Self-Employment in Cameroon: Do Technical Education and Credit Availability Matter?

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Research Article

Abstract

Purpose: *The purpose of this study was to investigate the determinants of self-employment in the Ndop Central sub-division in the North West Region of Cameroon. Specifically, the study aimed to examine the usefulness of technical education and finance in the creation of self-employment in the sub-division.*

Methods: *Using a survey research design, data were collected from primary sources with the help of a questionnaire. Convenience sampling technique was used to collect the needed data from a sample of 384 people from three villages of the sub-division. Binary logistics was used to analyze the data.*

Results: *Results revealed that the coefficient of technical education was significant and negative (-2.6581). This finding signifies that graduates from the technical system of education are less likely to join self-employment as compared to graduates of the general education background. Also, the availability of finance was seen to have a negative effect on the probability of being self-employed (-0.0632). It implies that individuals who have easy access to loans are less likely to be self-employed.*

Implication: *The study is expected to guide the government to revisit the curriculum and focus of technical education in the country, as regards its contribution to the unemployment problem of the country. The study also points to the fact that those who have access to loans are not those who deserve it.*

Keywords: Self-employment, Technical Education, Availability of finance, Cameroon.

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1. Introduction

Defining the word, 'self-employment' has always been a point of debate among scholars, which stems from its supposed confusion with the word, 'entrepreneurship'. These two concepts are often than not intertwined with each other. The question of whether a self-employed person is an entrepreneur or whether an entrepreneur is a self-employed person has been stimulating intellectual debates. Many have however concluded that all entrepreneurs are self-employed but not all self-employed are entrepreneurs. Proponents of this view argued that self-employment cannot be considered as entrepreneurship. Self-employment does not give the true picture of the actual level of entrepreneurship in a country (Bradley & Robert, 2004). Their reasoning also stems from the fact that self-employment results mostly from push factors, whereas entrepreneurship results from pull factors. However, the surrounding attitude in society concerning the links between these two terms, allows them to be synonymous.

Scholars captured the concept of self-employment based on the characteristic features of a self-employed person. The features include, the absence of hired employees, responsibility for their work, investment of

own funds, profit motive, independence of the labor market, the products and/or services must not be new, independence in deciding the issues relating to his/her activities (Pedersini & Colette, 2009). Given the above characteristics, Startienė et al. (2010) summarized the definition of self-employment as a simple form of entrepreneurship, whereby a person, through his/her capacity and the combination of financial resources, offers consumable goods and services in exchange for a financial and (or) non-financial benefits while at the same time assume the risk of self-employment.

Before the advent of the COVID-19 pandemic, self-employment figures skyrocketed throughout the World. The ILO reported that the percentage of self-employed worldwide in the year 2022 stood at 46.6% of total employment with high-income countries having a lower percentage of independent workers (12.1%) and low-income countries with the highest percentage of independent workers (81.1%) thereby showing an inverse relationship between the level of economic development of a country and its self-employment rate. The fact that the poorer economies often fail to fulfill the needs of their citizens and the people seek alternative ways to earn a living is responsible for the high rates of self-employment in developing countries. With the World average of 46.6% self-employed, Greece tops the charts in Europe with a self-employment rate of 31.9%. This is followed by the UK with a rate of 15.5%. In Asia, India is top of the chart with a self-employment rate of a whopping 75.8% followed by China with 44.7%. South America is dominated by Columbia with a self-employment rate of 49.9% while the US has a self-employment rate of 6.1%. In Africa as well as in the world, Niger is the country with the highest rate of self-employed accounting for over 95% of the total employment of that country (Buchholz, 2021).

The International Labor Organization (ILO, 2013) reported that the rate of unemployment in Cameroon was 30% with an underemployment rate of 75%. According to the report, even without much consideration, there are about 4-6 million able young people who are mostly educated and ready to work in Cameroon but are unemployed (ILO, 2013). The self-employment rates in Cameroon though high, have witnessed a steady decrease. In 2010, the number of self-employed stood at over 80%. However, it experienced a decrease to 75.23% in 2022. (Buchholz, 2021). It can be observed that the rates in Cameroon are not only high but almost twice the world average, in close competition with that of India. (Kahando & Mungai, 2018).

According to the World Bank (2016), self-employed individuals in Cameroon face the problem of access to finance. This problem occupies the 3rd position in the overall difficulties faced by entrepreneurs in Cameroon with a score of 30.7%, preceded by the taxation policies (53.5%) and administrative formalities (34.2%). Research has shown that a good number of self-owned enterprises in Cameroon do not reach their 5th birthday. Most of them close their doors due to the problem of financing. The inability for them to reach their 5th birthday can be attributed to their bad financial situation. This is worsened by poor bookkeeping systems, inadequate loan size, high-interest rates, cumbersome loan application procedures, failure to disburse loans timely, information gap about finance, inconvenient loans, fear of business failure, short loan durations, little or no guarantee from the government (Ngassa et al. 2020). As a result, Cameroon is ranked 167th position out of 190 in the business environment category and 80th position in getting credit in the World Bank Doing Business 2020 report (World Bank, 2020).

Technical education deals essentially with skills acquisition. When youths acquire skills from technical education, it helps prepare them for jobs with specific needs and gives them the strength to be self-employed. This will eventually lead to higher productivity because there will be competency, interest, and job satisfaction. (Aina & Gbenga, 2015). However, there are concerns about the existing technical education system in the country. Equipment are often inadequate and in some cases obsolete. Students are therefore pruned to learning theories making them not different from their general education counterparts. A cause for concern so to say.

Nevertheless, because of the importance and almost inevitable role self-employment plays in various economies in the world and most especially in those of developing countries, many governments have tended to employ means in promoting self-employment. The issue has received much attention from the Cameroon government given that it is a means to solve the unemployment of youths in the country. In 2004

in order to improve and reinforce the self-owned business environment, the government established a new ministry called "the Ministry of Small and Medium Size Enterprises and Craft". The main mission was to facilitate access to finance for SMEs through financing institutions as well as guaranteeing mechanisms (Abang, 2012 as cited in Berinyuy et al., 2022).

Also the government in a quest to improve the situation of self-owned businesses in the country, opened the bank for SMEs. This bank specializes in financing self-owned businesses and crafts. To achieve its missions, BC-SME as it is mostly called, has two motives which include, financing self-owned businesses and financing craft. The bank is expected to open branches in all regional headquarters including Bamenda in the North West region. The presence of this Bank has improved the credit position of Cameroon in the World Doing Business Report from 109th position in 2014 to 80th position in 2020.

Furthermore, the government in a bit to mitigate the problems arising from unemployment, has in one way or another put in place measures to encourage self-employment among youths in Cameroon. This can be seen in the recent drive by the State to facilitate the creation of enterprises in her ONE-STOP-SHOP policy. This policy warrants the creation of an enterprise in Cameroon in at most 48 hours, which is far more different from the months and even years the process usually took. Also, the recent enterprise exhibition dubbed PROMOTE serves as a sellout for Cameroonian enterprises and individual employment skills within and out of the country. Thanks to this exhibition, grants and/or aids have been given to prospective self-employed citizens to boost their businesses.

The Cameroon government has established the National Civic Service for Participation in Development (NCSPAD) placed under the Ministry of Youth Affairs and Civic Education. The primary aim of this service is to empower youths both technically and financially so as to enable them to be self-employed. As of 2020, 13.000 conscripts had been trained nationwide (Nkeze, 2020). The head of state in his 2015 ritual message to the youths, promised to disburse a special sum of 102 billion francs CFA for the promotion of self-employment.

From the above note, given the numerous measures taken to improve access to finance and skills needed for self-employment, it is obvious that the intention of the state as regards the promotion of self-employment has been genuine. But despite all these, it has been observed that only a few people took the initiative to create jobs for themselves. The current research work, therefore, is intended to examine the part played by technical education and availability of finance in the creation of self-employment in the Ndop Central sub-division of the North West region of Cameroon. Specifically, the study seeks answers to the following questions;

- How does technical education influence self-employment in the Ndop Central sub-division?
- How does the availability of finance influence self-employment in the Ndop Central sub-division?

2. Review of Literature
2.1 Theoretical Considerations

The Human capital theory (Becker, 2009) and the Credentialist theory (Collins, 1979) are the main theories used for this research work.

The human capital theory assumes a linear, clear, and direct relationship between education credentials and economic development (Becker, 2009). It assumes that firms will adapt their production process to changes in the relative supply of labor if there are changes in the labor market and not the other way around. The theory argues that higher earnings are possible for individuals who invest in education over time and have access to greater labor market scope and better career development opportunities. Furthermore, the human capital theory contends that because the education job mismatch is a negligible phenomenon, the forces of demand and supply should naturally correct such a mismatch. It also considers the education-job mismatch as a short-run phenomenon whereby individuals in mismatched jobs acquire more human capital and later

on move to jobs that fit their qualifications (Boudarbat & Chernoff, 2010). The theory assumes that most educated people are productive and therefore create or secure the best jobs (Allen & De Wert, 2007). According to the Credentialists, the relationship between educational credentials and employment is that a rise in graduate credentials is not directly equal to the economic value for more highly educated individuals (Collins, 1979). Proponents of this theory argue that the enlargement of higher education results in a corresponding upsurge in the number of people in possession of such credentials. Historically, Credentialism stipulates that elite higher education provided graduates with better access to labor market outcomes (Brown, 2000). However, a rise in the number of people with higher educational certificates has resulted in a fall in the value of such credentials in the labor market. Research carried out by Tomlinson (2007) questioned the economic demand for the increasing supply of graduates in the labor market and the possibility of the labor market accommodating this increase in graduate credentials. Advocates of the credentialism theory therefore hold the view that increasingly, over-qualified graduates are taking jobs in the labor market that were once meant only for non-graduates resulting in a mismatch between their educational qualification and labor market applicability (Battu et al., 2000; Brynin, 2002). As a result, the need to become self-employed increases among graduates once they discover that they do not have a place in the labor market.

2.2 Empirical Literature

A good number of researchers have examined the determinants of self-employment in a variety of countries. The works reviewed here are those that have relevance to our focus of investigation. This is to make the established gap more visible.

Awan and Ibrahim (2015) contend that the unemployment problem is one of the key problems in developing countries like Pakistan. Self-employment, according to them, is a part and parcel of society as a good number of people belong to the business sector. Based on primary data from Bahawalpur City, the study used bivariate regression analysis to check the relationship between different socio-economic determinants and self-employment. Results from data analysis carried out indicated that self-employment is greatly influenced by education, sex, age, marital status, family wealth, micro-finance, technical skill, and loan purpose. The researchers concluded that microfinance has a highly significant positive impact on self-employment. The researchers recommended that the government should emphasize technical education rather than general education. Ayele (2014) in his thesis submitted to Addis Ababa University examined the determinants of youth self-employment in selected cities of Addis Ababa. A sample of 708 self-employed workers was chosen to respond to the questionnaires at the Wereda level, wherein the researcher employed descriptive statistics for analysis. The study found that the age of the workers and economic independence have significant positive effects on self-employment. Moreover, dissatisfaction with the current working wage and educational attainment also had a positive significant effect on workers' decision to choose self-employment. Based on the findings, the researcher recommended that the government should formulate policies that promote the economic determinants so as to enhance the decision to be self-employed by youths in Addis Ababa.

Also, Fatima & Yousaf (2015) in their study on the Determinants of Self Employment in Rural Pakistan postulated that self-employment is the number one source of job opportunities in the developing world given the few avenues for salary employment available. The Household Integrated Economic Survey (HIES) was used as primary data for the study. This survey was carried out by the Pakistan Bureau of Statistics in the year 2010-11. A reduced-form Probit equation model was used to measure the effects of regional and personal characteristics on the decision to be self-employed. Gender, age, and marital status were all seen to have an effect on self-employment. In general, being married, being older, and being a male leads to a higher chance of self-employment. Assets and household size were significant influences in only some of the regions. With regard to the results, the researchers recommended that imparting technical skills to individuals and training workshops would help people gain entry into the self-employment sector.

Gaetsewe (2018) in a working paper for the Botswana Institute for Development Policy Analysis employs the logit regression model to investigate the determinants of self-employment in Botswana. The study used the 2009/2010 Botswana Core Welfare Indicator Survey (BCWIS). The results revealed that individuals who are living in cities, males and educated have a lesser chance to be self-employed than their counterparts. It was also seen that being a widow and the age of the entrepreneur has a positive influence on self-employment. Given the results, the researchers recommended that public policy needs to empower rural dwellers and females to gain more skills and entrepreneurship training in order to foster their success in their self-employment activities. In the work of Morrar et al. (2021), the authors examined the determinants of self-employment entry of Palestinian youths. Using a multinomial logistic (MNL) research design, a micro-level longitudinal data set from the Palestinian Labour Force Surveys (PLFS) between 2009 and 2016 was employed. The study had convincing evidence that the chances of being self-employed increase with age. With regard to the role of gender, results showed that young women are less likely to become self-employed than young men. Results also indicated that there was a negative significant impact of an increasing level of education on self-employment entry for both youth and the whole population. The researchers therefore called for national programs and social protection programs that would promote and develop women's self-employment with small business grants and training to facilitate the process.

In the same line, Faridi et al. (2016) investigated the Determinants of Self-Employment in Pakistan. The sample of 494 workers residing in Bahawalpur district were sampled for the study. The researchers employed the Logistic Regression technique to measure the determinants of the self-employment model. The study concluded that the age of the workers as well as their experience all have a significant positive influence on self-employment. Additionally, good health and educational attainment were seen to have a positive significant influence on workers' decision to be self-employed. Based on the results, the researchers suggested that the government should provide agricultural and technical education at basic and secondary levels to the workers. Minola et al. (2016) studied the interplay between age and culture as drivers of self-employment motivation. The authors examined cross-sectional age differences in self-employment feasibility beliefs and desirability within different cultures. They made use of individual-level data from the 2012 Flash Eurobarometer survey collected in 21 countries with a total of 13,963 individuals involved. The results indicated that the individual factors affecting self-employment are intertwined between age and culture. The results point to the importance of various mechanisms in enhancing the entrepreneurial potential of individuals with different cultures, different ages, and self-employment motivation. As a result, it was recommended that policymaking should consider the culturally embedded nature of entrepreneurship. Vlachos in the year (2016) examined the determinants of Self-Employment in Greece: Exploring Business Start-Ups. Data used for the study came from the Global Entrepreneurship Monitor covering the period 2001-2008. This data was analyzed with a Logit model and seven hypotheses were tested. The findings indicated that educational attainment is inversely related only for males while age is not related to business start-ups. Also, males were seen to be less opportunity-driven than females. Lastly, the researchers noted that unemployment increases the chances of engaging in business start-ups. Mwita (2019) examined the determinants of Self-Employment intentions among students in Tanzania's Higher Learning Institutions. Mzumbe University was used as a case study where 400 respondents were drawn using a simple random sampling technique. A structured questionnaire was used to collect data. Data analysis involved multiple linear regression analysis. The study found that academic performance and gender had no significant relationship with the self-employment decisions of students while entrepreneurship education and having parents who are self-employed had a significant relationship with self-employment decisions. The study recommended that higher institutions of learning should have curriculums that guide towards acquiring entrepreneurship education sufficiently.

Also, Kahando and Mungai (2018) examined the influence of Cognitive Factors on Self-Employment Intention among Students in Technical and Vocational Education and Training in Kenya. Using a survey research design, a questionnaire was administered to 400 diploma engineering finalists sampled from 41 public institutes with the help of a simple random sampling technique. Multiple linear regression analysis was used to establish the relationship that exists between the variables. The results showed that there was a significant positive relationship between cognitive factors and self-employment intention. Also, it was seen that entrepreneurship education enhances cognitive factors and therefore strongly influences self-employment intentions. The study therefore encouraged the inclusion of entrepreneurship education as a compulsory course in TVET institutions in Kenya.

Thus most of the previous studies consider technical skills and access to finance as two major contributors to the level of self-employment in any country. Therefore, in this current study, we intend to see the relationship between the intention to start self-employment and the technical skill, and access to finance in the context of Cameroon.

3. Materials and Methods
3.1. Research Design and Data

The survey research design was used for this study. This design is selected for this study as it is ideal for remotely collecting data about populations that are too large, due to its unobtrusive nature. Furthermore, the design is good for cross-sectional studies (Singh, 2006) and can extract data that are near to the exact attribute of the large population and its standardized nature eliminates researcher bias (Kothari, 2004).

Data were collected from the Ndop Central sub-division of Ngoketunjia division under the North West region of Cameroon. It is made up of four villages- Bamunka, Bamali, Bamessing and Bambalang. Bambalang is the biggest of the four, followed by Bamessing, Bamunka, and lastly Bamali. The exact population of the Ndop Central sub-division is unknown. However, estimates put it at less than 100,0000 inhabitants. Therefore, to get the sample for the study, the researcher used the Krejcie & Morgan (1970) formula applicable to the unknown population size. 384 people were sampled for the study. These people were obtained through convenience sampling technique. This type of technique allowed the researchers to draw from a population that is more convenient and accessible for the study. In a country where recruiting participants for a survey is an uphill task, given the high level of 'respondent apathy', participation based on willingness is key. This situation therefore warranted the use of convenient sampling. The researchers went to the field for nine days with each three days targeting a different village. They moved from one enterprise to another explaining the purpose of their visit and pleading for time from the respondents. Those who accepted were given the questionnaires to answer. This process continued until the required sample was obtained.

Data were collected through a questionnaire survey. The questionnaire included personal information (such as gender, sex, marital status, and type of education), information on self-employment (employment status, parents' employment status, etc.), and determinants of self-employment (technical education, availability of finance, parental role model, and unemployment). Self-employment was captured in a binary form (self-employed or not). All independent variables were captured using four different constructs to which an index was built. Sample questions for technical education, included, "I started my own business because of the technical skills I learned from school". Regarding finance, the sample question was, "Easy access to finance make me create my own enterprise." As regards the unemployment variable, the sample question included, "I started my own enterprise because of not having alternative job opportunity." For parental role model, the respondents were asked, for example, "My parents' example push me into starting my own businesses." All the questions were measured along a five-point Likert scale.

3.2. Estimation Technique

This study intends to investigate whether technical education and access to finance amongst other factors matter in determining self-employment in Ndop Central sub-division of the North West Region of Cameroon. In order to achieve this objective, the study used a logit estimation technique. The logit model was suitable for the study considering the limited nature of our dependent variable (self-employed or not). The logit estimation falls under a group of models known as limited dependent variable models. Limited Dependent Variable (LDV) models are models in which responses are delimited in a way. Rather than being continuous on the real line (or half–line), the dependent variable is restricted. In some cases, the response variable is limited to a Boolean or binary choice, showing that a particular event happened or did not happen. For further illustration, let us consider a binary choice model in which the response variable is coded as 1 or 0, respectively relating to responses of True or False to a particular question. We could develop a behavioral model of this decision including several explanatory factors that we expect will affect the respondent's view of such a question. We can undoubtedly spot the problem in the linear probability model. Given the linear probability model below;

$$R_i = \beta_1 + \beta_2 X_{i2} + \cdots + \beta_k X_{ik} + U_i \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.(1)$$

The model shows that R_i is a set of continuous responses making the predictions of a linear regression model not to be bounded, unlike the case with binary which is bounded. If we use OLS to run the above model, we get answers that fit. However, if the model was written as,

$$\text{Logit } p_i = \log\{ \frac{Pi}{1-Pi} \} = \beta_1 + \beta_2 X_{i2} + \cdots + \beta_k X_{ik} + U_i \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.(2)$$

Using OLS for estimation can give rise to negative predictions and predictions exceeding one, which in either case cannot be considered as a probability. Therefore, the estimation technique required is the logistic technique. This is so because as the response variable is bounded to take on values of (0,1), it is expected to generate a predicted probability that person i will choose to answer true rather than false. In such a framework, if $\beta_k > 0$, those individuals with high values of X_k have more chances of choosing True as a response with the probability of doing so respecting the upper bound.

The estimated model is therefore written as;

$$\ln (SE) \frac{P(Self-employed)}{1-P(Self-employed)} = \beta_0 + \beta_1 TED_1 + \beta_2 AVF_2 + \beta_3 UNT_3 + \beta_4 PES_4 + \beta_5 AGE_5 + \beta_6 SEX_6 + \beta_7 MAS_7 + \mu)$$

Where;

TED is Technical Education

AVF is the Availability of finance

UNT is Unemployment

PES is Parents' employment status

AGE is Age

SEX is Sex

MAS= Marital status

u= the error term

β_0= the intercept term

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7$, are parameters to be estimated.

4. Presentation and Discussion of Results

4.1 Reliability of Constructs

The degree to which a measurement of a phenomenon yields steady and reliable data is referred to as reliability. Therefore, consistency is a concern. The reliability test is determined or justified using

Cronbach's alpha value. The internal consistency metric, Cronbach's alpha indicates how closely connected a group of items are to one another. Conventionally, a Cronbach's alpha of 0.70 and higher is considered to be good, 0.80 and higher is better, and 0.90 and higher is considered to be the best. The reliability test findings as given in Table 1 below, reveal that the data is reliable because the mean Cronbach's alpha is greater than .70.

Table 1: Reliability Analysis

Constructs	Items	Cronbach alpha
Technical education	4	0.625
Availability of finance	4	0.873
Parents role model	4	0.792
Unemployment	4	0.961
	Total= 16	Mean= 0.812

Source: Field survey (2023)

4.2. Normality Test

Skewness evaluates a distribution's asymmetries. It shows if the data has a leftward or rightward skewness (positive or negative skewness). Zero skewness indicates that the data is normally distributed, with similar values on either side of the mean. Kurtosis estimates a distribution's peak or flatness in relation to a normal distribution. It suggests the presence of outliers or extremely high or low numbers. A distribution with a higher center peak and heavier tails than the normal distribution is said to have a positive kurtosis value (a leptokurtic distribution). A distribution with lighter tails and a flatter core is indicated by a distribution with a negative kurtosis value (platykurtic distribution). The results of the normality test are presented in Table 2.

Table 2: Normality Test

	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Skewness		Kurtosis	
					Statistic	Std. Error	Statistic	Std. Error
TED	1.00	5.00	4.2769	.82814	-1.466	.125	2.256	.248
AVF	1.00	5.00	4.1100	.78233	-1.684	.125	2.956	.248
PES	1.00	5.00	4.0221	.78964	-1.170	.125	1.530	.248
UNT	1.00	5.00	4.5540	.54062	-1.274	.125	.977	.248
SE	1.00	5.00	.65	.479	-.612	.125	1.634	.248
Valid N (listwise)	384							

Source: Field survey (2023)

The mean value is provided, and the standard error is in parentheses. The result indicates that technical education (TED) is 4.27 (.828), availability of finance (AVF) is 4.11 (.781), parental employment status (PES) is 4.02 (.789), unemployment (UNT) is 4.55 (.540) and Self-employment (SE) is .65 (.479). The results of the skewness and the kurtosis reveal that the data is normally distributed, with the z score ranging from -2 to +2.

4.2 Results

Results from the table 3 reveal that the male gender coefficient is positive (0.813) which implies that males are more likely to be involved in self-employment as compared to women. Being a man increases the likelihood of being self-employed by 10.26%. This result is in conformity with our theoretical expectations. It also conforms to the findings of Fatima & Yousaf (2015), Gaetsewe (2018), and Morrar et al. (2021), who found a positive effect of male gender on self-employment. As highlighted, many studies have proven

that men are less averse as compared to women and thus, may be more likely to join self-employment than women. Going by the significance of the finding, the coefficient of the male gender is significant at 10% given that the P-value is lower than 0.1 (10%).

Table 3: Logit Results

Variables	Coefficients	Marginal Effects	P-value
Gender (MALE)	0.813*	0.1026*	0.098
	(0.491)	(0.0760)	
Age group 25 – 35	-1.5427	-0.1904	0.520
	(2.3738)	(0.2790)	
Age group 35 – 45	1.635**	0.0999**	0.023
	(0.893)	(0.044)	
Age group 45 – 55	2.67127*	0.20299*	0.061
	(1.3989)	(0.1049)	
Technical education	-2.6581***	-0.1280***	0.005
	(0.9164)	(0.0771)	
Marital status (SINGLE)	-0.6909	-0.0820	0.422
	(0.5668)	(0.6295)	
Parental role model	0.307	0.0334	0.390
	(0.499)	(0.2683)	
Availability of Finance	-0.0632	-0.0071	0.317
	(0.469)	(0.5685)	
Unemployment	3.9830***	0.4984***	0.001
	(1.3903)	(0.1103)	
Constant term	15.76		0.989
	(1178)		
LR Chi 2 (9)	15.79		
Prob > (chi 2)	0.0455		
Number of Obs.	384		

Source: Field survey (2023)

Two age groups were automatically dropped by Stata software for the reason of multicollinearity. However, the age group 25 – 35 coefficient is negative (-1.5427) implying that there is a negative effect of this age group on the probability of being self-employed. In terms of marginal effect, individuals aged between 25 and 35 years are 19.04% less likely to be involved in self-employment. However, this finding is statistically insignificant given that the p-value is greater than 10%. Furthermore, the coefficients of the age group 35 – 45 and age group 45 – 55 are positive. These outcomes mean that these age groups increase the probability of individuals joining self-employment. From the marginal effects, we can observe that age group 35 – 45 increases the likelihood of joining self-employment by 9.99% while age group 45 – 55 increases the probability of being self-employed by 20.3%. Both results are significant though at different levels (5% and 10% respectively). We can conclude that as the individual grows older, the likelihood of being self-employed increases. These results fall in line with our a priori expectations. The findings also confirm the results of Morrar et al. (2021), Faridi et al. (2016), and Awan & Ibrahim (2015) who claimed that self-employment increases with age. However, contrary to Kidd (1993) who found out that though self-employment increases with age, the rate of increase decreases over time, we discover that the likelihood of self-employment increases at an increasing rate for the age group retained for the analysis. This is also not in accordance with the findings of Vlachos (2016), who found out that age is not related to business start-ups.

Another variable that affects self-employment is technical education. Contrary to our a priori expectation, the coefficient of technical education is negative (-2.6581). This finding signifies that graduates from the technical system of education are less likely to join self-employment as compared to graduates of the general system of education. Going by the marginal effect, technical education reduces the chance of being self-employed by 12.80% as opposed to general education. This result is statistically significant at 1% since the p-value (0.005) is lower than 0.01 (1%). According to Gbenga et al. (2012), technical education prepares youths for any type of job as the skills acquired give them a lifelong opportunity and competence to perform their job successfully and efficiently. Also, Kahando and Mungai (2018) found a positive significant relationship between technical education and self-employment in Kenya. As such, this result can be backed by the fact that technical education graduates in Cameroon are not as many as those from the general education which reduces competition in the labour market and then increases their likelihood of joining paid jobs. On the other hand, the high flux of general education graduates into the labour market makes it difficult for many to find a job which leaves some of them with no other option than to start up their own businesses.

The marital status coefficient is negative '(-0.6909) meaning that single individuals are less likely to enroll in self-employment. Said otherwise, single marital status reduces the probability of joining self-employment by 8.20%. This result can be explained by the fact that most singles are individuals below a certain age with no or very little family responsibilities and therefore very little financial pressure to sustain. They may still be willing to exercise patience in terms of joining paid jobs, especially in the public sector, and may not quickly join self-employment when there is still hope. Going by the significance level, the coefficient was found to be statistically insignificant. Fatima and Yousaf (2015) found a positive relationship between being married and self-employment, a result which is in tandem with that of this study. However, Gaetsewe (2018) on the other hand found out that being a widow increases the likelihood of being self-employed.

Unlike marital status, there is a positive relationship between parents' employment status and self-employment. In other words, individuals whose parents were/are self-employed are more likely to join self-employment. Parents' employment status increases the chance of being self-employed by 3.34%. This result can be explained by the role model played by parents. This result conforms to our a priori expectation. It also falls in line with the finding of Mwita (2019) who claimed that children of self-employed parents are more likely to join self-employment in Tanzania. This is usually achieved through the transfer of management ownership from parents to children. However, our result is not significant.

Availability of finance has a negative effect on the probability of self-employment as the coefficient of Availability of finance (-0.0632) is negative. Contrary to expectation, individuals who have easy access to loans stand fewer chances to join self-employment. This result is surprising but can be explained by the fact that those who easily have access to credit in Cameroon are civil servants or salary owners in general being it in the public or private sector. It is therefore difficult for self-employed individuals to sustain a loan. Financial institutions in Cameroon view this category of people as high-risk. However, this outcome is statistically insignificant at conventional levels of significance. Awan & Ibrahim (2015) found that loan purpose affects self-employment in Pakistan.

Further results indicate that the coefficient of unemployment is positive revealing that unemployment increases the likelihood of involving in self-employment. Unemployed individuals are 49.84% more likely to be self-employed as compared to people who are employed. This result conforms with our theoretical expectations. However, this finding contradicts the results of Simpson & Sproule (1998) and Blanchflower & Oswald (1990) who found a negative association between self-employment and unemployment. The inability of individuals to find a job can push them into entrepreneurship. The coefficient of unemployment is significant at 1%.

It is worth noting that the overall model was statistically significant at 5% given that the Prob > (chi 2) = 0.045 is lower than 0.05 (5%) which implies that all the explanatory variables included in this model jointly and significantly explain the probability of being involved into self-employment.

5. Conclusion and Policy Implications

This study has attempted to shed some light on whether technical education and the availability of finance matters for self-employment in the Ndop central sub-division. The analysis showed that contrary to our a priori expectation, the coefficient of technical education was negative signifying that graduates from the technical system of education are less likely to join self-employment as compared to graduates of the general system of education. Surprisingly, the availability of finance was also seen to have a negative effect on the probability of being self-employed, meaning individuals who have easy access to loans stand fewer chances to join self-employment. To this end, the researchers concluded that technical education and availability of finance do not matter for self-employment in the Ndop central subdivision. A controversial conclusion yet, valid as seen from the preceding discussions.

Granted that the future of Africa, Cameroon, and Ndop central subdivision in particular lies on building millions of entrepreneurs, the following policy recommendations can be made to the different stakeholders; First and foremost, the concept of technical education should be revisited in Cameroon. It is pointless to have a system that is meant to reduce the unemployment rate in the country but does little or nothing to improve it. Else how can we explain the fact that graduates from the technical system of education are less likely to join self-employment as compared to graduates of the general system of education? It is absurd! The key instrument in the betterment of our technical education is the availability of equipment. Without equipment, we are running general education in the guise of technical education. It is the presence of equipment that distinguishes technical education from general education. In this light, the budgets of technical schools should be increased so that the necessary equipment can be obtained for practical sessions. If not done, we will continue to see situations where an automobile mechanic student cannot fix a basic mechanical problem in a vehicle after seven years of studies Or the fact that an electronic student cannot repair a simple television fault in their house after seven years of studies. The government should therefore sit up and do what is right. In the same light, more vocational training schools should be opened by the Ministry of Employment, and vocational training added to the already existing ones to train school dropouts or those willing to be self-employed in any form of job opportunity. Examples of such schools include the vocational training school in Ndop and that in Limbe in the southwest region of Cameroon.

The government should provide subsidies and (or) startup capital to those who are willing to be self-employed so as to enable them to start up their businesses in a secure atmosphere. The bank for SMEs which was recently created should play its main role which is to provide loans to these groups of people hence there should be no discrimination, and no corruption, and the loans should be provided just to them. In the same vein, the national civic service for participation in development should be empowered with more resources to train those willing to take up initiatives to be self-employed. The little packages given to them at the end of the training could also be increased to help them start up something good for themselves. Lastly, we are recommending that common initiative groups (CIG) or trade unions be created by the self-employed according to the type of businesses they perform. These will permit them to have easy access to loans, to be united, and to defend their rights whenever they are confronted with problems.

6. Limitations and Direction for further study

The fact that this work is limited to only the Ndop central sub-division is a bias in itself. This is because the views of many people have not been taken into consideration thereby hampering confident generalizations. To improve on this, the same study can be expanded to consider other parts of the country or the country at large. Also, the use of convenience sampling never results in a statistically balanced selection of the population, thereby leading to bias. Future researchers may want to consider using a probability sampling technique so as to avoid this.

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