gave me skills and know-how that enable me to run a business	.545	.581
ESE1 Brainstorm and come up with a new idea of product or service	.581	.685
ESE2 Identify the need for a new product or service	.588	.711
ESE3 Design a new product or service that would satisfy the customers' wants or needs	.493	.546
EI1 I intend to set up a company in the future	.574	.614
EI2_R *I have never searched for business start-up opportunities	.395	.391
EI3 I am saving money to start a business	.444	.462
EI4_R *I don't read any books on how to set up a firm	.407	.377
EI5 I search for information on how to set up a firm	.639	.670
EI6_R *I have no plans to launch my own business	.466	.456
EI7 I spend time learning about starting a firm	.648	.707
PEE1 Started a business before	.306	.348
PEE2 Parent(s) have a business or were self-employed	.426	.571
PEE3 Worked for an entrepreneur	.288	.329
PEE4 Other relatives or friends started a business	.315	.355
Extraction Method: Principal Axis Factoring.		

R* indicates that the scale was reversed

Table 13 presents results on the total variance explained by the items retained when EFA was conducted. The results show that 4 factors were retained as had been hypothesised. The retained factors explained 63.694% of the variation in the original 18 items, excluding the one that was eliminated from further analysis.

Table 13: Total variance explained

Total Variance Explained							
Factor	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**			**Rotation Sums of Squared Loadings[a]**
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	5.285	29.361	29.361	4.849	26.940	26.940	4.296
2	2.521	14.005	43.366	2.152	11.956	38.895	2.798
3	1.992	11.068	54.433	1.513	8.407	47.302	2.831
4	1.667	9.261	63.694	1.211	6.729	54.031	2.181
5	.855	4.752	68.446				
6	.703	3.907	72.353				
7	.670	3.720	76.073				
8	.611	3.396	79.469				
9	.558	3.099	82.568				
10	.531	2.947	85.515				
11	.453	2.519	88.034				
12	.420	2.336	90.370				
13	.370	2.055	92.425				
14	.333	1.850	94.276				
15	.301	1.675	95.951				
16	.255	1.415	97.365				
17	.247	1.372	98.738				
18	.227	1.262	100.000				
Extraction Method: Principal Axis Factoring.							
a. *When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.*							

The scree plot shown in Figure 6 also indicates the number of factors extracted. The scree plot illustrated that 4 factors were extracted as indicated by the chart flattening out after four (4) points. On the vertical axis, it can be noted that the 4 factors had eigenvalues greater than 1.

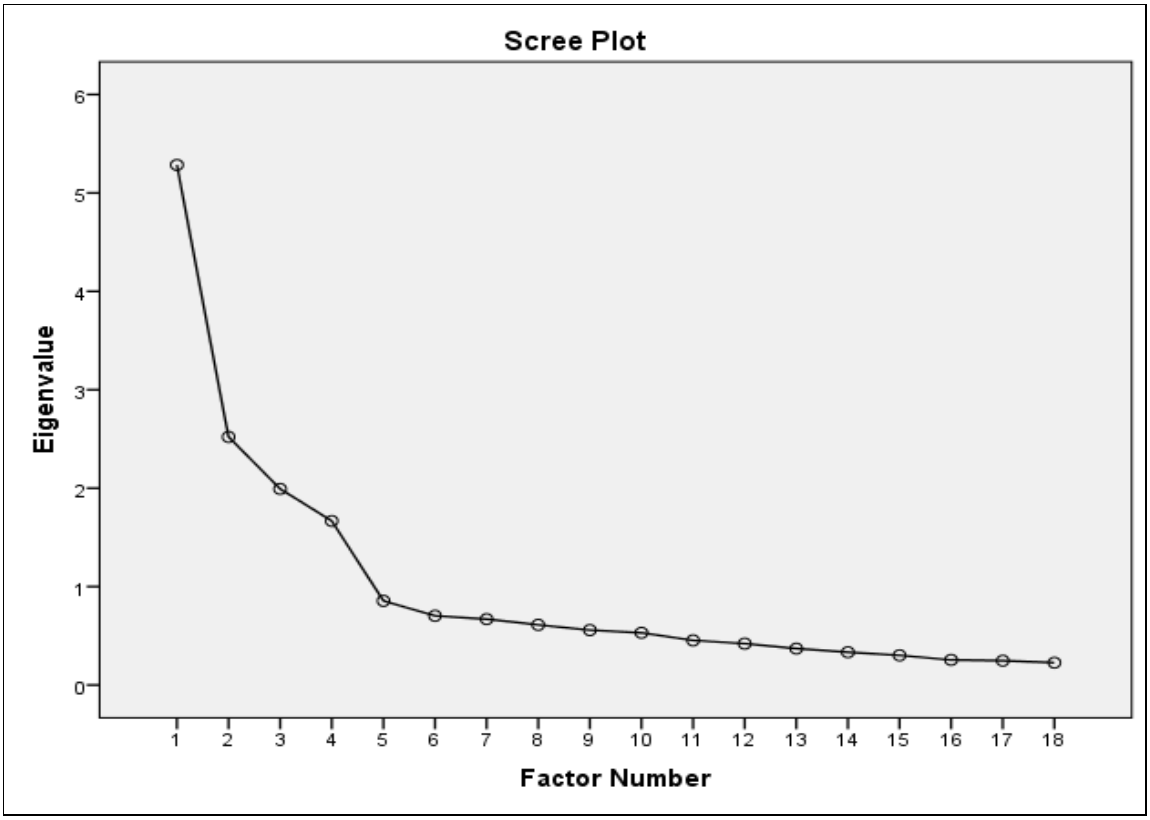


Figure 6: Scree plot

The pattern matrix showing the factor loadings for each of the 4 factors is presented in Table 14. The results show that the 4 factors retained were Entrepreneurial Intention with the originally hypothesised 7 items, Entrepreneurial Self-Efficacy with all the 3 items that were initially in the hypothesised construct, Entrepreneurship education with 4 items out of the 5 initially hypothesised items, and Prior Entrepreneurial Exposure with all 4 items that were initially hypothesised.

The retained items all loaded highly on the initially hypothesised constructs and the factor loadings were all above the minimum required value of at least 0.4 (Field, 2009). These results confirmed that there was both convergent validity and divergent validity in the constructs. There was convergent validity because the items converged into the respective constructs, while divergent validity was established since items diverge from unrelated constructs.

Table 14: Pattern matrix

Construct	Items	Factor			
		1	2	3	4
Entrepreneurial Intention	EI7 I spend time learning about starting a firm	.845			
	EI5 I search for information on how to set up a firm	.808			
	EI1 I intend to set up a company in the future	.801			
	EI6_R *I have no plans to launch my own business	.686			
	EI3 I am saving money to start a business	.647			
	EI4_R *I don't read any books on how to set up a firm	.602			
	EI2_R *I have never searched for business start-up opportunities	.596			
Entrepreneurship Education	EE2 My school /university education helped me to better understand the role of entrepreneurs in society		.866		
	EE1 My school /university education helped me to develop my sense of initiative – a sort of entrepreneurial attitude		.835		
	EE5 My school /university education gave me skills and know-how that enable me to run a business		.738		
	EE4 My school /university education made me interested to become an Entrepreneur		.678		
Entrepreneurial Self-Efficacy	ESE2 Identify the need for a new product or service			.855	
	ESE1 Brainstorm and come up with a new idea of product or service			.820	
	ESE3 Design a new product or service that would satisfy the customers' wants or needs			.716	
Prior Entrepreneurial Exposure	PEE2 Parent(s) have a business or were self-employed				.748
	PEE4 Other relatives or friends started a business				.613
	PEE3 Worked for an entrepreneur				.573
	PEE1 Started a business before				.552
	Extraction Method: Principal Axis Factoring. Rotation Method: Promax with Kaiser Normalization.				
	a. Rotation converged in 5 iterations.				

4.6 Reliability of Scale

Cronbach's Alpha was computed for each of the retained 4 factors/constructs to assess the reliability of the scale (Field, 2009). The results are presented in Table 15. The results revealed that there was a very good level of reliability for Entrepreneurial Intention (7 items, α = 0.877), Entrepreneurship Education (4 items, α = 0.860) Entrepreneurial Self-Efficacy (3 items, α = 0.837) because the Cronbach's Alpha values were greater than 0.8 (Field, 2009). There was an acceptable level of reliability for Prior Entrepreneurial Exposure (4 items, α = 0.708).

All the 4 constructs had Cronbach's Alpha values greater than the minimum acceptable level of at least 0.7 (Field, 2009). This means that the items within each scale could be aggregated to form a composite scale per construct. The composite scale per construct was computed by calculating the average of the items within each construct.

Table 15: Reliability of scale

Construct	Items in Construct	Cronbach's Alpha	Reliability level
Entrepreneurial Intention	7	0,877	Very good
Entrepreneurship education	4	0,860	Very good
Entrepreneurial Self-Efficacy	3	0,837	Very good
Prior Entrepreneurial Exposure	4	0,708	Acceptable

4.7 Correlation analysis

Correlation analysis was conducted to assess the nature of the relationship among variables. The correlation among the variables was assessed using Pearson's correlation, since the variables were assumed to be normally distributed based on the histograms shown in Figure 13. The correlation matric and the mean scores of the constructs are summarised in Table 16.

The results show that there was a weak significant positive correlation between each of Entrepreneurial Self-Efficacy (r = 0.37, p-value < 0.01), Prior entrepreneurial exposure (r = 0.25, p-value < 0.01) and Entrepreneurial intention (Schober & Schwarte, 2018). The relationships were weak because the correlation coefficients were between 0.10 – 0.39 (Schober & Schwarte, 2018). They were positive because the coefficients were greater than zero and were significant because the p-values were less than 0.05. Entrepreneurship Education (r = 0.22, p-value > 0.05) was on the other hand not significantly correlated to Entrepreneurial intention. The correlation was weak positive and insignificant (Schober & Schwarte, 2018).

Entrepreneurial Self-efficacy was the highest-rated construct (mean = 5.37), followed by Entrepreneurial Intention (mean = 4.52). Entrepreneurship Education (mean = 4.33) was the least rated construct.

Table 16: Descriptive statistics and Pearson's correlations

	M	SD	1	2	3	4
1. EE	4.33	1.64	1.00			
2. ESE	5.37	1.12	.18	1.00		
3. PEE	4.41	0.85	.10	.24***	1.00	
4. EI	4.52	1.53	.22	.37***	.25***	1.00

Notes: M = Variable mean, SD = standard deviation, *** = p < .01, *

4.8 Regression analysis

4.8.1 *Testing Regression Assumptions*

Test for Linearity

Regression assumes that there is a linear relationship between the independent variables and the dependent variable. Scatter plots were plotted between the independent variable and the dependent variable. Trend lines drawn through the plotted points indicates that there was some linear relationship between the

independent variables and the dependent variable as shown in Figure 7. Thus, the assumption of linearity was met for both model 1 and model 2.

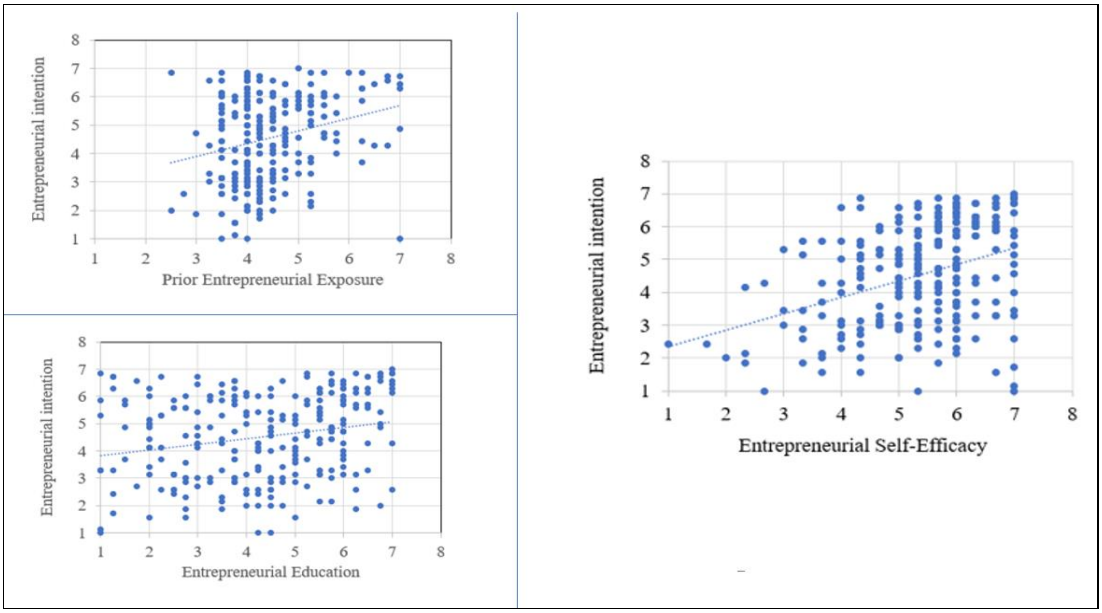


Figure 7: Scatter plot between Independent variables and entrepreneurial intention

Test for normality of error terms

Histograms shown in Figures 8 and 9 indicated that the error terms were normally distributed or approximated the normal distribution, since most of the bars fall under the normal curve (Field, 2009). This was also confirmed by a normal P-P plot that showed residuals plotted close to the diagonal line. This indicates that the assumption for normally distributed error terms was met for both model 1 and model 2.

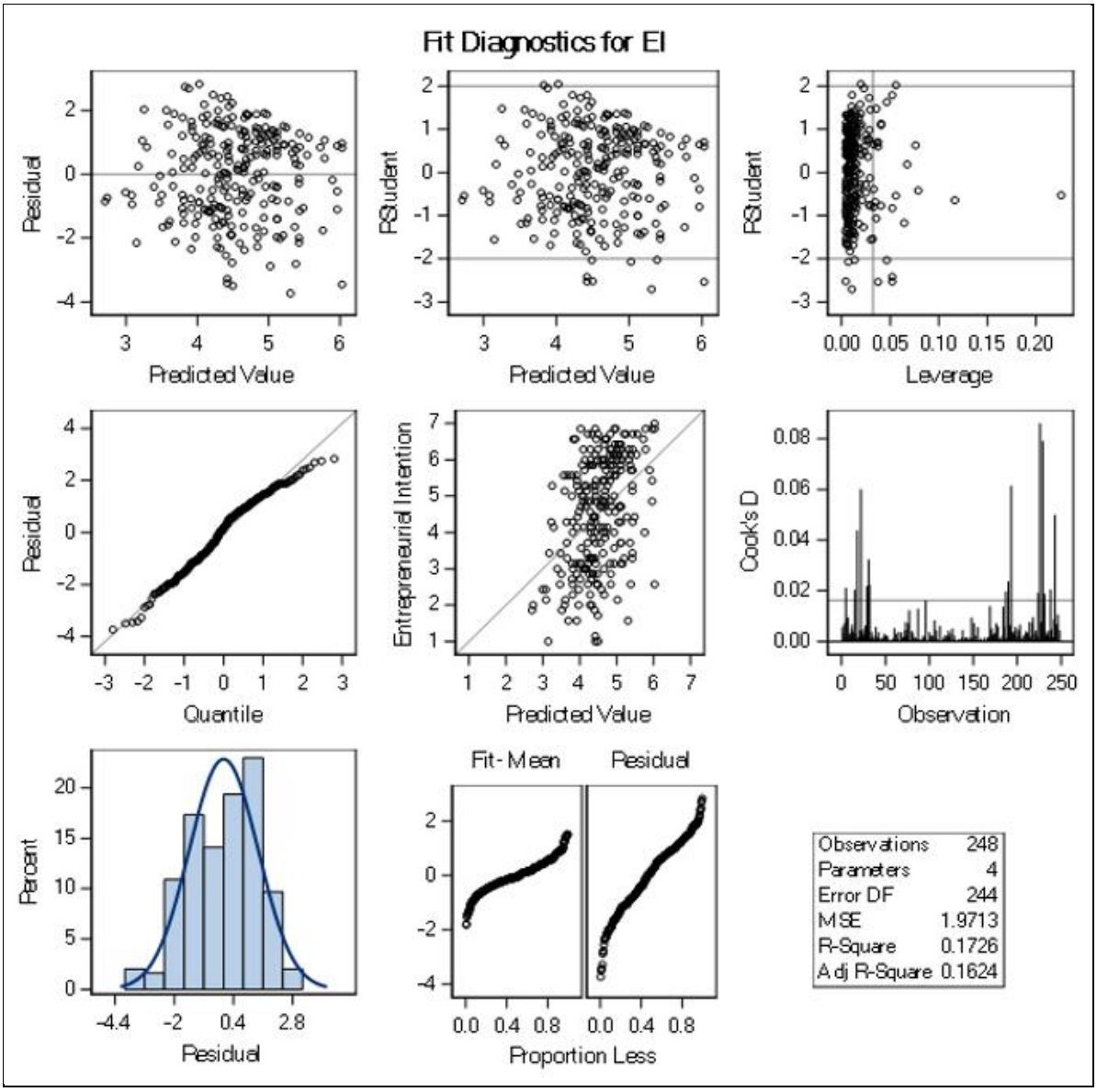


Figure 8: Fit diagnostics model 1 – ESE moderates the relationship between PEE and EI

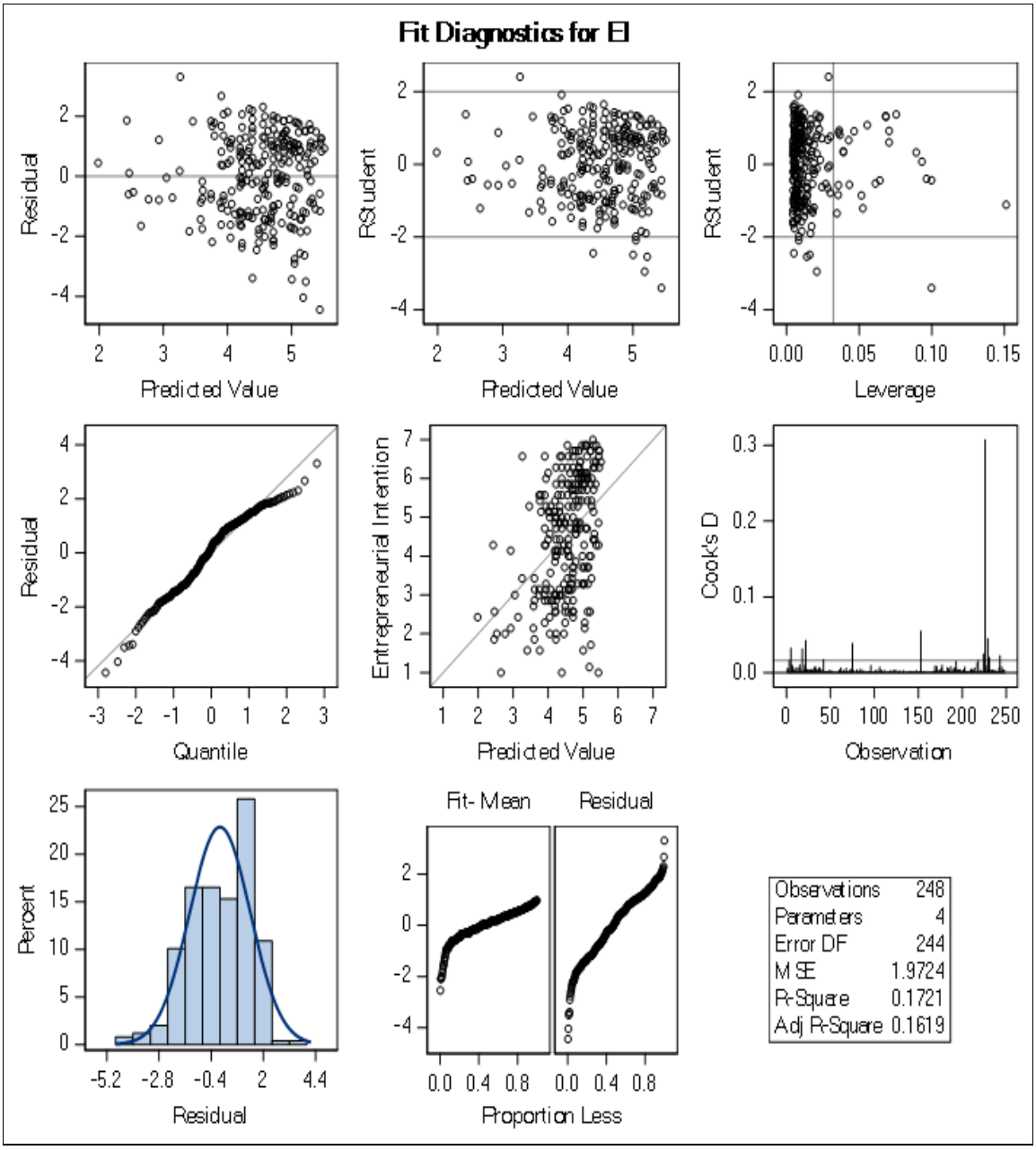


Figure 9: Fit diagnostics model 2 – ESE moderates the relationship between PEE and EI

Test for Outliers

The cook's distances were all less than 1 (as shown in Figure 8 and 9), indicating that no one case or a few cases had an undue influence on the model (Field, 2009). This shows that there were no outliers.

Box plots for each of the variables were also plotted as shown in Figure 10. An outlier is indicated by a number with an asterisk (*) outside the whiskers of the box plots. None of the numbers outside the whiskers had an asterisk, confirming that there were no outliers, that could have undue influence the regression model.

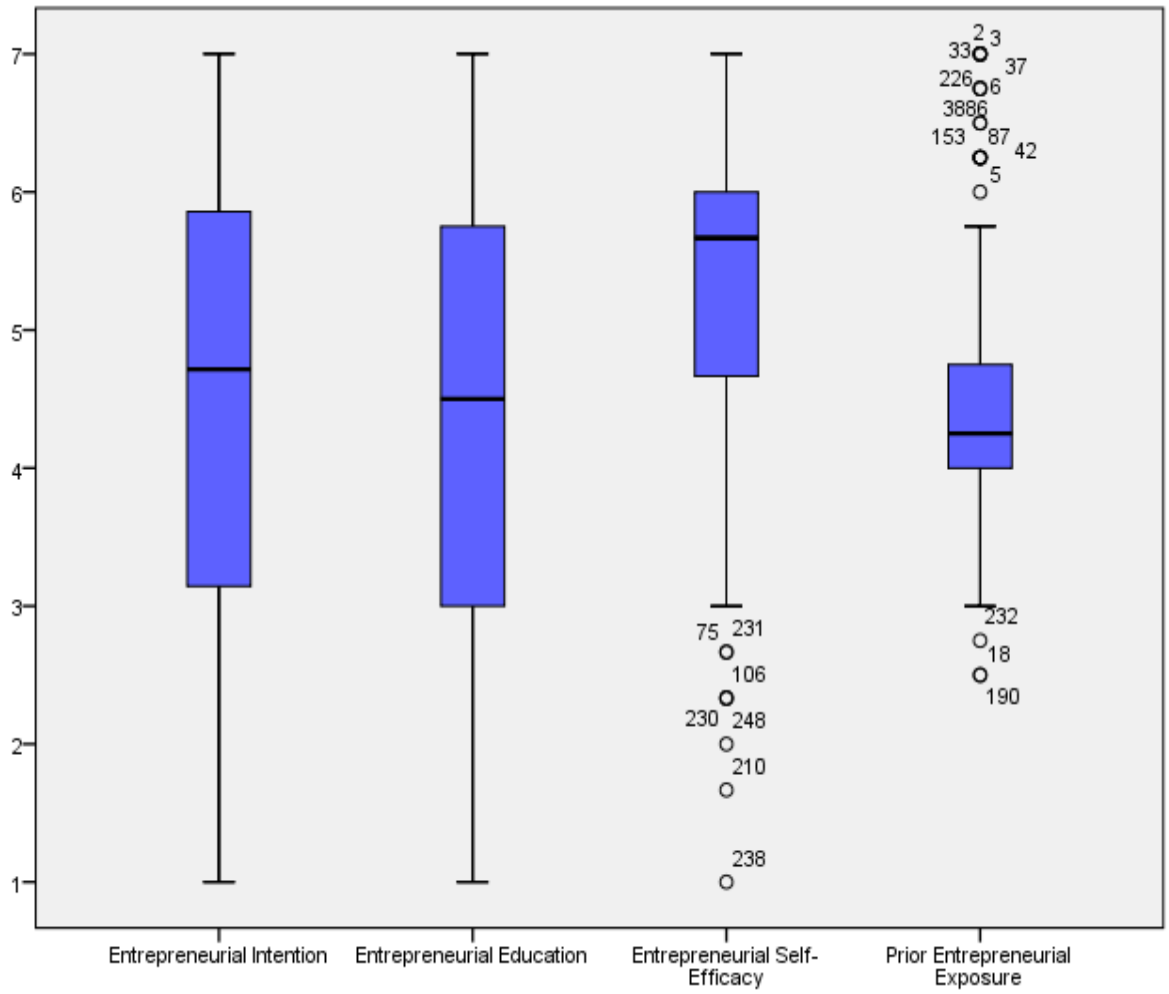


Figure 10: Box plots

Test for heteroscedasticity

A scatter plot of the residuals against each of the three variables in the model was done to check for heteroscedasticity. The plots are shown in Figure 11 and Figure 12. The scatter plots showed that there was no heteroscedasticity as the residuals plotted against the three variables indicated values scattered randomly around zero. Thus, the homoscedastic assumption was met.

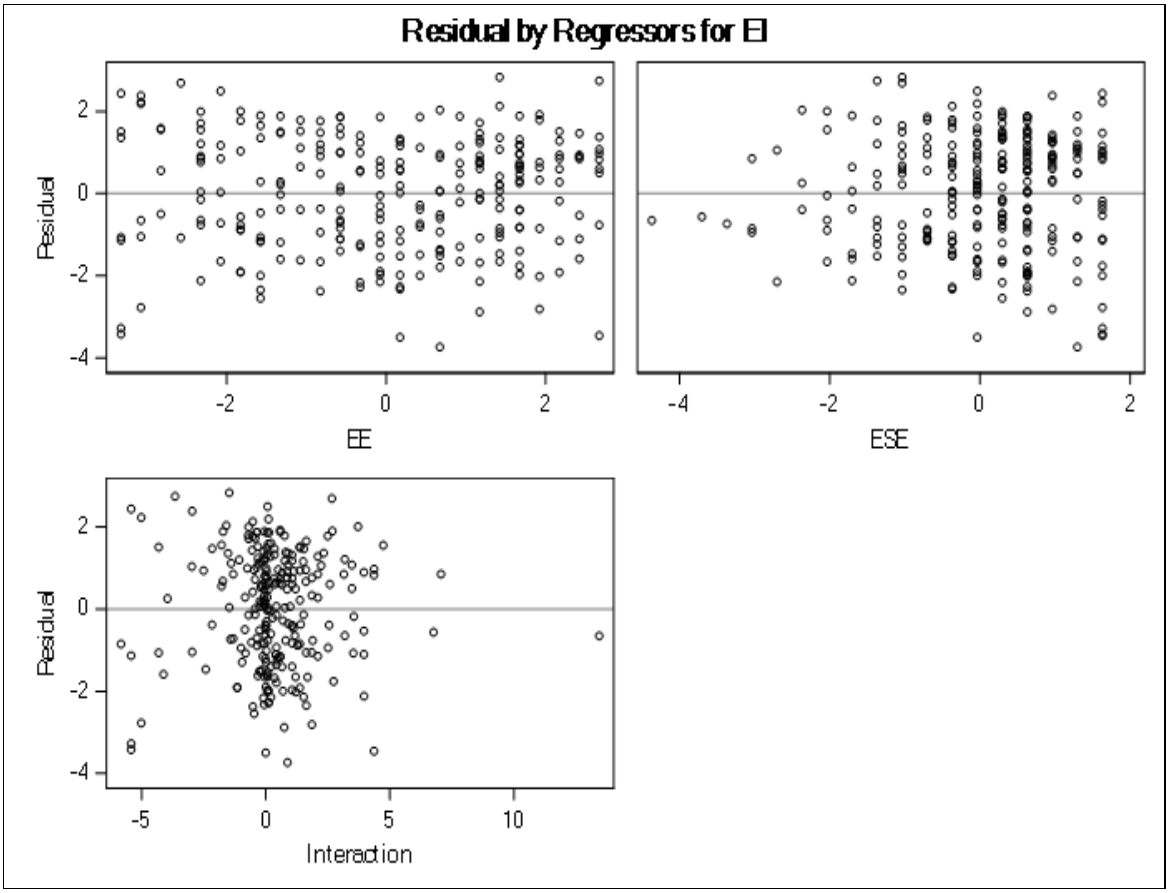


Figure 11: Assessment for homoscedastic – Model 1: ESE moderates the relationship between EE and EI

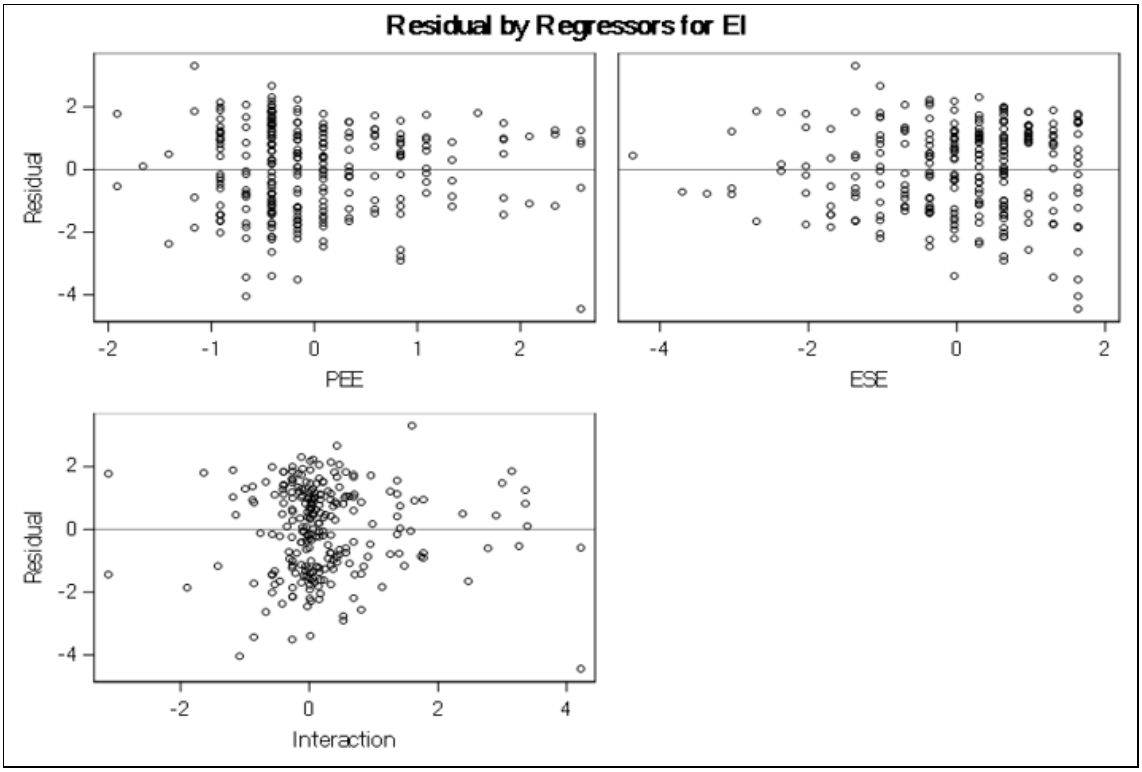


Figure 12: Assessment for homoscedastic – Model 2: ESE moderates the relationship between PEE and EI

Test for Multicollinearity

The test for multicollinearity is summarised in Tables 17 and 18. All the variables had a Variance Inflation Factor (VIF) values less than 10. This implies that there is no problem of multicollinearity.

Table 17: Parameter estimates – Model 1: ESE moderates the relationship between EE and EI

Parameter Estimates								
Variable	**Label**	**DF**	**Parameter Estimate**	**Standard Error**	**t Value**	**Pr > |t|**	**Standardized Estimate**	**Variance Inflation**
Intercept	Intercept	1	4.493	0.090	49.66	<.0001	0	0
EE		1	0.126	0.057	2.21	0.0278	0.13504	1.09707
ESE		1	0.502	0.084	5.99	<.0001	0.36697	1.10572
Interaction		1	0.087	0.046	1.89	0.0605	0.11567	1.10915

Table 18: Parameter estimates – Model 2: ESE moderates the relationship between PEE and EI

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Standardized Estimate	Variance Inflation
Intercept	Intercept	1	4.565	0.092	49.43	<.0001	0	0
PEE		1	0.383	0.118	3.25	0.0013	0.211	1.245
ESE		1	0.409	0.085	4.84	<.0001	0.300	1.131
Interaction		1	-0.186	0.104	-1.79	0.0750	-0.114	1.195

Test for Normality

The variables were assessed whether they were normally distributed or not. This was because the type of correlating applied depends on whether the variables are normally distributed or not. The normality of the constructs was assessed using histograms with a superimposed normal curve as shown in Figure 13.

The histograms for all the variables indicate that all four variables were normally distributed or approximated the normal distribution since most of the bars fell within the normal curve. This implies that Pearson's Correlation analysis that assumes normality of variables was applied.

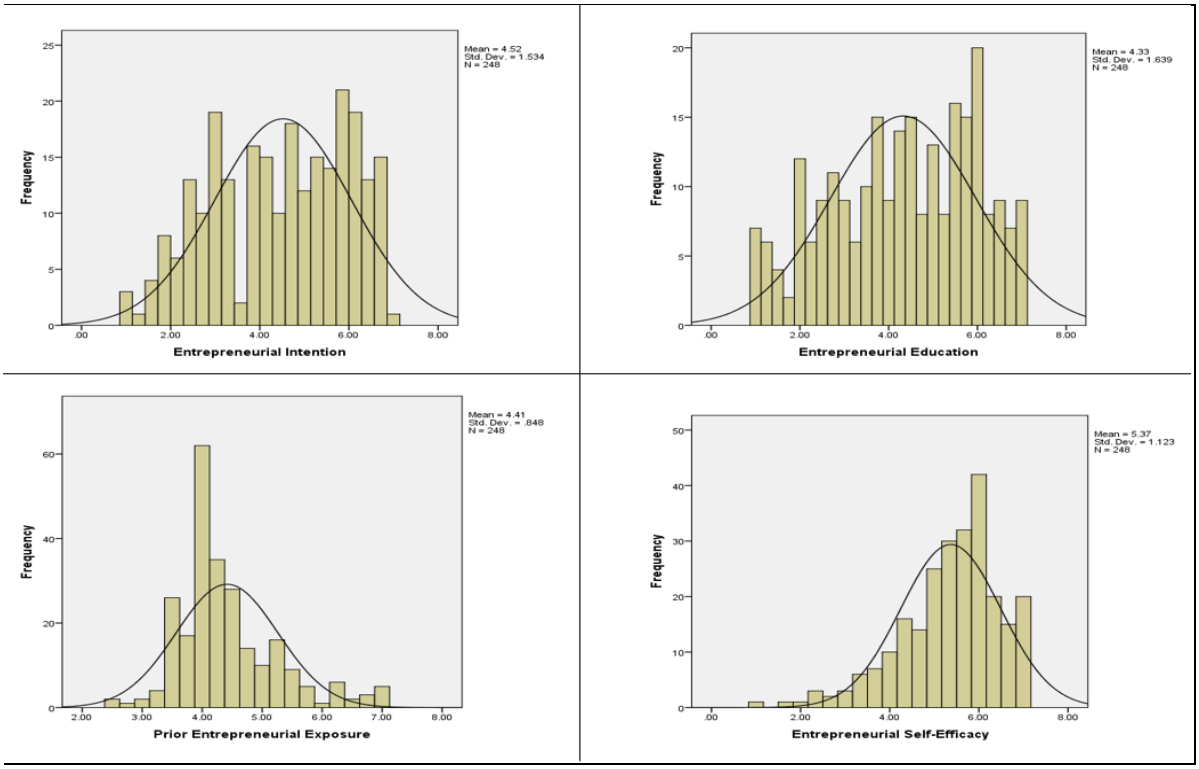


Figure 13: Histograms of variables

All the regression assumptions were met for both model 1 and model 2. This implies that the two models were valid.

4.8.2 Hypothesis Testing

Two multiple regression models were fitted. The first model to assess hypotheses 1 and 3, had *Entrepreneurial intention* as the dependent variable, *Entrepreneurship education* as the independent variable and *Entrepreneurial self-efficacy* as the moderating variable.

The second model had to assess hypotheses 2 and 4 and had *Entrepreneurial intention* as the dependent variable, *Prior entrepreneurial exposure* as the independent variable and *entrepreneurial self-efficacy* as the moderating variable.

Model 1

The moderation regression models are summarised in Table 19. The model with EE, ESE, and EE x ESE explains 17% of the variance in *entrepreneurial intention* (R-square = 0.017). The regression model was given by;

$$\mathrm{EI} = 4.493 + 0.126\ \mathrm{EE} + 0.502\mathrm{ESE} + 0.087\ (\mathrm{EExESE})$$

Table 19: Moderation Regressions – ESE moderates the relationship between EE and EI

Moderation Regressions						
	Model 1		Model 2		Model 3	
	B	B	B	β	B	β
Intercept	4.52***	0.00	4.52***	0.00	4.49***	0.00
EE	0.21***	0.22	0.15***	0.16	0.13**	0.14
ESE			0.46***	0.34	0.5***	0.37
EE x ESE					0.09*	0.12
R2	0.05		0.16		0.17	

*** = p < .01, ** = p < .05, * = p < .10

Results Pertaining to Hypothesis 1:

Entrepreneurship education has a significant positive impact on entrepreneurial intention

The results in Table 19 show that entrepreneurship education (B =0.13, β = 0.14, p-value < 0.5) has a positive and significant impact on *entrepreneurial intention* at 5% significance level. The relationship was positive because the coefficient for entrepreneurship education was greater than zero and the impact was significant because the p-value was less than 0.05. This means that hypothesis 1 was supported.

Results Pertaining to Hypothesis 3:

Entrepreneurial Self-Efficacy significantly moderates the relationship between entrepreneurship education and entrepreneurial intention.

The results in Table 19 also show that the relationship between *entrepreneurship education* and *entrepreneurial intention* is moderated by *entrepreneurial self-efficacy.* This is because the interaction term (EE x ESE) (B = 0.09, β = 0.12, p-value = 0.0605 > 0.05) was not zero. Although self-efficacy moderates the relationship between *entrepreneurship education* and *entrepreneurial intention*, as indicated by a positive coefficient, the result was not significant since the p-value was greater than 0.05. This means that hypothesis 3 is supported as there is moderatsion as hypothesised but the moderatsion is insignificant.

The moderation effect is illustrated in Figure 14. It can be noted that the relationship between *entrepreneurship education* and *entrepreneurial intention* was stronger at higher levels of *entrepreneurial self-efficacy*. The relationship becomes weaker at medium levels of ESE and is almost non-existent at low levels of ESE as shown by the slopes of the regression lines shown in Figure 14.

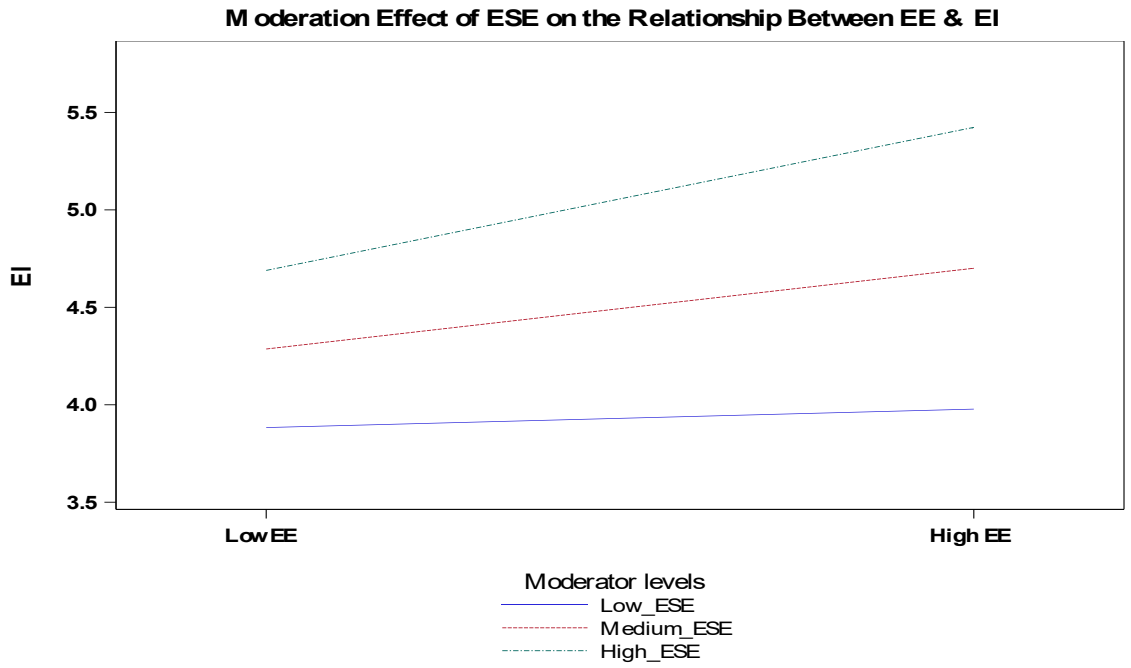


Figure 14: Moderating effect of ESE on the relationship between EE and EI - model 2

To assess the impact of *entrepreneurial self-efficacy* on the relationship between prior entrepreneurial exposure and intention, a regression model was also fitted.

Entrepreneurial intention was the dependent variable, prior entrepreneurial exposure (independent variable) and *entrepreneurial self-efficacy* (moderating variable).

The moderation regression models are summarised in Table 20. The model with PEE, ESE, and EE x ESE explained 17% of the variance in *entrepreneurial intention* (R-Square = 0.17).

The regression the model was given by;

$$\mathrm{EI} = 4.565 + 0.383\ \mathrm{PEE} + 0.409\ \mathrm{ESE} - 0.186\ (\mathrm{PEExESE})$$

Table 20: Moderation regressions – ESE moderates the relationship between PEE and EI

Moderation Regressions						
	Model 1		**Model 2**		**Model 3**	
	B	β	B	β	B	β
Intercept	4.52***	0.00	4.52***	0.00	4.57***	0.00
PEE	0.45***	0.25	0.3***	0.17	0.38***	0.21
ESE			0.45***	0.33	0.41***	0.30
PEE x ESE					-0.19*	-0.11
R2	0.06		0.16		0.17	

*** = p < .01, ** = p < .05, * = p < .10

Results Pertaining to Hypothesis 2: Prior entrepreneurial has a significant positive impact on entrepreneurial intention.

The results in the final model (Model 3,) shows that prior entrepreneurial exposure (B = 0.38, β = 0.21, p-value < 0.001) had a positive and significant impact on *entrepreneurial intention*. The impact was positive since the coefficient for PEE was greater than zero and was significant because the p-value was less than 0.05. This means that hypothesis 2 is supported.

Results Pertaining to Hypothesis 4:

Entrepreneurial Self-Efficacy significantly moderates the relationship between prior entrepreneurial exposure and entrepreneurial intention.

The results show that the relationship between *prior entrepreneurial exposure* and *entrepreneurial intention* is moderated by *entrepreneurial self-efficacy*. This is because the interaction term (PEE x ESE) (B = -0.19, β = -0.11, p-value = 0.0750 > 0.05) was not zero and was not significant since the p-value was greater than 0.05. This means that hypothesis 4 is supported but the result is not significant.

The moderating effect of *entrepreneurial self-efficacy* on the relationship between *prior entrepreneurial exposure* and *entrepreneurial intention* is illustrated in Figure 15. The results indicate that the relationship between *Prior entrepreneurial exposure* and *entrepreneurial intention* was stronger at low levels of *entrepreneurial self-efficacy* and weakens with increasing self-efficacy.

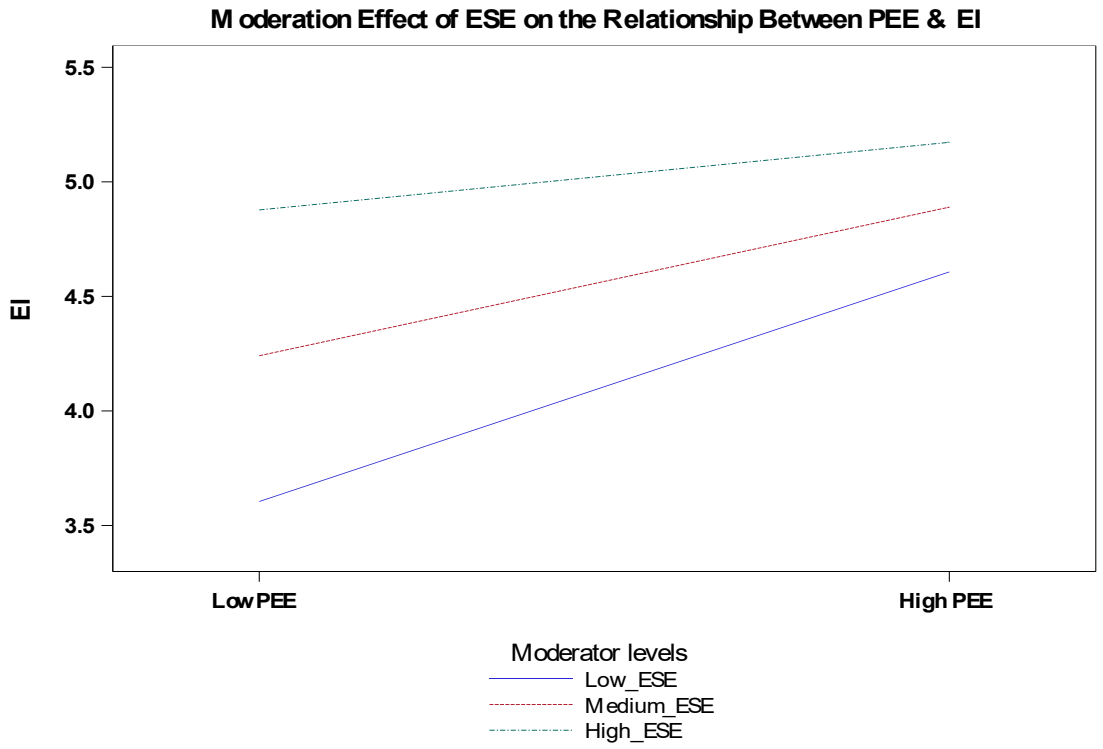


Figure 15: Moderation - Moderation Regressions – ESE moderates the relationship between PEE and EI

Chapter Summary

In summary, entrepreneurship education and prior entrepreneurial exposure were found to have a direct significant and positive impact on entrepreneurial intention. It was noted that entrepreneurial self-efficacy had a positive but insignificant impact on the relationship between entrepreneurship education and entrepreneurial intention. That is, the impact of education on intention strengthens as entrepreneurial self-efficacy increases and vice versa but the result was insignificant.

On the other hand, Entrepreneurial Self-Efficacy moderated the relationship between prior entrepreneurial exposure and entrepreneurial intention in a negative way. That is, the relationship weakens with an increase in entrepreneurial self-efficacy, although the moderating effect was insignificant.

An updated consistency table comparing the answers from the study and the research questions and hypotheses is shown in Table 21.

Table 21: Comparison of literature review and findings

RQ #	State Objective	Prop / hyp #	State Hypothesis	Findings from own study
1	Determine whether entrepreneurship education has an impact on entrepreneurial intention female, black South African youth	1	Entrepreneurship education has a positive impact on entrepreneurial intention among female, black South African youth.	Entrepreneurship education has a positive significant impact on entrepreneurial intention among female, black South African youth
2	Establish whether prior entrepreneurial exposure has an impact on entrepreneurial intention among	2	Prior entrepreneurial exposure has a positive impact on entrepreneurial intention	Prior Entrepreneurial Exposure has a positive significant impact on entrepreneurial intention

RQ #	State Objective	Prop / hyp #	State Hypothesis	Findings from own study
	female, black South African youth		among female, black South African youth	among female, black South African youth
3	Investigate the influence of entrepreneurial self-efficacy on the relationship between entrepreneurship education and entrepreneurial intention among female, black South African youth	3	Entrepreneurial Self-Efficacy significantly moderates the relationship between entrepreneurship education and entrepreneurial intention among female, black South African youth	Entrepreneurial Self-Efficacy moderates the relationship between entrepreneurship education and entrepreneurial intention among female, black South African youth but the moderation is insignificant
4	Examine the influence of entrepreneurial self-efficacy on the relationship between prior entrepreneurial exposure and entrepreneurial intention among female, black South African youth.	4	Entrepreneurial Self-Efficacy significantly moderates the relationship between prior entrepreneurial exposure and entrepreneurial intention among female, black South African youth.	Entrepreneurial Self-Efficacy moderates the relationship between prior entrepreneurial exposure and entrepreneurial intention among female, black South African youth but the moderation is insignificant

CHAPTER 5. DISCUSSION OF THE RESULTS

5.1 Introduction

The results presented in chapter 4 were discussed in this chapter. A link between the results of this study and literature review was drawn. The chapter commenced with a discussion of the demographic outline of the sample. A discussion of the findings for each hypothesis followed and then the chapter closed with a conclusion to the study.

5.2 Demographic profile of respondents

The results indicated that the respondents were mainly between 18 – 24 years old. These respondents are more likely to not have started any business yet or made a career choice. According to Herman (2018), intention is measured among those that do not currently run any business. This indicates that this study targeted the correct respondents.

5.3 Discussion of Findings

5.3.1 *Discussion pertaining to Hypothesis 1:*

The aim of the study in relation to hypothesis 1 was to assess the impact of entrepreneurship education on entrepreneurial intention among Black female South African youth. It is vital to state that both the entrepreneurship education and entrepreneurial intention constructs, were both valid and reliable. This indicates that the results are based on statistically valid constructs.

The outcome indicated that the impact of entrepreneurship education on entrepreneurial intention was positive and significant at 5% significance level. Accordingly, hypothesis 1 was supported, indicating that entrepreneurship education had an impact on intention to start a business. This is not surprising given a profusion of evidence from previous research that suggested that entrepreneurship education

had a positive influence on entrepreneurial intention (Israr & Saleem, 2018; Cardoso, Cairrão, Petrova, & Figueiredo, 2018). The result, however, was in contrast with what was found by Patricia & Silangen (2016) where they found in their study that entrepreneurship education among university students did not have an impact on entrepreneurial intention.

Grounded on the results from this study; Hypothesis 1: Entrepreneurship education has a significant positive impact on entrepreneurial intention, is supported. This indicates that the problem of low participation rates in entrepreneurship among the female, black South African youth can possibly be solved by introducing entrepreneurship education.

5.3.2 *Discussion pertaining to Hypothesis 2:*

The objective was to assess whether prior entrepreneurial exposure had a significant impact on entrepreneurial intention. The prior entrepreneurial exposure, like entrepreneurship education and entrepreneurial intention constructs, were valid and reliable. This indicates that the results for the above-mentioned hypothesis 2 was based on a statistically valid construct.

It was concluded in this study that prior entrepreneurial exposure has a significant positive impact on entrepreneurial intention. This result was also not surprising considering a plethora of previous evidence such as the conclusion by Mueller, Zapkau, & Schwens (2014); Peterman & Kennedy (2003); Israr & Saleem (2018); and Zapkau et al. (2015) where they concluded in their studies that prior entrepreneurial exposure had a positive impact on an individual's entrepreneurial intention.

This result was, however, not in congruence with findings by Zhang, Duysters, & Cloodt (2014) where they argued that prior entrepreneurial exposure had a significant negative impact on entrepreneurial intention.

This study indicated that Hypothesis 2: Prior entrepreneurial exposure has a positive impact on entrepreneurial intention, was supported.

5.3.3 *Discussion pertaining to Hypothesis 3:*

All three constructs were valid and reliable. The aim was to assess whether entrepreneurial self-efficacy significantly moderated the relationship between entrepreneurship education and entrepreneurial intention among female, black South African youth.

The results indicated that entrepreneurial self-efficacy positively moderated the relationship between entrepreneurship education and entrepreneurial intention but the result was insignificant. This result was unanticipated, given that Piperopoulos & Dimov (2015) resolved in their study that the relationship between entrepreneurship education and entrepreneurial intention was significantly moderated by pedagogy, with the relationship being negative in theory-oriented courses and positive in practical-oriented courses.

Ahlin, Drnovšek, & Hisrich, (2014), also indicated in their study, that entrepreneurial self-efficacy can be used as a moderating variable, as the confidence in ones' abilities can go a long way in influencing the impact of other variables on entrepreneurial intention.

Thus, it is concluded in this study that, entrepreneurial self-efficacy does not significantly moderate the relationship between entrepreneurship education and entrepreneurial intention. The relationship between entrepreneurship education and intention does not change significantly with changes in the level of self-efficacy of the female, black South African youth.

5.3.4 *Discussion pertaining to Hypothesis 4:*

The aim was to examine the influence of entrepreneurial self-efficacy on the relationship between prior entrepreneurial exposure and entrepreneurial intention among female, black South African youth.

The results indicated that entrepreneurial self-efficacy moderated the relationship between prior entrepreneurial exposure and entrepreneurial intention in a negative way, but the moderation was insignificant. This implies that the relationship between

prior entrepreneurial exposure and entrepreneurial intention and weakens with an increase in entrepreneurial self-efficacy, although the moderating effect was insignificant.

This contradicts the findings by Liu, Ma, & Li (2019) who indicated that entrepreneurial self-efficacy plays a significant and vital role in the effect of role models on entrepreneurial intention. In most cases, the youth find parents, family and friends to be role models.

Thus, it is concluded in this study that, although entrepreneurial self-efficacy moderated the relationship between prior entrepreneurial exposure and entrepreneurial intention, the moderatsion is not significant. The relationship between prior entrepreneurial exposure and entrepreneurial intention is not significantly impacted by the level of self-efficacy of the female, black South African youth.

5.4 Summary

This study indicated that the intention by black female South African youth to start businesses is dependent on the amount of entrepreneurship education that they receive and the entrepreneurial exposure received from family and friends. Given South Africa's past, where the participation of black people in the economic sector as entrepreneurs was minimal, this could explain the low participation of black females in entrepreneurship.

Entrepreneurial self-belief does not play a significant role in influencing how entrepreneurship education and prior exposure is translated into an intention to start a business.

CHAPTER 6. CONCLUSIONS & RECOMMENDATIONS

6.1 Introduction

In this chapter, from the discussion of results, concluding remarks are summarised about the study. A description of summarised conclusions is provided with reference to the hypotheses of this study. Recommendations are made in line with the importance of the study and what further research can focus on. This is trailed by ramifications of the findings per research question and then suggestions for future research.

6.2 Conclusions regarding research question 1

The primary purpose of this research was to assess the impact of entrepreneurial self-efficacy on the relationship between prior entrepreneurial exposure and entrepreneurship intention as well as the impact of entrepreneurial self-efficacy on the relationship between entrepreneurship education and entrepreneurial intention. The first research question was to determine whether entrepreneurship education had an impact on entrepreneurial intention among female, black South African youth.

The results indicated that entrepreneurship education indeed plays a significant positive role in impacting entrepreneurship intention. The more the female, black South African youth is exposed to entrepreneurship, the more they are likely to have entrepreneurship intention. The findings from this study did not deviate from previous research on the same topic but in different contexts, where it was found that entrepreneurship education had a positive influence on entrepreneurial intention (Israr & Saleem, 2018; Cardoso, Cairrão, Petrova, & Figueiredo, 2018).

The findings were, however, not in accord with what Patricia & Silangen (2016) found in their study among university students. They concluded that entrepreneurship education among university students did not have an impact on

entrepreneurial intention. This difference can be attributed to how Patricia & Silangen (2016) measured entrepreneurship education. Patricia & Silangen (2016) operationalised entrepreneurship education as the number of courses taken by students during their university studies. For the purposes of this research, however, entrepreneurship education was defined as whether one was exposed to entrepreneurship education or not. This was a shortcoming on how Patricia & Silangen (2016) operationalised entrepreneurship education, as long as one is exposed to entrepreneurship, the increase in the number of courses may not necessarily translate into an improvement in entrepreneurial intention.

6.3 Conclusions regarding research question 2

The second research question was to establish whether prior entrepreneurial exposure had an impact on entrepreneurial intention among female, black South African youth.

The results indicated that prior entrepreneurial exposure had a significant positive impact on entrepreneurship intention. This result was in harmony with previous research evidence as offered by Mueller, Zapkau, & Schwens (2014); Peterman & Kennedy (2003); Israr & Saleem (2018); and Zapkau et al. (2015). They also concluded in their studies that prior entrepreneurial exposure had a positive impact on an individual's entrepreneurial intention.

This result was, however, not in congruence with findings by Zhang, Duysters, & Cloodt (2014) where they argued that prior entrepreneurial exposure had a significant negative impact on entrepreneurial intention. Zhang, Duysters, & Cloodt (2014) indicated in their study that the result of a negative impact of entrepreneurial exposure, was due to their sample being made up of some respondents that were exposed to negative entrepreneurial exposure. The current study addressed this problem by making sure that the type of exposure was part of the rating scale ranging from very negative exposure to very positive exposure.

From the findings of this study and previous research it is concluded that indeed entrepreneurial exposure has a positive impact on entrepreneurial intention among female, black South African youth. Thus, the more the female, black South African youth is exposed to entrepreneurship, the more they are likely to have entrepreneurship intention.

6.4 Conclusions regarding research question 3

The third research question was to investigate the influence of entrepreneurial self-efficacy on the relationship between entrepreneurship education and entrepreneurial intention among female, black South African youth.

Research results from this study indicated that entrepreneurial self-efficacy did moderate the relationship between entrepreneurship education and entrepreneurial intention to a limited extent (insignificant effect). This result was not consistent with findings by Piperopoulos & Dimov (2015) who indicated that entrepreneurial self-efficacy significantly moderates the relationship between entrepreneurship education and entrepreneurial intention. The differences in results could be due to the fact that Piperopoulos & Dimov (2015) concentrated on the impact of pedagogy, while this research was about having received entrepreneurial education or not, irrespective of pedagogy.

It is therefore concluded in this study, that entrepreneurial self-efficacy does not significantly moderate the relationship between entrepreneurship education and entrepreneurial intention. The relationship between entrepreneurship education and intention is not significantly affected by the level of self-efficacy of the female, black South African youth.

6.5 Conclusions regarding research question 4

The fourth research question was to examine the influence of entrepreneurial self-efficacy on the relationship between prior entrepreneurial exposure and entrepreneurial intention among female, black South African youth.

The results indicated that entrepreneurial self-efficacy was not significant in moderating the relationship between prior entrepreneurial exposure and entrepreneurial intention. The results were not in consondance with findings by Liu, Ma, & Li (2019) who found in their study that entrepreneurial self-efficacy significantly moderated the relationship between prior entrepreneurial exposure and entrepreneurial intention.

Thus, it is concluded in this study that Entrepreneurial Self-Efficacy does not significantly moderate the relationship between prior entrepreneurial exposure and entrepreneurial intention. The relationship between prior entrepreneurial exposure and entrepreneurial intention is not significaltly affected by the level of entrepreneurial self-efficacy of the female, black South African youth.

The consistency table shown in Table 22 indicates the contribution of this study.

Table 22: Consistency table: research questions, conclusions and contribution to knowledge

RQ #	State Research Question or Objective	State literature-based hypothesis	State conclusion or answer based on own research	Highlight key differences between your initial hypotheses and your findings – this is your contribution to knowledge
1	Determine whether entrepreneurship education has an impact on entrepreneurial intention among female, black South African youth.	Entrepreneurship education has a significant positive impact on entrepreneurial intention among female, black South African youth.	Entrepreneurship education has a significant positive impact on entrepreneurial intention among female, black South African youth.	Entrepreneurship education was hypothesised to have a positive impact on entrepreneurial intention among female, black South African youth. The results of this study tied up with literature.
2	Establish whether prior entrepreneurial exposure has an impact on entrepreneurial intention among female, black South African youth.	Prior entrepreneurial exposure has a significant positive impact on entrepreneurial intention among female, black South African youth.	Prior Entrepreneurial Exposure has a significant positive impact on entrepreneurial intention among female, black South African youth.	Prior entrepreneurial exposure was hypothesised to have a positive impact on entrepreneurial intention among female, black South African youth. The results of this study tied up with literature.
3	Investigate the influence of entrepreneurial self-	Entrepreneurial Self-Efficacy significantly moderates the relationship	Entrepreneurial Self-Efficacy does not moderate the relationship between	Entrepreneurial Self-Efficacy was hypothesised to have a significant impact on the relationship between entrepreneurship education and

RQ #	State Research Question or Objective	State literature-based hypothesis	State conclusion or answer based on own research	Highlight key differences between your initial hypotheses and your findings – this is your contribution to knowledge
	efficacy on the relationship between entrepreneurship education and entrepreneurial intention among female, black South African youth.	between entrepreneurship education and entrepreneurial intention among female, black South African youth.	entrepreneurship education and entrepreneurial intention among female, black South African youth.	entrepreneurial intention but the results revealed that in South Africa Entrepreneurial Self-Efficacy does not significantly moderate the relationship between prior entrepreneurial exposure and entrepreneurial intention among female, black South African youth.
4	Examine the influence of entrepreneurial self-efficacy on the relationship between prior entrepreneurial exposure and entrepreneurial intention among female, black South African youth.	Entrepreneurial Self-Efficacy significantly moderates the relationship between prior entrepreneurial exposure and entrepreneurial intention among female, black South African youth.	Entrepreneurial Self-Efficacy does not moderate the relationship between prior entrepreneurial exposure and entrepreneurial intention among female, black South African youth.	Entrepreneurial Self-Efficacy was hypothesised to have a significant impact on the relationship between prior entrepreneurial exposure and entrepreneurial intention but the results revealed that in South Africa, it is not the case. The results revealed that Entrepreneurial Self-Efficacy does not significantly moderate the relationship between prior entrepreneurial exposure and entrepreneurial intention among female, black South African youth.

6.6 Recommendations

The results revealed that entrepreneurship education has a positive and significant impact on entrepreneurship intention among female, black South African youth.

This may be a solution to the problem of low participation of black women entrepreneurs in the South African economy. The introduction of entrepreneurship education in schools, colleges and universities may be considered. This will have a positive impact on the youth's entrepreneurship intention, which will, in turn, be translated into the behaviour of starting new businesses according to the Theory of Planned Behaviour (Ajzen, 1991).

It was also found that prior entrepreneurial exposure had a significant and positive impact on entrepreneurship intention among the South African black female youth. The use of role model entrepreneurs who are visible and can engage with female, black South African youth can positively influence their entrepreneurial intentions. It is thus recommended that during entrepreneurship classes, the educational institutions should bring role models who will reflect on the positive impact of entrepreneurship. This will act as entrepreneurship exposure, which will in turn positively impact on the youth's entrepreneurial intention as was found in this study.

The government can be guided accordingly in drafting relevant policies that ensure that youths are exposed to entrepreneurship at an early stage and are also exposed to role models who have made a difference in the country through entrepreneurship.

6.7 Suggestions for further research

This research had 4 main limitations namely;

1) it was limited to female, black South African youth with access to internet as the study was conducted online,
2) only quantitative research was done,
3) there was no qualitative component to try and get the reasoning behind the rating of the four constructs and
4) only 278 respondents were sampled to represent approximately 8.8 million black female youth in South Africa (Statistics South Africa, 2019).

It is therefore recommended that future research be done among all black female South African youth including the ones without access to the internet. This means that data collection methods should not be limited to online portals only. A combination of qualitative and quantitative research should be done to make sure that the reasoning behind the quantitative figures is explained. A larger sample should be collected for future research on this topic.

This study was delimited to the assessment of the impact of entrepreneurship education and prior exposure to entrepreneurial intention and the moderating effect of entrepreneurial self-efficacy on these relationships. It is recommended that future research should also explore other possible determinants of entrepreneurial intention.

There are five dimensions to the Mcgee et al., (2009) entrepreneurial self-efficacy instrument, but only one dimension, searching, was used in this research. It is recommended that future research can be conducted to assess whether the impact of self-efficacy varies significantly depending on the dimension (s) used.

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APPENDIX A: Respondent Cover Letter

Dear Respondent;

My name is Honest Muchabaiwa. I am conducting research for the purpose of completing my Masters in Entrepreneurship and New Venture Creation at Wits Business School. I am conducting research on the influence of entrepreneurial self-efficacy, education, and experience on entrepreneurial intention among Black South African female students. I hereby request for your participation in this survey. It will take approximately 10 minutes to complete.

Your participation is voluntary and confidential, and you are not being forced to take part in this study. You have the right to withdraw at any point during the study. No respondent name will be published in this study. By clicking the link below, you acknowledge that your participation in the study is voluntary, you are 18 years or older, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

At the present time, I do not see any risks in your participation. The risks associated with participation in this study are no greater than those encountered in daily life. There are no immediate benefits to you from participating in this study. If you would like to receive feedback on the study, I can send you the results of the study when it is completed sometime after July 2020.

Contact details

If you would like to contact my supervisor in this study to discuss this research, please feel free to e-mail her at jabulile.galawe@wits.ac.za. Attention: Dr. Jabulile. The researchers email address is 2287531@student.wits.ac.za.

Do you consent to take part in this survey?

Yes, I consent (Continue)

No, I do not consent (Close)

APPENDIX B: Research Instrument

DEMOGRAPGIC INFORMATION		
D1: What is your gender?		
Female	1	CONTINUE
Male	2	CLOSE
Other	3	
D2: Are you a South African citizen?		
Yes	1	CONTINUE
No	2	CLOSE
D3: How best do you describe your population group?		
Black	1	CONTINUE
Coloured	2	
Indian	3	
White	4	CLOSE
Other, Specify….....	5	
D4: Which Course are you currently registered to study at WITS?		
Undergraduate diploma	1	CONTINUE
Undergraduate degree	2	
Post graduate diploma	3	
Post graduate degree	4	
Other, Specify….....	5	
Not registered to study at WITS	6	CLOSE SURVEY
D5: What is your age?		
18 - 24 years	1	CONTINUE
25 – 34 years	2	
35 – 44 Years	3	
45 – 54 years	4	
55+ years	5	

ENTREPRENEURSHIP EDUCATION							
To what extend do you agree or disagree with the following …?							
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
EE1: My school /university education helped me to develop my sense of initiative – a sort of entrepreneurial attitude	1	2	3	4	5	6	7
EE2: My school /university education helped me to better understand the role of entrepreneurs in society	1	2	3	4	5	6	7
EE3: I learnt nothing about entrepreneurship at school/university							
EE4: My school /university education made me interested to become an Entrepreneur	1	2	3	4	5	6	7
EE5: My school /university education gave me skills and know-how that enable me to run a business	1	2	3	4	5	6	7

PRIOR ENTREPRENEURIAL EXPOSURE		
PEE1a: Did you ever start a business of any kind or were self-employed?		
Yes	1	CONTINUE
No	2	GO TO PEE2a

PEE1b: ASK ONLY IF YES IN PEE1a: Was the experience positive or negative?						
Extremely negative	Negative	Somewhat negative	Neither negative nor Neutral	Somewhat positive	Positive	Extremely positive
1	2	3	4	5	6	7

PEE2a: Did your parent(s) have a business or were self-employed?		
Yes	1	CONTINUE
No	2	GO TO PEE3a

PEE2b: ASK ONLY IF YES IN PEE2a: Was the experience positive or negative?						
Extremely negative	Negative	Somewhat negative	Neither negative nor Neutral	Somewhat positive	Positive	Extremely positive
1	2	3	4	5	6	7

PEE3a: Did you ever work for an entrepreneur?		
Yes	1	CONTINUE
No	2	GO TO PEE4a

PEE3b: ASK ONLY IF YES IN PEE3a: Was the experience positive or negative?						
Extremely negative	Negative	Somewhat negative	Neither negative nor Neutral	Somewhat positive	Positive	Extremely positive
1	2	3	4	5	6	7

PEE4a: Did any other relatives or friends of yours ever start a business?		
Yes	1	CONTINUE
No	2	GO TO ESE1

PEE4b: ASK ONLY IF YES IN PEE4a: Was the experience positive or negative?						
Extremely negative	Negative	Somewhat negative	Neither negative nor Neutral	Somewhat positive	Positive	Extremely positive
1	2	3	4	5	6	7

ENTREPRENEURIAL SELF-EFFICACY							
How would you rate your ability to do the following? You are able to....							
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
ESE1: Brainstorm and come up with a new idea of product or service	1	2	3	4	5	6	7
ESE2: Identify the need for a new product or service	1	2	3	4	5	6	7

ESE3: Design a new product or service that would satisfy the customers' wants or needs	1	2	3	4	5	6	7
ENTREPRENEURIAL INTENTION							
To what extend do you agree or disagree with the following …?							
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
EI1: I intend to set up a company in the future	1	2	3	4	5	6	7
EI2: I have never searched for business start-up opportunities	1	2	3	4	5	6	7
EI3: I am saving money to start a business	1	2	3	4	5	6	7
EI4: I don't read any books on how to set up a firm	1	2	3	4	5	6	7
EI5: I search for information on how to set up a firm	1	2	3	4	5	6	7
EI6: I have no plans to launch my own business	1	2	3	4	5	6	7
EI7: I spend time learning about starting a firm	1	2	3	4	5	6	7

APPENDIX C: Consistency Matrix

Assess the influence of entrepreneurial self-efficacy, education, and prior exposure on the entrepreneurship intention of black South African Black female youth							
Sub-problem/Aims	**Literature Review**	**Hypotheses**	**Research questions**	**Variables**	**Source of data**	**Type of data**	**Analysis**
Assess the extent to which entrepreneurship education has an impact on entrepreneurial intention	(Darnihamedani, 2016; Israr & Saleem, 2018; Parboteeah et al., 2015)	H1. Entrepreneurship education has a significant positive impact on entrepreneurial intention.	To what extent does entrepreneurship education influence entrepreneurial intention?	IV= Entrepreneurship education	EE1- EE5	Ordinal data (7-point Linkert scale)	Descriptive Statistics, Correlation Matrix, regression
				DV= Entrepreneurial intention	EI1 – EI7	Ordinal data (7-point Linkert scale)	
Assess the extent to which prior entrepreneurial exposure has an impact on entrepreneurial intention	(Peterman & Kennedy, 2003; Mueller et al., 2014; Israr & Saleem, 2018; Laviolette, Lefebvre, & Brunel, 2012)	H2. Prior entrepreneurial exposure has a significant positive impact on entrepreneurial intention.	To what extent does prior entrepreneurial exposure influence entrepreneurial intention?	IV=Prior entrepreneurial exposure	PEE1a - pEE4b	Ordinal data (7-point Linkert scale)	Descriptive Statistics, Correlation Matrix, regression
				DV= entrepreneurial intention	EI1 – EI7	Ordinal data (7-point Linkert scale)	
To investigate the influence of entrepreneurial self-efficacy on the relationship between entrepreneurship education and entrepreneurial intention	Arafat et al. (2018); Laviolette et al., 2012).	H3. Entrepreneurial Self-Efficacy significantly moderates the relationship between entrepreneurship education and entrepreneurial intention.	To what extent does entrepreneurial self-efficacy influence the relationship between entrepreneurship education and entrepreneurial intention?	IV=Entrepreneurship education	EE1- EE5	Ordinal data (7-point Linkert scale)	Descriptive Statistics, Correlation Matrix, regression
				DV= entrepreneurial intention	EI1 – EI7	Ordinal data (7-point Linkert scale)	
				M = Entrepreneurial Self-Efficacy	ESE1 – ESE3	Ordinal data (7-point Linkert scale)	

To investigate the influence of entrepreneurial self-efficacy on the relationship between prior entrepreneurial exposure and entrepreneurial intention	(Arafat et al., 2018; Laviolette et al., 2012).	H4. Entrepreneurial Self-Efficacy significantly moderates the relationship between prior entrepreneurial exposure and entrepreneurial intention.	To what extent does entrepreneurial self-efficacy influence the relationship between prior entrepreneurial exposure and entrepreneurial intentions?	IV=Prior entrepreneurial exposure	PEE1a - pEE4b	Ordinal data (7-point Linkert scale)	Descriptive Statistics, Correlation Matrix, regression
				M = Entrepreneurial Self-Efficacy	ESE1 – ESE3	Ordinal data (7-point Linkert scale)	
				DV= entrepreneurial intention	EI1 – EI7	Ordinal data (7-point Linkert scale)	

IV = Independent variable, DV = Dependent variable, M = Moderating variable

APPENDIX D: Ethics Approval Notification

Graduate School of Business Administration
University of the Witwatersrand, Johannesburg

Wits Business School

Wits Business School Ethics Committee
Constituted under the University Human Research Ethics Committee (Non-Medical)

Ethics Clearance Certificate

Ethics protocol number: WBS/BA2287531/927
This certificate is only valid with a legitimate ethics protocol number and signed by the Researcher (below)

Project title	The effect of entrepreneurial self-efficacy, experience, and education on entrepreneurial intention among black South African female youths
Investigator / Researcher	Mr Honest Muchabaiwa
Nature of Project	MM (Entrepr & New Venture Creation)
Decision of the Committee	Approved unconditionally
Issue Date of Certificate	2019/11/19
Expiry date	Date of submission of the project report
Chairperson	Prof Anthony Stacey ☎ +27 11 717 3587 +27 82 880 4531 anthony.stacey@wits.ac.za

Declaration by Researcher

One copy must be signed by the Researcher and returned to the Chairperson of the Wits Business School Ethics Committee.

I fully understand the conditions under which I am authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I undertake to resubmit the protocol to the Committee.

Signature

25/11/2019
Date: