

## AN EXAMINATION OF ADOLESCENT GIRLS' AND YOUNG WOMEN'S ENTREPRENEURIAL KNOWLEDGE IN SOUTH AFRICA: LONGITUDINAL STUDY

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### Abstract:

Motivated by the lack of empirical research on entrepreneurial knowledge training among adolescent girls and young women in South Africa and elsewhere, this article examined the entrepreneurial knowledge among 3584 adolescent girls and young women from four provinces, namely KwaZulu Natal, Mpumalanga, Eastern Cape and Western Cape in South Africa. This study adopted a quantitative and descriptive research approach. Secondary data collected using a questionnaire survey during entrepreneurial mindset and skills training from July-October 2021 by the large anonymized not-for-profit organization based in South Africa was used for data analysis. Robustness analysis was entirely performed using descriptive statistics using SPSS version 28.0. The findings from the empirical part of this research statistically proved that adolescent girls and young women improved their knowledge entrepreneurially after training, which is evident in most of the extent literature. This article contributes to the current body of knowledge as it fills in the gap and contributes significantly to the entrepreneurial mindset skill and knowledge improvement among adolescent girls and young women in South Africa.

**Keywords:** Entrepreneurial Knowledge, Adolescent Girls and Young Women (AGYWs), Entrepreneurial mindset.

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## INTRODUCTION

Entrepreneurial capability and knowledge are the innovative practice that leads to discovering and evolving opportunities and then setting up the proper behavior to effectively exploit those business opportunities, marketable and profitable (Davis, Hall, & Mayer, 2019; Kanonuhwa, Rungani, & Chimucheka, 2018) fully. However, unemployment due to a lack of entrepreneurial knowledge among adolescent girls and young women (AGYWs) is a subject that has received a lot of attention globally and in South Africa, to be specific (Dawson, 2021). Specifically, statistics show that the global unemployment rate from 2010 to 2020 is escalating. The global rate of unemployment amounted to 6,47% in 2021 (2017=5.55%; 2018= 5.37%; 2019= 5.37%, and in 2020=6.7% (Huikari & Korhonen, 2021). Shockingly, much more recently, the statistics of South Africa's Quarter Labour Force Survey (QLFS) report released in June 2021 by statistician-general Risenga Maluleke revealed that South Africa's unemployment rate reached 35.3% in the first three months of 2021, the rise for unemployment rate has forced the developed and developing countries to tackle its consequences (Anastasiou, Argiri, Komninos, Dermatis, & Papageorgiou, 2021; Mutarubukwa, 2021).

Nowadays, South Africa has become a high temple of unemployment, especially due to the need for more entrepreneurial mindsets and skills among adolescent girls and young women

(Ijeoma & Ndedi, 2021). Worse still, unemployment among these particular economic segments is a global pandemic that continues to marginalize AGYWs in participating in inclusive development and growth (Chitiga, Henseler, Mabugu, & Maisonnave, 2021). It has led to the acknowledgment that entrepreneurs are of particular importance for the country's economy, and the South African government, to a very large extent, recognized the crucial role of developing and supporting the small and medium micro-enterprises (SMMEs) sector.

According to Botha, Nieman, and Van Vuuren (2021), this could lead to the reduction of unemployment among youth and promote wealth creation through many agencies, including wealth relatives and family members (WRFM), local operatives (youth cooperatives), junior achievement South Africa (JASA) in school program, South Africa's Enterprise and Supplier Development landscape, Tshepo 1 million, National Empowerment Fund (NEF), Small Enterprise Finance Agency (SEFA), National Youth Development Agency (NYDA), Department of Small Enterprise Development Agency (SEDA), and Ford Resource and Engagement Centre (FREC).

Furthermore, the government's focus over the past few years has been on training entrepreneurs to some extent on developing the previously disadvantaged population. However, AGYWs, who are the majority and the nation's future, have been excluded and are seen as newcomers to the space of entrepreneurship and therefore need to have adequate entrepreneurial knowledge to start and grow businesses (Ulrich, 2018). In contrast, Valla (2019) argues that South Africans, in general, are not educated to become entrepreneurs but to enter the labor market as employees and consumers of existing jobs instead of creators of new jobs. Smith-Hunter and Boyd (2020) report an overall lack of robust entrepreneurial elements in the education system in South Africa and a lack of entrepreneurial mindset and skills among AGYWs. However, there is a significant role and need for an entrepreneurial mindset and skills.

Schindehutte, Morris, and Kuratko (2019) interviewed several south African entrepreneurs to get data on the main barriers they face. Overall the results indicate that the need for entrepreneurial awareness, understanding, mindsets, training and education are the South African entrepreneurs' most frequently mentioned weaknesses. Financial and business planning is the second most frequently mentioned barrier. The interviewees thirdly mentioned access to financial support for start-up capital. These findings largely contribute to the limitation of entrepreneurship development in South Africa. There is an urgent need to examine AGYW's entrepreneurial knowledge and training needs and whether key role players in South Africa could look after these needs.

This research deals with whether AGYW's entrepreneurial knowledge and capability will be effective in assisting them in starting their businesses. It aims to address the frequently mentioned barriers to AGYWs, entrepreneurial skills and negative attitudes toward failure. Other studies have called to examine the entrepreneurial knowledge of women who have been successful in entrepreneurship and other factors that greatly drive their success (Schindehutte et al., 2019).

It is essential that unemployment among AGYWs is eradicated or significantly reduced in South Africa. There has been growing consensus at the global level in linking unemployment reduction with entrepreneurship skills via robust awareness and training among AGYWs (Pretorius, Nieman, & Van Vuuren, 2017; Stanger, 2020). Supporting this view, Orhan and Scott (2021) claim the crucial roles different types of education or training have to play: (1) education about enterprise, which deals mostly with awareness creation and seeks to foster skills, attitudes and values appropriate to starting, owning, running, managing in a successful business enterprise (2) education for enterprise-specifically deals with the preparation of aspiring entrepreneurs for a career in self-employment, talented entrepreneurs are taught the practical skills required to start their ventures and (3) education in the enterprise- which is mainly deals with appropriate management training for established entrepreneurs ensuring the sustainable growth of the enterprise. By contrast, Lindh

and Thorgren (2021), however, argue that an actual entrepreneurial mindset involves art and science. On the science part, Moses and Akinbode (2014) postulate that it involves business and management functional skills, which is teachable using a conventional pedagogical approach, while entrepreneurial as art relates to creative and innovative attitudes of entrepreneurship which is not easily teachable. However, for AGYWs in South Africa, the gap between what is art and science is much wider. It is because there has been an ongoing debate about whether entrepreneurial skills and knowledge are teachable. The entrepreneurial mindset is one of the critical drivers to be considered in the success or failure of the business. It simply means that business without entrepreneurial capability adoption is more susceptible to fail than succeed.

Commarmond (2017) agrees with the following authors that education determines whether or not an entrepreneur progresses beyond the start-up phase. Supporting this view (Davis et al., 2019) add that an entrepreneur's education level seems to impact the average number of jobs he/she creates. Mitchell (2020) concludes that establishing entrepreneurial knowledge could promote flexibility, creativity, ongoing innovation and renewal and enhance value creation and job formation.

It is also essential to provide a sequenced process for preparing AGYWs to succeed in income-generating activities, strengthen their self-sustenance, enhance all necessary entrepreneurial skills and practical knowledge and link them with employment entrepreneurship opportunities. It can be done by (1) building AGYW's knowledge of how to identify business opportunities, mobilizing resources to exploit fully the opportunity and execute the business model, and (2) equipping AGYW with coping strategies for resilience to setbacks.

The objective of this article was to examine baseline (pre-test answers) against endline survey (post-test answers) of the entrepreneurial mindsets, knowledge and skills among 3584 AGYWs from four provinces of South Africa, namely: Eastern Cape, Western Cape, Mpumalanga and KwaZulu-Natal surveyed from July to October 2021. The study also assessed how best entrepreneurial mindset and skills training had driven the development and growth of AGYW's mindsets towards entrepreneurship. The next logical question could be, "how can entrepreneurial mindset, knowledge and skills be taught and delivered to a wide range of AGYWs with desperate profiles and needs in South Africa.

This article contributes to the current body of knowledge in many ways: The current study's findings contribute towards measuring entrepreneurial mindset skills and knowledge among AGYWs. The novel nature of the entrepreneurial mindset skills and knowledge training among AGYWs in South Africa is a much-needed program to be followed-up by the government and other key stakeholders to include all young South Africans. The novel aspects framework developed from this article is highly relevant to improve significantly AGYWs entrepreneurially. This article offers entrepreneurship trainers and educators a real platform for future development in entrepreneurship. The relevant output from this article has been the measurement of entrepreneurial knowledge improvement framework among AGYWs in South Africa, such a framework for entrepreneurial mindset skills and knowledge training would benefit the government, key stakeholders in the field and funders within entrepreneurship programs. There is a contribution to the field because this article statistically proved that entrepreneurial training intervention effectively improves AGYWs knowledge entrepreneurially. These contributions are crucial for augmenting entrepreneurial training and education programs that are effective and highly relevant, thereby improving and boosting adolescent girl's and young women's knowledge entrepreneurially. Based on the description above, the authors chose the study's title, "An Examination of Adolescent Girls' and Young Women's Entrepreneurial Knowledge in South Africa: Longitudinal Study".

## METHODS

This quantitative research project used longitudinal data from large anonymized South African not-for-profit organizations. Pre- and post-tests were to measure knowledge gained by the AGYWs in entrepreneurship training intervention framework. This analysis randomly used 100%, 3584 respondents [AGYWs] who were trained. 654 participants' results were from Western Cape, 2288 from Mpumalanga, 188 from Eastern Cape and 454 from KwaZulu Natal. The data set for this study contains longitudinal dimensions (from July- October 2021) as 3584 AGYWs across the four provinces namely: Eastern Cape (EC), KwaZulu-Natal (KZN), Mpumalanga (MP) and Western Cape (WC) trained within that particular period of time. Descriptive statistics were used to analyze quantitative data, including percentages, frequencies, standards deviations, and means. Chi-Square test, linear regression analysis and Pearson correlation analysis were performed to determine whether there is a statistically significant relationship between variables.

## RESULT AND DISCUSSION

Entrepreneurship mindset skills and knowledge training took place successfully and that AGYWs learned and gained entrepreneurial and business skills and knowledge after the completion of the content. This finding confirms that entrepreneurship training among AGYWs effectively improves their entrepreneurial mindset, skills and knowledge significantly.

These results support the literature that notes that South Africans are not educated to become entrepreneurs but to enter the labor market as employees and consumers of existing jobs instead of creators of new jobs (Smith-Hunter & Boyd, 2020; Valla, 2019). However, the results of the current study contradict Amit and Muller (2020) study that entrepreneurial training or education can transfer and communicate to young women the skills, ability and knowledge necessary to identify potential business opportunities. It is supported by Ulrich (2018) who stated that young girls are the majority and the nation's future and are seen as newcomers to the game of entrepreneurship and therefore do not have adequate entrepreneurial knowledge to start and grow businesses.

The only variable that indicates no statistically significant improvement before and after entrepreneurship is: performing Micro-value chain analysis in the local community can lead AGYWs to get an entry-level paid job or business opportunity. The mean after the completion of training is equal to the mean before training, indicating that the respondents had the same rating or opinion on this variable. Furthermore, questionnaire items 4, 5, 6, 7 and 8 indicates that there is insignificant improvement before and after training as the means after training was slightly less, which indicates that the respondents had lower rating opinion on their knowledge on these variables. However, questionnaire items 1, 2,3, and 6 indicate statistical knowledge improved significantly as their means after training were higher, which indicates that the respondents had higher ratings or opinions on the knowledge entrepreneurially.

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This finding also agrees with previous studies such as Smith-Hunter and Boyd (2020), who reported an overall lack of robust entrepreneurial elements in the education system in South Africa and a lack of entrepreneurial mindset and skills among Young Women.

The high Chi-square and P-value greater than 0.05 indicate no statistical significance between dependent and independent variables. From the results in the above table, Chi-square value of 35.987, 122.024, 18.069, 72.336, 54.237, 72.336, 72.336 and a P-value of .000 was found. Since the P-value of .000 is less than 0.05 on the questionnaire items 1, 2, 3, 4, 6, 8, and 9, it means that we reject the null hypothesis and conclude that the AGYWs' actual entrepreneurial knowledge improved significantly entrepreneurially. However, for questionnaire items 5 and 7, the null hypothesis is accepted, and the alternative hypothesis is rejected since their P-value was more significant than 0.05. It implies that entrepreneurial mindset skills and knowledge training significantly improve AGYWs entrepreneurially in South Africa. These findings are supported Gouvea et al. (2021), who found that an entrepreneur introduces a new or improved product or service, introduces a new production or marketing method; opens up a new market; uses a new source of supply of raw materials or other components, and creates a new organization.

The current study's findings align with the current body of knowledge that states that women are keen to use sources of entrepreneurial training and business advice to act upon it and place a higher value on such advice (Wickham, 2019). The current study's findings in this area also support the current body of knowledge that found that the positive pull factors, such as a career path that offers entrepreneurial opportunities or education, give a person adequate and appropriate knowledge and business opportunity. In contrast, push factors to encourage entrepreneurship for reasons such as traditional jobs being less important or an option (Kirkwood, 2019).

Moreover, the current study's findings support Mitchell's (2020) finding that establishing entrepreneurial knowledge could promote flexibility, creativity, ongoing innovation and renewal, enhancing value creation and job formation among Youth.

The findings of the current study also support the findings of other studies that concluded that there is a real correlation between the personality traits of the big five model, such as extraversion, agreeableness, openness, conscientiousness and neuroticism and the success of entrepreneurial activities (Rucker & Galinsky, 2021). However, the findings of the current study contradict Moses and Akinbode (2014), who found that entrepreneurial is the science that involves business and management functional skills, which is teachable using a conventional pedagogical approach. On another side, entrepreneurial is an art that relates to creative and innovative attitudes of entrepreneurship which is not easily teachable.

Based on the regression analysis results for the entrepreneurial mindset skills and knowledge variables Q1, Q2, Q3, Q4, Q5, Q6, Q8, and Q9 of the study, the researcher can therefore draw a valid conclusion on the crucial role of entrepreneurial mindset skills. Knowledge training as a tool for improving knowledge of adolescent girls and young women entrepreneurially as the value of significance (P-value) was less than 5%. The findings of the current study show that the increased entrepreneurial knowledge variable is driven by training conducted. The coefficients of pushed Q1, Q2, Q3, Q4, Q6, Q7, Q8, and Q9 are statistically significant at the 5% confidence level and positive. The coefficients on the entrepreneur, successful entrepreneur, product or service marketing, the rate of entrepreneur's failure, background of successful entrepreneurs, product positioning, e-business, and performing micro-value chain analysis were both significant and positive at a 5% level. We are 95% confident that the current entrepreneurial skills and knowledge leverage cited above has a significant positive effect on the AGYWs measured by post-tests. The findings are statistically significant at the 1% confidence level for the AGYWS to the extent of 1.134. It implies that an increase in the training intervention is associated with an increase in their knowledge improvement

entrepreneurially. These results are in line with the current body of knowledge that states that the willingness of women proprietors to acquire formal business and entrepreneurial skills training and to develop non-formal management skills such as networking and flexibility is of huge benefit for women entrepreneurs (Johnson, 2019; Kirkwood, 2019; Mathisen & Arnulf, 2016).

## CONCLUSION

This article examined adolescent girls and young women's entrepreneurial Knowledge in South Africa, the findings of the current study confirmed that training intervention was highly effective in improving potential AGYWs in four provinces of South Africa knowledge entrepreneurially and can therefore be seen as a compulsory sequenced program for any Young person whether male or female in South Africa. This article offers entrepreneurship trainers and educators a real platform for future development in entrepreneurship.

The appropriate Chi-square test was executed on the relevant variables, and statistical entrepreneurial knowledge improved significantly. Furthermore, the null hypotheses were rejected based on descriptive statistics analysis, and the alternative hypotheses were accepted. Overall the result showed that AGYWs expectations were highly met directly after entrepreneurship training. This article demonstrated that AGYWs gained new skills and knowledge to initiate new venture businesses and increased the entrepreneurial competencies and abilities. The relevancy of entrepreneurial training was examined and measured and proved at all levels of significance in improving entrepreneurial mindset skills and knowledge as introduced by Hochanadel and Finamore (2015). The Southern African government should target and immensely assist, and equip AGYWs with entrepreneurial skills on how to become job creators rather than job seekers by investing in this field. However, the most outstanding contribution of our longitudinal research is anticipating a negative impact if no extensive follow-up is made after training.

This article proposes a framework for linking AGYWs and entrepreneurship opportunities through an entrepreneurial skills training capability-based conceptualized model. The article recommends that the service provider make robust and rigorous short-medium and long-term follow-ups to evaluate the intended training impact and outcomes. More resources should be invested in the organization conducting this valuable training to make short, medium and long-term follow-ups on AGYWs trained and expand the covered areas.

The study was only limited to AGYWs, quantitative research design was adopted, and all limitations, such as weakness in dealing with the social complexities of a phenomenon and its inflexibility because the same questions were asked in the same manner and format linked with this methodology apply to this research, future research could be conducted using a mixed method approach to overcome the limitations this study encountered. Since the research was limited to only four provinces, it is extremely difficult to generalize the findings to the whole country. It is suggested that research be conducted on other provinces in order to compare the findings.

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