Impact of Behavioural Factors as Related to Available Resources on Entrepreneurial Intentions of Electrical Installation and Maintenance Works Students*

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This paper investigates behavioural factors as a mediator between resources and entrepreneurial intentions among electrical installation and maintenance works (EIMW) students in technical colleges in Nigeria. The study used different approaches to analyse the data collected and structural equation models were used in the empirical analysis. The study found out that the more access EIMW students have to financial resources and tools and equipment, the more positive their attitude, perceived behavioural control and perceived efficacy but not subjective norms. Also, the more positive the students attitude towards starting a new business, the higher their entrepreneurial intentions. This study stimulates the Technical and Vocational institutions to seek collaboration between institutions and industry to bridge the gap between theory and practice through industrial training. It shows that access to resources stimulates students' behaviours towards entrepreneurial intentions and it is mediated by attitudes, subjective norms, perceived efficacy and perceived behavioural control.

Keywords: entrepreneurial intentions; attitude; perceived behavioural control; perceived efficacy; subjective norms; electrical installation and maintenance works

1. Introduction

Unemployment has remained a major problem in many parts of the world especially Africa. The level of unemployment has continued to rise in most African countries especially, Congo, Namibia, South Africa, Lesotho, Swaziland, Mozambique, Nigeria, among others. According to [1], Nigeria is ranked seventh in Africa on the level of unemployment with 23.1 per cent unemployed persons in the population as at September 2018. This problem has affected many Nigerian youths, especially those between 15 and 30 years. According to [2] youth unemployment rate in Nigeria averaged 23.63 per cent from 2014 until 2018, reaching an all-time high of 38 per cent in the second quarter of 2018. This problem could be attributed to economic instability which has driven the nation into economic recession, increase in population which made the readily available jobs insufficient for the entire population or migration of people from one place to the other. In the search for jobs many had died when stampeded upon in the quest for the job meant for 4,500 people with over 125,000 applicants across the nation [3]. The high level of unemployment among the youths requires urgent attention to entrepreneurship. This will help to increase the intentions of graduates towards entrepreneurship thereby, reducing unemployment among youths.

Entrepreneurial intention is based on the theory of planned behaviour by [4] which views intention as the best predictor of behaviour. According to [5] any behaviour requires some planning, the act of creating a new business can be predicted according to the intention adopted by a given individual. The theory comprises such variables as attitude towards behaviour, perceived behavioural control and subjective norms which are important determiners in individual's intention to venture into any enterprise. In addition to financial and human resources which were studied by the previous researchers, the present study also focused on the tools and equipment, as well as other material resources. Availability of resources is a strong motivator of an individual's entrepreneurial intention. This gives the individual a competitive advantage that leads to success [6]. The resource-based theory by [6] contends that the possession of strategic resources provides an organisation with a golden opportunity to develop competitive advantages over its rivals. These competitive advantages, in turn, can help the organisation enjoy strong profits [7].

Entrepreneurship could be defined as establishing and running a business. It is the act of identifying and venturing into a business that leads to job creation and profit making. It is important to determine available resources and how accessible they are to the individual before talking about the

individual's behaviour towards becoming an entrepreneur. This is one of the major emphases of the resource-based theory. The entrepreneurial intention of an individual is manifested in the entrepreneurial behaviour of the individual, which is in line with the Theory of Planned Behaviour (TB) by [4]. The major component of the theory includes: attitude towards behaviour, perceived behavioural control and subjective norms.

The main aim of this study is to determine the mediating role of behavioural factors (attitude, subjective norms, perceived behavioural control and perceived efficacy) with respect to available resources (financial, human, tools and equipment, materials) and entrepreneurial intentions of EIMW students. Previous researches have concentrated on the influence of human and financial resources on the entrepreneurship intentions with little or no study on other variables such as tools, equipment and other materials [8, 9]. The core contributions of this study is based on the fact that previous studies of behavioural mediators between resources and entrepreneurial intention ignored some elements of resources such as students' access to tools and equipment and materials, perceived behavioural control for behavioural factors, business climate and students' education level as variables. Also, while previous studies have been carried out in Europe and other developed countries, little or no study has been carried out in this regard with respect to African countries [10-13]. Again, while previous studies were concerned about general businesses with little or no emphasis on skilled/production businesses, this study focused on the graduates of Electrical Installation and Maintenance Works (EIMW). This is as a result of the importance of Vocational and Technical Education as a solution to unemployment and ensures a technology-driven economy. This research studied EIMW students who are potential entrepreneurs and are expected to fight unemployment and become drivers of the economy.

1.1 Electrical Installation and Maintenance Works in Technical Colleges

Electrical Installation and Maintenance Works (EIMW) is an area of specialization in Vocational and Technical Education programme of technical colleges in Nigeria. It is designed to impart knowledge and practical skills in different engineering trade areas such as house wiring (conduit and surface), coil winding and re-winding, electrical gadgets repairs, installation and maintenance of electrical machines, battery charging, installation and maintenance of electric motors, among others. The EIMW programme is one of the Vocational and Technical Education (VTE) programmes which

provides training leading to the production craftsmen and technicians who could either secure employment at the end of their training, set up their own businesses or further their studies in Polytechnics, Colleges of Education (Technical) and Universities (National Board for Technical Education, [14].

1.2 Resources and Entrepreneurial Intentions

Entrepreneurial intentions simply means desire of becoming self-employed, working for oneself, being a founder or leader of one's business or being and entrepreneur. Entrepreneurs refer to individuals who start their own business [15]. Entrepreneurship is an opportunity to discover any new business and venture into it so as to make profit by investing scarce resources. Creating awareness about the importance of entrepreneurship can change students' beliefs about engineering especially in Electrical Installation and Mentainance Works (EIMW) trades and increase students' interest in engineering career [16]. Entrepreneurship entails cocreating, evaluating and exploiting opportunities in production and services [17, 18]

The theory of planned behaviour identified attitudes, subjective norm and perceived behavioural control as the major determinants of entrepreneurial intentions [4]. Attitude, the degree to which a person has negative or positive assessment about being an entrepreneur, can be grouped into two; perceptions of desirability and feasibility [19, 20]. Perceived desirability is the personal attractiveness of a specific behaviour such as starting a business enterprise and becoming an entrepreneur [13, 21]. Perceived feasibility on the other hand, shows perceived behavioural control where there is perceived situational competence [19, 4) hence the capacity to carry out the respective behaviour [21]. Becoming an entrepreneur is beyond mere intention, it is about actions. It is the extent to which entrepreneurial intentions translate to actions that matters [22]. Translation of intentions to actions can also rely on individual's subjective norm.

Subjective norms indicate perceived social pressures to engage or not to engage in behaviour. Furthermore, perceived behavioural control refers to a person's perception of the ease or difficulty of performing the behaviour of interest [22]. However, where a person has strong control over his or her behaviour, intention to start a business is dependent on attitude and social norm. In this case, the effect of perceived behavioural control is mediated by intentions (4, 22]. The staring presence of unemployment amongst graduates in Nigeria, increasing unstable career path [18] suggest strong intentions towards entrepreneurship. Due to inadequate empirical evidence on technical college EIMW students' entre-

preneurial intentions, we hypothesize based on [4] theory of planned behaviour thus:

H₁. The more positive the attitude (a), subjective norms (b), perceived behavioural control (c) and perceived efficacy (d) of EIMW students towards starting a new business, the higher their entrepreneurial intentions.

Intention to become an entrepreneur has been widely investigated with relation to exogenous, situational and personal factors [23, 24]. In particular, entrepreneurial intention model [18] has been used by several researchers to explain the effect of exogenous factors on intentions [25, 26]. This theory unlike other theories takes cognisance of the influence of capitals (human, financial, materials, etc.) on entrepreneurial behaviours. This theory explains the land slide effect of environmental factors on entrepreneurial attitude, subjective norm and perceived behavioural control to starting up a new business [27, 28].

Access to resources (financial, human, materials, tools and equipment) may be directly or indirectly available to the students' which is a precursor to the students' entrepreneurial behaviour as explained by the theory of entrepreneurial intention model [20]. Accessibility to resources has a significant positive relationship with entrepreneurial behaviour [29]. Availability of critical resources (financial capital, human and social capital) is the most important determinant of entrepreneurial process [12]. Therefore, following the theory of entrepreneurial intention model, resources serve as a link between entrepreneurial behavioural factors (attitude, subjective norms, perceived behavioural control and perceived efficacy) and entrepreneurial intentions [12] stated that availability of resources is the most important determinant of the entrepreneurial process, and the critical resources are financial capital and human and social capital. Hence, the following hypotheses:

- H₂. The more access to human resources EIMW students have to start a business, the more positive their attitude (a), subjective norms (b), perceived behavioural control (c) and perceived efficacy (d) towards entrepreneurial intentions.
- H₃. The more access to financial resources EIMW students have to start a business, the more positive their attitude (a), subjective norms (b), perceived behavioural control (c) and perceived efficacy (d) towards entrepreneurial intentions.

Several researches on availability of resources and entrepreneurial environment are focused on the creation of new business and establishing firms [29] with less evidence on the determinants of entrepreneurial intentions. Entrepreneurial resource is glue that ties the knot between entrepreneurial intentions and actualizing the intentions (establishing business venture) [6]. But [10] notes that lack of access to resources affects entrepreneurial risk perception by leading individuals to underestimate their chances of success and be provoked to perceive weakness and threat while access to resources affects their risk perception by leading them to overestimate chances of success, provoking strengths and opportunities. Moreover, entrepreneurial intentions have gender influences [31]. Gender could sometimes be a hindrance to starting a business enterprise. Some cultures reserve certain types of work for a particular gender, of which entrepreneurial career path has male undertone. For instance [32] observed that technical/engineering courses in Nigeria have witnessed low female enrolment [33] found a positive relationship between sons and their fathers' self-employment. According to [34] gender is among those elements that are playing a significant role in moulding the career decision of an individual. Thus, we hypothesize that:

- H₄. The more access to tools and equipment EIMW students have to start a business, the more positive their attitude (a), subjective norms (b), perceived behavioural control (c) and perceived efficacy (d) towards entrepreneurial intentions.
- H_{5.} The more access to material resources EIMW students have to start a business, the more positive their attitude (a), subjective norms (b), perceived behavioural control (c) and perceived efficacy (d) towards entrepreneurial intentions.

1.3 Business climate and entrepreneurial intentions

In the changing business climate, it is essential for entrepreneurs to be able to cope with the varying degree of perceived uncertainty scanning and information processing and reach decision [35, 36] views business climate as the man made intangibles that have direct and indirect effect on people's behaviour and career choice. EIMW students are constrained to make entrepreneurial decision by the influence of this business climatic condition or by others previous experiences. On this, we hypothesize that:

H6. The more viable the EIMW students' business climate to start a business, the more positive their attitude (a), subjective norms (b), perceived behavioural control (c) and perceived efficacy (d) towards entrepreneurial intentions.

2. Methodology

The primary data was collected from the Electrical Installation and Maintenance Works (EIMW) students in technical colleges in Lagos State Nigeria

through a well-structured questionnaire measured on a 7 point Likert scale with 7 (strongly agreed) – 1 (strongly disagreed). The first part of the instrument measures the demographic content and the second part measures antecedents of intentions, which were recognized by the theory of planned behaviour, related to attitudes, resources (access to financial capital, access to human capital, access to materials, access to tools and equipment), Entrepreneurial Intentions (EI), perceived efficacy and business climate. The attitude contained five items that were adapted from [20] with a reliability coefficient of 0.927, subjective norm contained four items that were adapted from [13] with a reliability coefficient of 0.882 and perceived behavioural control contained five items that were adapted from [20] with a reliability coefficient of 0.757. Access to financial capital contained three items that were adapted from [37] with a reliability coefficient of 0.846, access to human capital contained four items that was adapted from [38] with a reliability coefficient of 0.922, access to material contained four items and access to tools and equipment contained four items. Entrepreneurial intentions contained five items that were adapted from [20] with a reliability coefficient of 0.85. Perceived efficacy contained four items that were adapted from [39] with a reliability coefficient of 0.84. Business climate contained seven items that were adapted from [20] with a reliability coefficient of 0.849. The sample for the study was 281 students however, 250 students completed and returned the questionnaire. The instrument for the study was subjected to content validity to ascertain the appropriateness of the questionnaire items. Three professionals from the Faculty of Vocational and Technical Education, University of Nigeria, Nsukka were required to validate the research instrument (two from Industrial Technical Education and one from Agricultural Education). These experts were requested to identify and make suggestions for improving the instrument towards meeting the objectives of the study. Each of the experts was served with a copy of the questionnaire and requested to identify any mistakes and make concrete suggestion for improving the instrument towards meeting the objectives of the study. These experts comment and suggestions were utilized to develop the final instrument for data collection. It was trial tested on 26 Electrical Installation and Maintenance Works (EIMW) students which were not part of the population. The reliability coefficient for attitude is 0.743, subject norm is 0.641, perceived behavioural control is 0.765, access to financial capital is 0.696, access to human capital is 0.515, access to materials is 0.744, access to tools and equipment is 0.734, entrepreneurial intention is 0.804, perceived efficacy is 0.748 and business climate is 0.815. Data was collected by hand through direct delivery method which involved the use of a research assistant in data collection. The instruments were retrieved as soon as they were completed in the presence of the school guidance and counsellor. A descriptive analysis of the students' responses determines the level of acceptance or rejection of the questionnaire items of the constructs shows that the respondents agreed to all the items. In this study, demographic factors which include students' age, education level and gender were controlled to minimize the possibility of alternative explanation. To further ascertain the level of degree of acceptance or rejection from the table of mean of the constructs, the variable items are subjected to a confirmatory factor analysis based on the procedure used by [40] with principal component analysis and the unrotated factor solution with Eigen values greater than 1. The adjustment measures were estimated using SPSS v.23 in the preliminary analysis.

Thereafter, an evaluation of the measurement of the model was carried out in two stages. At first the measurement model was estimated using confirmatory factor analysis (CFA) to test the goodness of fit of the measurement scale. The CFA confirmed the existence of the hypothesized factor structure with fit indices supporting an adequate fit between the model and the data, therefore, there is a good fit and the measurement model is robust (Satorra-Bentler χ^2 (250) = 334.42 (p = 0.000), the Bentler-Bonett normed fit index is robust (NFI) = 0.553, the Tucker-Lewis index is robust (TLI) = 0.27, the comparative fit index is robust (CFI) = 0.57, the Bollen's fit index is robust (IFI) = 0.59, goodness of fit index (GFI) = 0.80 and the root mean square error of approximation is robust (RMSEA) = 0.15. A scrutinized analysis of the variables and items shows that all have significant standardized coefficient values with a p – value < 0.01. Conclusively, the model is suitable for measuring the specified constructs based on the results.

This study adopted [41] methodology of average variance extracted and composite reliability. The composite reliability and the AVE were checked for entrepreneurial intentions (Cp = 0.73 and AVE =0.51), for attitude (Cp = 0.76 and AVE = 0.58), for subjective norms (Cp = 0.78 and AVE = 0.52), for perceived behavioural control (Cp = 0.67 and AVE= 0.52), for financial resources (Cp = 0.75 and AVE = 0.51), for human resources (Cp = 0.82 and AVE =0.61), for materials (Cp = 0.83 and AVE = 0.56), for tools and equipment (Cp = 0.71 and AVE = 0.58), for perceived efficacy (Cp = 0.79 and AVE = 0.53), and business climate (Cp = 0.79 and AVE = 0.59). All the values of composite reliability and AVE are above the recommended scale. This is in consonance with the assertion of [42] who predicted a value of

Table 1. Descriptive Analysis and Discriminant Validity

| Variables | X | SD | 1 | 2 | 3 | 4 | 5 | 9 | 7 | 8 | 6 | 10 |
|-------------------------------|------|------|---------|---------|---------|----------|---------|--------|---------|---------|---------|------|
| Attitude | 5.79 | 0.91 | 92.0 | | | | | | | | | |
| Subjective norms | 5.31 | 1.44 | 0.252** | 0.72 | | | | | | | | |
| Perceived behavioural control | 5.78 | 0.83 | 0.475** | 0.272** | 0.72 | | | | | | | |
| Access to financial resources | 5.61 | 1.19 | 0.451** | 0.198** | 0.348** | 0.71 | | | | | | |
| Access to human capital | 5.50 | 1.97 | 0.273** | 0.121 | 0.184** | **657.0 | 82.0 | | | | | |
| Access to materials | 4.75 | 1.20 | 0.030 | -0.100 | 0.049 | 650.0 | 0.042 | 0.74 | | | | |
| Access to Tools and equipment | 5.89 | 1.05 | 0.368** | 0.205** | 0.355** | 0.451** | **06£.0 | -0.020 | 0.76 | | | |
| Entrepreneurial intention | 5.02 | 1.11 | 0.501** | 0.166** | 0.385** | **\LSE.0 | **097'0 | -0.112 | 0.352** | 0.71 | | |
| Perceived efficacy | 5.79 | 96.0 | 0.390** | 0.240** | 0.487** | **/27* | **6L70 | 680.0 | 0.521** | 0.529** | 0.72 | |
| Business Climate | 4.55 | 1.58 | -0.010 | -0.001 | 0.181** | **881.0 | **7070 | -0.002 | 0.266** | 0.049 | 0.273** | 0.76 |

Note. * p < 0.05; ** p < 0.01.

Table 2. Mean, Standard Deviation and Correlations

| Attitude | 5.79 | 0.91 | 1 | | | | | | | | | | | | |
|-------------------------------|------|------|----------|---------|----------|----------|---------|---------|-----------------------------|----------|----------|--------|--------|---------|---|
| Subjective norms | 5.31 | 47.1 | 0.252** | 1 | | | | | | | | | | | |
| Perceived behavioural control | 5.78 | 0.83 | 0.475** | 0.272** | 1 | | | | | | | | | | |
| Access to financial resources | 5.61 | 1.19 | 0.451** | 0.198** | 0.348** | 1 | | | | | | | | | |
| Access to human capital | 5.50 | 1.97 | 0.273** | 0.121 | 0.184** | 0.259** | 1 | | | | | | | | |
| Access to materials | 4.75 | 1.20 | 0.030 | -0.100 | 0.049 | 0.059 | 0.042 | 1 | | | | | | | |
| Access to Tools and equipment | 5.89 | 1.05 | 0.368** | 0.205** | 0.355** | 0.451** | 0.390** | -0.020 | 1 | | | | | | |
| Entrepreneurial intention | 5.02 | 1.11 | 0.501** | 0.166** | 0.385** | 0.357** | 0.260** | -0.112 | 0.352** | 1 | | | | | |
| Perceived efficacy | 5.79 | 96.0 | 0.390** | 0.240** | 0.487** | 0.457** | 0.279** | 0.083 | 0.521** | 0.529** | 1 | | | | |
| Business climate | 4.55 | 1.58 | -0.010 | -0.001 | 0.181** | 0.188** | 0.202** | -0.002 | 0.266** | 0.049 | 0.273** | 1 | | | |
| Gender | 1.05 | 0.22 | -0.307** | 680:0- | -0.354** | -0.273** | -0.151* | -0.020 | -0.238** | -0.457** | -0.361** | -0.091 | 1 | | |
| Age | 1.89 | 0.63 | 0.017 | -0.006 | 0.026 | -0.080 | -0.105 | 0.101 | -0.112 | -0.018 | -0.029 | 0.087 | -0.045 | 1 | |
| Education level | 1.31 | 0.46 | -0.126* | -0.022 | 0.004 | -0.154* | -0.089 | 0.180** | 0.180** -0.277** -0.013 | | -0.047 | 0.008 | -0.120 | 0.279** | 1 |
| | | | | | | | | | | | | | | | |

Note. * p < 0.05; ** p < 0.01.

0.7 and above for composite reliability and a value of 0.5 and above for Average Variance Expected. This gives a good convergent validity for the study [43]. The discriminant validity of the study was carried out with the square root of the AVE and is compared with the correlations of the constructs in Table 1. It can be seen that the square root of the AVE for the constructs is higher than their correlations; it shows that each construct relates strongly to its measure than to others. Also, Table 2 shows the means, standard deviation and correlations between the variable of the proposed model. The variables show a positively significant correlation.

3. Presentation

The adjustment measures of the structural equation modelling are within the parameters recommended, therefore, there is a good fit (Satorra-Bentler χ^2 (250) = 334.42 (p = 0.000), the Bentler-Bonett normed fit index is robust (NFI) = 0.553, the Tucker-Lewis index is robust (TLI) = 0.27, the comparative fit index is robust (CFI)= 0.57, the Bollen's fit index is robust (IFI) = 0.59, goodness of fit index (GFI) = 0.80 and the root mean square error of approximation is robust (RMSEA) = 0.15.

In view of the model path, the standardized regression estimate of students' entrepreneurial intentions describes the level of degree of influence of resources and behavioural factors on entrepreneurial intentions. The statistical significance of SEM components was based on the assertion of [44] at the significance level of 0.01. Therefore, students' access to resources has direct effect on entrepreneurial intentions.

The structural equation model of electrical installation and maintenance work students in Fig. 1 shows that it is appropriate to have used theory of planned behaviour of [4].

The attitude towards entrepreneurship have positive and significant influence on entrepreneurial intention ($\gamma = 0.336$, p < 0.01). Also, subjective norms have a negative and an insignificant influence on entrepreneurial intentions of EIMW students ($\gamma = 0.033$, p < 0.01). Likewise, EIMW students perceived behavioural control have insignificant influence on their entrepreneurial intentions (γ = 0.019, p < 0.01) and there is a positive and significant effect of perceived efficacy on entrepreneurial intentions of EIMW students ($\gamma = 0.397$, p < 0.01). The result of the study showed that EIMW students attitude, perceived behavioural control and perceived efficacy positively influence their entrepreneurial intentions while subjective norms have a low influence on their entrepreneurial intentions. This result aligns with the theory of planned behaviour as explained in previous researches [13]. Therefore, H1

is accepted and it is supported by previous research works [45]. As regard to the effects of access to resources, the result of this paper shows that there is no direct effect of resources (financial, human capital, tools and equipment and materials) and business climate on entrepreneurial intentions. This results coincide with the previous studies [10] showing the direct and indirect effect on entrepreneurial intentions.

Fig. 1 and Table 3 show the dimensions of the effect of EIMW students access to resources on entrepreneurial intention is influenced by the determinants of entrepreneurial intentions. Some of these determinants are omitted in previous researches. Precisely, Fig. 1 and Table 3 confirms that more EIMW students access to human resources positively but insignificantly influence attitude ($\gamma = 0.063$, p < 0.01), on subjective norms ($\gamma = 0.036$, p < 0.01), on perceived behavioural control ($\gamma = 0.009$, p < 0.01) and on perceived efficacy ($\gamma = 0.022$, p < 0.01). Therefore, hypothesis 2 is rejected.

The analysis of direct and indirect effect of the structural model showed that more access to human resources has an indirect effect on entrepreneurial intention ($\gamma = 0.137$, p < 0.01) and there is no direct effect of access to human resources on entrepreneurial intentions ($\gamma = 0.042$, p < 0.01).

Likewise, the result of the study in Fig. 1 shows that EIMW students more access to financial resources have positive and significant influence on attitude ($\gamma = 0.274$, p < 0.01), on perceived behavioural control ($\gamma = 0.151$, p < 0.01) and on perceived efficacy ($\gamma = 0.209$, p < 0.01) but have no significant influence on subjective norms ($\gamma = 0.173$, p < 0.01). Table 3 shows that there is an indirect effect on entrepreneurial intentions ($\gamma = 0.252$, p < 0.01) and there is no direct effect of access to financial resources on entrepreneurial intentions $(\gamma = 0.024, p < 0.01)$. This confirms that the influence of financial resources occurs through the influence of attitude, perceived behavioural control and perceived efficacy but not subjective norms. The result allows the partial acceptance of hypothesis 3 with respect to its sub hypotheses.

The result obtained in Fig. 1 shows that EIMW students more access to tools and equipment have positive and significant influence on attitude ($\gamma = 0.169, p < 0.01$), on perceived behavioural control ($\gamma = 0.172, p < 0.01$) and perceived efficacy ($\gamma = 0.326, p < 0.01$) but have no significant influence on subjective norms ($\gamma = 0.191, p < 0.01$). Table 3 shows that there is indirect effect of entrepreneurial intention ($\gamma = 0.204, p < 0.01$), and there is no direct effect of access to tools and equipment on entrepreneurial intention ($\gamma = 0.019, p < 0.01$). This confirms that the influence of tools and equipment on entre-

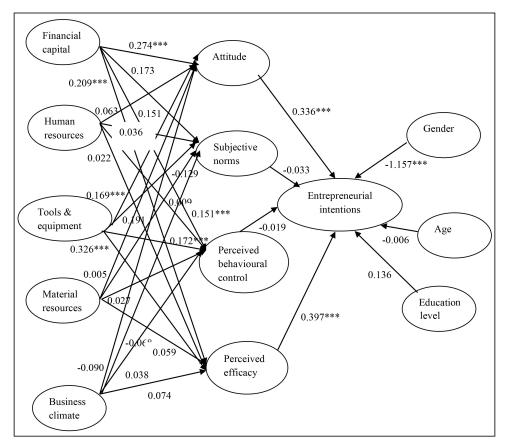


Fig. 1. A model of behavioural factors mediating resources and entrepreneurial intentions of EIMW students.

Table 3. Direct and Indirect Effects in the Structural Model

| | Entrepreneurial | intention | Dependent va | riable | | |
|-------------------------------|-----------------|-----------------|--------------|------------------|-------------------------------------|--------------------|
| Independent Variable | Direct effect | Indirect effect | Attitude | Subjective norms | Perceived behavioural control | Perceived efficacy |
| Attitude | 0.336*** | | | | | |
| Subjective norms | -0.033 | | | | | |
| Perceived behavioural control | 0.019 | | | | | |
| Perceived efficacy | 0.397*** | | | | | |
| Financial capital | 0.024 | 0.252*** | 0.274*** | 0.173 | 0.151*** | 0.209*** |
| Human resources | 0.042 | 0.137*** | 0.063 | 0.036 | 0.009 | 0.022 |
| Tools and equipment | 0.019 | 0.204*** | 0.169*** | 0.191 | 0.172*** | 0.326*** |
| Material resources | -0.160*** | -0.204*** | 0.005 | -0.129 | 0.027 | 0.059 |
| Business climate | -0.063 | -0.08 | -0.09 | -0.068 | 0.038 | 0.074 |
| Gender | -1.157*** | | | | | |
| Age | -0.006 | | | | | |
| Education level | 0.136 | | | | | |

Note. Goodness of fit robust structural model: Satorra-Bentler χ^2 (250) = 334.42 (p = 0.000); (NFI) = 0.553, (TLI) = 0.27, (CFI) = 0.57, (IFI) = 0.59, (GFI) = 0.80, (RMSEA) = 0.15, p < 0.01. *** p < 0.01.

preneurial intentions is established through the influence of this variable on most of the determinants of entrepreneurial intention such as attitude, perceived behavioural control and perceived effi-

cacy but not subjective norms. The result allows the acceptance of hypothesis 4.

Also, the result obtained in Fig. 1 shows that EIMW students more access to material resources

have positive but insignificant influence on attitude $(\gamma = 0.005, p < 0.01)$, on perceived behavioural control ($\gamma = 0.027$, p < 0.01), on perceived efficacy ($\gamma = 0.059$, p < 0.01) and a negative insignificant influence on subjective norms ($\gamma = 0.129$, p < 0.01). As it was revealed, the coefficient of the analysis presented in Table 3, more access of EIMW students to material resources has a negative indirect effect on entrepreneurial intentions ($\gamma = 0.128$, p < 0.01) and there is also a negative but direct effect of access to material resources on entrepreneurial intentions $(\gamma = 0.160, p < 0.01)$. This confirms that H5 is rejected as access to materials resources by EIMW students does not have significant influence on attitude, subjective norms, perceived behavioural control and perceived efficacy. The study found out that material resources unlike financial, human, tools and equipment and business climate have a negative significant indirect effect on entrepreneurial intention and a negative but significant direct effect on entrepreneurial intentions.

The result obtained in Fig. 1 shows that EIMW students business climate to start a business has a negative and insignificant influence on attitude (γ = 0.09, p < 0.01), on subjective norms (γ = 0.068, p < 0.01) but has a positive and insignificant influence on perceived behavioural control (γ = 0.038, p < 0.01) and perceived efficacy (γ = 0.074, p < 0.01). Table 3 shows that there is no indirect effect of business climate on entrepreneurial intentions (γ = -0.08, p < 0.01) and there is no direct effect of business climate on entrepreneurial intentions (γ = -0.063, p < 0.01). Therefore, H6 is rejected.

4. Discussion

The result of the study shows that hypothesis 1 (H1) is accepted and it confirms that the theory of planned behaviour can be used to determine the entrepreneurial intentions among electrical installation and maintenance work students in technical colleges [4]. The results of previous studies carried out among secondary school students, university students and young entrepreneurs [10, 13, 46] show that attitudes, subjective norms and perceived behavioural control contribute immensely to students entrepreneurial intentions.

This study affirms a positive financial capital and tools and equipment: attitude link (H3a, H4a), the positive financial capital and tools and equipment: perceived behavioural control link (H3c, H4c) and financial capital and tools and equipment: perceived efficacy link (H3d, H4d). Access to financial capital and tools and equipment is seen as important elements for the success of entrepreneurial activity influencing three out of the four determinants (attitude, perceived behavioural control, and per-

ceived efficacy with the exception of subjective norms). There is consistency that financial resources have high positive influence on EIMW students perceived efficacy, attitude and subjective norms. This aligns with the contribution of [49] that discovered that individuals with adequate finance will be zealous and ambitious to engage in business as compared with someone with little or no access to resources. [50] ascertained that students may have the zeal to establish their businesses after school but may be crippled because of lack of access to start-up capital. [51] contradicted the opinion that employees with low income have high motivation to learn new skills and having high efficacy. Also, [52] opined that the ability to manage finance will improve students' perceived efficacy.

Also, business climate has neither direct nor indirect effect on entrepreneurial intentions. [53] as well as [54] found a significant relationship between business climate and perceived efficacy. The result of this study contradicts their findings as it shows a non-significant relationship between business climate and students' perceived efficacy. On students' access to financial resources, [10] found a positive relationship between access to adequate funding and the degree to which this affects their behaviour. This finding of this study contradicts their work as there is no significant relationship between access to financial resources and students' subjective norms towards their entrepreneurial intentions. This finding also revealed that there is no significant relationship between access to tools and equipment and their subjective norms but it is favourable to their attitude, perceived behavioural control and perceived efficacy.

EIMW students' gender has a negative significance on their entrepreneurial intentions. This is in line [55] whose affirmation shows that the ability to become an entrepreneur is masculine in nature. Therefore, female entrepreneurs perceive themselves to have high male gender identification to participate in entrepreneurial activities [56] discovered that female self-perception regarding their ability to succeed in the entrepreneurial task restricts their attitudes towards entrepreneurship. Their findings also opined that students, gender reflects the way they perceive themselves and their environment and this can be influenced by their environment. Also, the result of the finding shows that there is no significant effect of subjective norms on EIMW students' entrepreneurial intentions [13] while some other researches contradicts [47] The result also shows that there is a significant effect of attitude on EIMW students' entrepreneurial intention. This finding is consistent with the positive effect of attitude of students towards entrepreneurial intentions [47, 48].

5. Conclusions

This study contributes on entrepreneurial intentions by delving into the behavioural factors mediating access to resources and students' entrepreneurial intentions. Previous research studied, have considered other factors that influenced behavioural factors towards entrepreneurial intentions among students, nascent entrepreneurs and firms among different geo – political zones, countries and continents [11, 57, 58]. But this study suggests that the previous study had omitted variables of materials and tools and equipment as resources and

perceived behavioural control. This study found that resources influence individual's perceived behavioural control and attitude.

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Appendix

INSTRUMENT FOR DATA COLLECTION QUESTIONNAIRE

Impact of Behavioural Factors as related to Available Resources on Entrepreneurial Intentions of Electrical Installation and Maintenance Works Students

Section A

Instructions: Please tick in the appropriate box

```
Gender: Male [ ] Female [ ]
Age: 10–14 [ ] 15–19 [ ] 20–24 [ ] 25–above [ ]
Level of study: Year 2 [ ] Year 3 [ ]
```

Section B

Please respond to items in the section using options provided below. Indicate by checking the behavioural factors as mediators between resources and entrepreneurial intentions of Electrical Installation and Maintenance Work students in Technical Colleges.

| S/N | Items: Attitudes | Strongly agree | Agree | Some- what agree | Neither agree nor disagree | Some- what disagree | Disagree | Strongly disagree |
|---------|---|----------------|-------|------------------------|----------------------------------|---------------------------|----------|-------------------|
| 1 | Being an electrical installation and maintenance work entrepreneur implies more advantages than disadvantages to me. | | | | | | | |
| 2 | A career as an electrical installation and maintenance work entrepreneur is attractive for me. | | | | | | | |
| 3 | Even if I had the opportunity and resources, I would never like to start an electrical installation and maintenance workshop. | | | | | | | |
| 4 | It is desirable for me to become an electrical installation and maintenance work entrepreneur. | | | | | | | |
| 5 | Being an electrical installation and maintenance work entrepreneur would entail great satisfaction for me. | | | | | | | |
| | Subjective Norm | Strongly agree | Agree | Some- what agree | Neither agree nor disagree | Some- what disagree | Disagree | Strongly disagree |
| 1 | If I were to start an electrical installation and maintenance workshop, my parents would be supportive. | | | | | | | |
| 2 | If I were to start an electrical installation and maintenance workshop, my close friends would be very supportive. | | | | | | | |
| Thinkin | ng of important people in your life and answer t | he question | ıs | • | • | | • | |
| 3 | My parents' opinion are not at all important for me | | | | | | | |
| 4 | My close friends opinion is important in starting an electrical installation and maintenance workshop. | | | | | | | |

| ~~. | | Strongly | | Some- what | Neither agree nor | Some- what | | Strongly |
|-----|--|----------------|-------|------------------------|----------------------------------|---------------------------|----------|-------------------|
| S/N | Perceived behavioural control | agree | Agree | agree | disagree | disagree | Disagree | disagree |
| 1 | I would be able to define a business idea for starting an electrical installation and maintenance workshop. | | | | | | | |
| 2 | To create an electrical installation and maintenance work business and implement it would be easy for me. | | | | | | | |
| 3 | I know the practical details needed to create an electrical installation and maintenance work business. | | | | | | | |
| 4 | If I worked in my electrical installation and maintenance work business, the chances of success would be higher. | | | | | | | |
| 5 | I would be able to recognize market opportunities for new electrical products and/or services. | | | | | | | |
| | Resources: Access to financial capital | Strongly agree | Agree | Some- what agree | Neither agree nor disagree | Some- what disagree | Disagree | Strongly disagree |
| 1 | My immediate family would give me money if I should start an electrical installation and maintenance workshop. | | | | | | | |
| 2 | If my family had a business, they would facilitate me in creating an electrical installation and maintenance workshop. | | | | | | | |
| 3 | My immediate family would support me, with a financial institution (bank) to create an electrical installation and maintenance workshop. | | | | | | | |
| | | | | Some- | Neither | Some- | | |
| | Access to human capital | Strongly agree | Agree | what agree | agree nor disagree | what disagree | Disagree | Strongly disagree |
| 4 | The electrical installation and maintenance work training I am receiving in technical college has given me the knowledge and skills to create my workshop. | | | | | | | |
| 5 | The electrical installation and maintenance work training I am receiving in technical college has helped me to better understand the role of entrepreneurs in society. | | | | | | | |
| 6 | With the electrical installation and maintenance work training I am receiving in technical college, I could start up my workshop in the future. | | | | | | | |
| 7 | I receive training on entrepreneurship outside technical college. | | | | | | | |
| | Access to materials | Strongly agree | Agree | Some- what agree | Neither agree nor disagree | Some- what disagree | Disagree | Strongly disagree |
| 8 | I will find it difficult to start up electrical business because electrical installation work materials are not produced locally. | | | | | | | |
| 9 | I will find it difficult to procure materials for starting up electrical installation and maintenance workshop. | | | | | | | |
| 10 | Electrical installation and maintenance workshop materials are expensive to purchase. | | | | | | | |
| 11 | There are lots of electrical installation and maintenance work substandard materials in the market. | | | | | | | |

| S/N | Access to tools and equipment | Strongly agree | Agree | Some- what agree | Neither agree nor disagree | Some- what disagree | Disagree | Strongly disagree |
|-----|---|----------------|-------|------------------------|----------------------------------|---------------------------|----------|----------------------|
| 12 | Proper demonstration on use of tools by the instructor enhances my knowledge on creation of modern electrical installation and maintenance workshop. | | | | | | | |
| 13 | Available equipment and tools in the school workshop stimulates me to establish my own electrical installation and maintenance workshop. | | | | | | | |
| 14 | Using tools and equipment during practical will help me when I establish my electrical installation and maintenance workshop. | | | | | | | |
| 15 | Learning maintenance culture will help me to keep available tools in my workshop properly. | | | | | | | |
| | Entrepreneurial intentions | Strongly agree | Agree | Some- what agree | Neither agree nor disagree | Some- what disagree | Disagree | Strongly disagree |
| 1 | I am not ready to do anything to be an electrical installation and maintenance work entrepreneur. | | | | | | | |
| 2 | My professional goal is to become an electrical installation and maintenance work entrepreneur. | | | | | | | |
| 3 | I will make every effort to start and run my own electrical installation and maintenance workshop. | | | | | | | |
| 4 | I am not determined to establish an electrical installation and maintenance workshop. | | | | | | | |
| 5 | I have had the thought to start up electrical installation and maintenance workshop some day. | | | | | | | |
| | Perceived efficacy | Strongly agree | Agree | Some- what agree | Neither agree nor disagree | Some- what disagree | Disagree | Strongly disagree |
| 1 | I am able to make decision on the choice of electrical installation and maintenance work. | | | | | | | |
| 2 | I can manage money made from the sales of electrical installation products. | | | | | | | |
| 3 | I am able to solve problems that may arise in the electrical installation and maintenance work business. | | | | | | | |
| 4 | I can be a leader in an electrical installation and maintenance workshop. | | | | | | | |
| | Business climate | Strongly agree | Agree | Some- what agree | Neither agree nor disagree | Some- what disagree | Disagree | Strongly disagree |
| 1 | In my country there are enough financial resources for starting a business. | | | | | | | |
| 2 | In my country, the procedure for starting a new business is straight forward. | | | | | | | |
| 3 | The legal system in my country is conducive for doing business. | | | | | | | |
| 4 | The tax system in my country is conducive for doing business. | | | | | | | |
| 5 | The government of the country directly supports youth entrepreneurs. | | | | | | | |
| 6 | The government in my country directly supports the creation of new businesses. | | | | | | | |
| 7 | The infrastructure in my country is conducive for doing business (roads, power, water, transport links, telecommunications, industrial land, estates and incubators). | | | | | | | |