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Combined Effect of Personality Factors and Cognitive Factors on Students' Self-Employment Intentions in Technical, Vocational Education and Training in Kenya

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Abstract: Entrepreneurship has been acknowledged as a key driver of economic growth across many economies both in developed and developing countries. Entrepreneurial intention has been empirically proved to be the predictor of entrepreneurial behaviour. This study used personality factors (need for accomplishment and internal locus of control) and cognitive Factors (personal attraction and perceived social valuation) to assess their combined effect on self-employment intentions in Technical, Vocational Education and Training in Kenya. The study objective was to establish the combined effect on the relationship between personality factors and cognitive factors on students' self-employment intentions. A cross-sectional survey research design was used to obtain quantitative data. A structured questionnaire was developed and administered to diploma engineering finalist students sampled from 41 public TVET Institutions in Kenya between 2016 and 2017. The data was analysed using both descriptive statistics and inferential statistics. Pearson's Coefficient Correlation was used to examine the relationship between independent variables and the dependent variable. Factor analysis was conducted to investigate the internal structure among the set of variables. Multiple regressions analysis was used to examine the effect of independent variables on the dependent variable. The findings indicated that there was a positive and significant relationship between combined effect of personality factors and cognitive factors on self-employment intention. Consequently, the combined effect of independent variables strongly influences dependent variable. The study concluded that although personality factors and cognitive factors positively individually influenced self-employment intention, combined association enhanced this effect further among engineering students in TVET institutions in Kenya.

Keywords: Personality Factors, Combined Effect, Congnitive Factors, Entrepreneurship, Self-Employment Interntion

1. Introduction

Entrepreneurship has recently been acknowledged as a key driver of economic growth across many economies both in developed and developing countries. In addition, the emergence of new and innovative business start-ups has positively impacted economic growth of nations globally. Many countries have embraced entrepreneurial activities as a primary stream of rejuvenating their economy, a recipe to cope with unemployment problems, and job creation in most developing countries. In Kenya, the past few decades, massive unemployment from universities and tertiary institutions, and lack of affirmative action to eradicate unemployment for the Kenyan youth have raised major concerns among policy makers and entrepreneurs. Hence the introduction of Technical and vocational and training (TVET) courses.

TVET remains a key development strategy for international development agencies and governments [1-2]. UNESCO report [1] defined TVET as all forms and levels of the educational process involving in addition to general knowledge, the study of technologies and related sciences and the acquisition of practical skills, know-how, attitudes and understanding relating to occupations in various sectors

of economic and social life. In Kenya, TVET is part of the education and training system placed under Directorate of Technical Vocational and Training (DTVET) within the Ministry of Education, Science and Technology (MoEST) targeting fresh graduates from secondary schools. According to Kenya's economic survey 2018, the number of public TVET institutions stood at 985; one Technical Teachers College; 11 National Polytechnics; 850 technical and vocational centres; 123 technical and vocational colleges (TVC. The report from the Economic Survey indicated that, TVET enrolment declined by 7.7 per cent from 564,507 in 2016/17 to 520,893 in 2017/18. The decline in enrolment was mainly occasioned by reduction in the number of candidates who met the minimum university entry requirements.

Many scholars, [3-6] have realized that targeting post-secondary students mean that the future of self-employment lies with graduate entrepreneurs who are expected to contribute to the economy of any country. Furthermore, this cadre of students are unlikely to have any or substantial prior business experiences as all of them are admitted directly after secondary school. Targeting this cadre of students therefore agree to the investigation of self-employment intention before the actual self-employment. The government's objective in emphasizing the importance of competence based skills in TVET institutions is therefore in line with the expected outcome.

The employability of TVET graduates and their ability to start new businesses and employ other Kenyans while contributing to the country's economic wellbeing are central to the mission of the Kenya's education system. Evidently, [1-3] indicate that entrepreneurship is the preferred bridge in reducing the gap between the current and desired levels in economic growth. [4] Observed that self-employment intentions are low among TVET graduates in developing countries like Kenya. According to the study [5] this is partly due to the poor entrepreneurial culture among the youth given that very few engage in self-employment after graduation. According to the Kenya Youth Empowerment Project (KYEP) 2014, youth unemployment is twice the national average of 40 percent.

Given the persistent unemployment problem among the Kenyan youth, most recently, the government through the sessional paper No 1 of 2015 *on Reforming Education and Training* re-emphasized the need for TVET Institutions concentrate on courses which are more skewed towards self-employment.

The essence of self-employment is new venture creation, while opportunity identification is the very first step in entrepreneurship. Studies provide evidence that much of 'entrepreneurial' activity is intentionally planned behaviour. Entrepreneurial intention has been empirically proved to be the best and unbiased predictor of entrepreneurial behaviour or self-employment [5]. Since a common definition of self-employment intention is lacking, it is incumbent upon researchers to define explicitly the meaning they ascribe to the term. For example, a study [6] defines entrepreneurial intention as the desire to be self-employed and starting one's own business. For the purpose this study, self-employment intention is defined as student's decisions about the likelihood of becoming self-employed at some point in time after graduation.

To investigate the combined effect of personality traits and cognitive factors on self-employment intentions among TVET students in Kenya, the study applied two theories. The theory of planned behaviour (TPB) and the personality traits theory both operationalized as cognitive factors (personal attraction towards self-employment and perceived social valuation) and personality factors (need for accomplishment and internal locus of control) deemed important in shaping and influencing a person's self-employment intentions.

1.1. Statement of the Problem

The youth unemployment rate worldwide continues to rise in recent years [7]. The report from Kenya's Economic Survey [8] indicates that less than percent of the students who graduate from both universities and TVET institutions are absorbed into formal employment annually. The rest are left out to compete for opportunities in the informal sector or simply waste away in idleness.

However, despite the government's effort to address the youth unemployment problems through job creation and initiatives to encourage them to venture into self-employment activities, more of those who graduate prefer formal career options as opposed to self-employment [7]. The opportunity costs and losses arising from unemployed and underemployed young therefore have and will continue to exert, tremendous impacts on society if these problems are not addressed in time. This observation is alarming and calls for an investigation of factors that influence the decision to be self-employed.

While there has been significant previous research on the causes and effects of self-employment there is a lack of rigour in past research studies regarding the combined effect of personality factors and cognitive factors on self-employment intentions. Hence the need to investigate the combined effect of personality factors and cognitive factors on self-employment intentions among TVET students in Kenya.

1.2. The Objective of the Study

The objective of the study is to:

Establish the combined effect of personality factors and cognitive factors on students' self-employment intentions.

1.3. Research Hypotheses

H_{o1}: There is no significant combined effect on the relationship between personality factors and cognitive factors on students' self- employment intentions.

1.4. Conceptual Framework

The conceptual framework (figure 1) provides an overview of the relationships between independent variables and dependent variable. The conceptual model for the study is

derived from the Theory of Planned Behaviour (TPB), operationalized cognitive factors comprising two elements; personal attraction towards self-employment, perceived social valuation and also extends the model to personality traits, as personality factors comprising two elements; need for accomplishment and internal locus of control. Both composite variables explain their relationship with self-employment intentions among TVET students in Kenya.

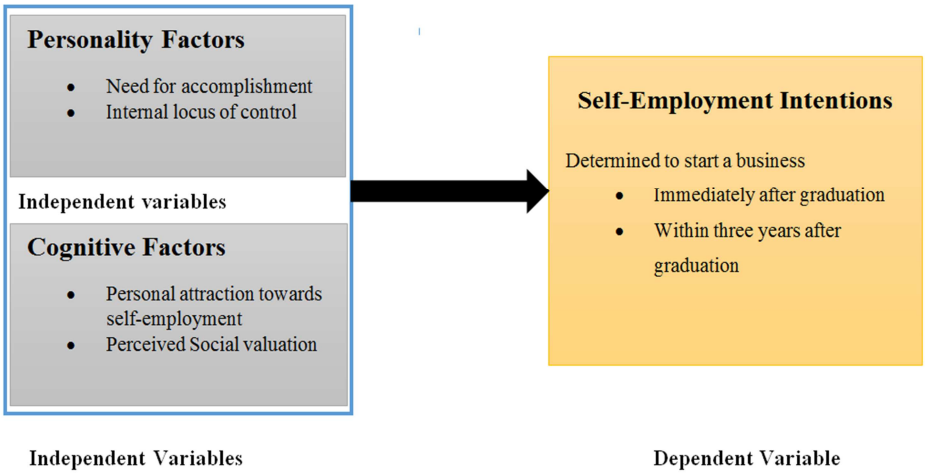

Figure 1. *Conceptual Framework.*

2. Literature Review

2.1. The Personality Factors and Self-Employment Intention

Personality traits or psychological characteristics is another field of research that focuses on entrepreneurial intention [9]. The main assumption of this approach is that people who choose self-employment as a career option have peculiar personality profiles [10]. Personality traits are predictable characteristics of individual behaviour which assist in explaining the differences of individual actions in similar situations [11]. The characteristics inherent within personality traits include desire for achievement [12]; Locus of control [13]; risk taking propensity [14]; pro-activeness [15] and creativity [16]. These characteristics have become the focus of many researchers in the recent time. Youth often have a special personality. They value the issues of strength, autonomy and independence as important in their desire to become entrepreneurial [17].

This study focused on two main personality traits. They comprise; desire for achievement [12] and internal Locus of control [13]. For the purpose of this study, the two main personality traits were adopted as personality factors (need for accomplishment, internal locus of control) and reviewed to investigate how they influence self-employment intentions among TVET students in Kenya. [18] Used the same traits in their meta-analysis of the effect of personality on entrepreneurship. Similar Characteristics are preferred as most significant by these studies [19,9]. Alike, the study [19] linked psychological characteristics with self-employment intention and puts forward trait model that includes: need for achievement, internal locus of control. Personality factors (need for accomplishment, internal locus of control) are reviewed and discussed in the section that follows

2.1.1. Need for Accomplishment and Self-Employment Intentions

The need for accomplishment was first identified as a personality trait by a study [12] in his first work on economic development. He proposed that achievement motivation is the key to entrepreneurial behaviour. Recent studies on the need for accomplishment have shown that it can evolve over time, especially by obtaining an advanced education. The theory of the need to achieve claims that individuals who have a strong need to achieve commonly find their way to self-employment and their success rate is higher than that of other entrepreneurs [19]. High achievers typically choose situations that are linked with responsibility, moderate risk-taking, and knowledge of results of decisions, new instrumental activity and anticipation of possibilities in the future.

2.1.2. Internal Locus of Control and Self-Employment Intentions

Internal Locus of control *(LoC)* is a personality variable that is related to the generalized expectations of a person on whether he/she will be able to control the events in life as an entrepreneur [20]. The LoC represents the degree to which individuals believe that their achievements are dependent on their own behaviour. Individuals with self-employment intention, consider that the accomplishment of the missions depends more on their own ability and actions (internal LoC), rather than luck or other people's efforts (external LoC) [21]. The empirical reports by [22-24], confirm that small businesses entrepreneurs are more oriented at the internal level than the population in general. To confirm the validity of internal locus of control in relation to self-employment intentions in a Kenyan context, this study therefore attempted to fill one of the gap by focusing on the relationship between personality factors (need for accomplishment, internal and

self-employment intentions among TVET students in Kenya.

2.2. The Cognitive Factors and Self-Employment Intentions

The theory of planned behaviour (TPB) has been said to predict more on entrepreneurial intentions by considering not only personal characteristics but also social factors [25-28, 5]. This model has been hailed for accurately predicting and explaining self-employment intentions in the past studies; [27-31, 25, 5]. TPB asserts that intentions are a function of three sets of factors: attitudes towards behaviour, subjective norms, and perceived behavioural control. in this study, two antecedents of intention are adopted as cognitive factors (personal attraction towards self-employment and perceived social valuation to assess the relationship between cognitive factors and students' self-employment intentions among TVET students in Kenya. Cognitive factors are characteristics that influence how people think and make decisions. Compared to personality, motives and core self-evaluation characteristics, cognitive factors tend to change overtime. The cognitive approach tries to develop an understanding of how people acquire and process information and utilize it to understand the world of entrepreneurship better [32]. They tend to be more heavily influenced by a person's perception of the situation he/she is involved in.

2.2.1. Personal Attraction Towards Self-Employment and Self-Employment Intentions

Personal attraction is the beliefs and perceptions regarding self-employment intentions and subsequent self-employment. [33] refer attitudes toward behaviour to the degree to which a person has a favourable evaluation appraisal of the level of being an entrepreneur, which is believed to have two components which work together; beliefs about consequences of becoming an entrepreneur (behavioural beliefs) and the corresponding positive or negative judgments about each of these features of the behaviour. Personal Attitude will either trigger a positive or negative intention of students [34].

2.2.2. Perceived Social Valuation and Self-Employment Intentions

Perceived social valuation is the individuals' entrepreneurial perceptions about the values, beliefs, and norms held by people whom they respect or regard as important (significant others) and the individuals' desire to comply with those norms [34]. The perceived social valuation has been used to investigate the effect of social pressures on the inclination to self-employment [33]. It is argued that social norms are less predictive of intentions for individuals who have a high internal locus of control [25] compared to those who have lower internal Locus of control.

2.3. The Personality Factors, Cognitive Factors and Self-Employment Intentions

The study focused on students' self-employment intentions at an early age between 18 and 26 years who are admitted to vocational institutions direct after secondary education at a time when they face critical decisions about programs to study for an intended career. similar studies; [3, 5-6], established that students who study between 24 and 34 years, are able to understand the factors that affect the intentions of a country's future entrepreneurs and are then most likely to start a business. To test whether there is a significant combined effect on the relationship between personality factors and cognitive factors on students' self- employment intentions; an integrated conceptual model for this research is developed (Figure 1). The model attempted to answer the question; "Does the combined effect of personality factors and cognitive factors have influence in students' intentions to start a new business?" Review of the literature discloses that most researchers focus on individual factors. This study therefore endeavours to research on combined effect on the relationship between personality traits and cognitive factors on students' self- employment intentions and improve on the existing literature.

3. Methodology

The study used a cross-sectional survey design with mixed approaches. A mixed method research uses a systematic integration of quantitative and qualitative methods in a single study for purposes of obtaining a fuller and deeper understanding of a phenomenon. The study population consisted of all diploma finalist students in the field of engineering in their final term. The engineering courses are classified into building construction, civil, electrical and electronic, mechanical and automobile. To select the sample size for the study, three stages were involved. Finally, based on Slovin's formula for determining the proportionate sample size of students in the 10 institutions, 397 respondents were selected for the study. The study used a questionnaire to collect primary data from the respondents. The secondary data was accessed from the findings stated in published documents and literatures related to research problem while the primary data was collected from respondents. The statistical processes in the analyses of the data comprised of descriptive statistics, ANOVA and inferential statistics. In order to assess the existence of relationship between the dimensions of personality factors and cognitive factors and self-employment intention, the Pearson's correlation coefficient '*r*' was computed. In addition, multiple regression analysis was conducted to examine the relationships between independent variables and the dependent variable. A general equation of the multiple regression models is given as:

$$Y_1 = \beta_{o1} + \beta_1 PF + \beta_2 CF + \varepsilon_o \quad (1)$$

Where: Y is the self-employment intention (SEI); β_0 is the intercept term; β_i (i=1 and 2) are the regression coefficients; PF is Personality factors; CF is cognitive factors; and ε is the random error term.

4. Results/Findings

Among the targeted 400 respondents, 397 respondents were issued with the questionnaire after which, 377 managed

to fill and return them, thus yielding a response rate of 98.4%. Among the respondents were 84 females constituting 22.3% of the sample and male constituted 77.7% of the sample. Age Distribution of Students in Selected TVET Institutions. In addition, majority of students (89.7%) in TVET institutions age ranged from 19 to 24 years only 10.3% of students were aged above 25 years. The results suggest that the optimal age in learning TVET Institutions was within 25 years.

The objective of this study was to determine the combined effect of personality factors (need for accomplishment and internal locus of control) and cognitive factors (personal attraction towards self-employment and perceived social valuation) on self-employment intentions among TVET students in Kenya. In addition, this objective related to the testing of null hypothesis that stated: There is no significant combined effect on the relationship between personality factors and cognitive factors on students' self- employment intentions.

4.1. Personality Factors

The personality factors comprised two elements, the need for accomplishment and internal locus of control.

4.1.1. Need for Accomplishment

In order to test the factors effect of the 10 items of need for accomplishment under investigation, factor analysis was undertaken. In order to improve the interpretability of factors, varimax rotation was performed on the extracted component matrix. Two components were extracted. The two new components are described in Table 1.

Table 1. *Need for Accomplishment Total Variance Explained by extracted factors.*

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative%	Total	% of Variance	Cumulative%
1	5.607	50.975	50.975	5.040	45.822	45.822
2	4.415	40.132	91.107	4.981	45.285	91.107
3	.978	8.893	100.000			

According to the Table 1, two components are extracted. The first component involves setting and meeting standards of accomplishment. This factor is largely influenced by internal drive for action. The first need for accomplishment factor was labelled 'Intrinsic Motivation' and comprises personality factors such as one's aim to make successful achievements, enriching personal record of achievement, seeking happiness when successful at work, taking own risk for own achievement and feeling as a self-starter who is driven by strong desire to compete, pursue and attain challenging goals. The second component involves pressure exerted by the expectation of others. The second need for accomplishment factor was therefore labelled 'Extrinsic Motivation' and comprises quest for achievement, need for performance feedback, the desire to do the best in any work situations, desire to be successful in doing things differently and establishing own business termed as self and personal major goal.

4.1.2. The Internal locus of Control

Seven items, on five-point Likert scale type questions measured the internal locus of control constructs. Three new factors are extracted namely 'Capability Component', 'Hard work Component' and Action Component'.

Table 2. *Internal Locus of Control Total Variance Explained by the Extracted Factors.*

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative%	Total	% of Variance	Cumulative%
1	3.076	43.949	43.949	2.999	42.840	42.840
2	2.174	31.051	74.999	2.001	28.586	71.426
3	1.750	25.001	100.000	2.000	28.574	100.000
4	0.00	.000	100.000			

The first component factor loading was labelled 'Capability Component'. Three items that loaded on this variable included statement that measured the extent to which one's leadership depends on individual ability, preference of work depends on original thinking and original idea is independent on time of the day. The second component factor loading was labelled 'Hard Work Component'. Two items that loaded on this component measured the degree to an individual accomplishment and setbacks are within his/her control and may affect the outcome of self-employment and whether any outcome of an activity is due to hard work. The final component was renamed 'Action Component' variable. Two items that loaded on these variable included statements that measured the extent to which ones feeling determines future outcome and whether one's life may determine own action as an entrepreneur.

4.2. Cognitive Factors

The cognitive factors comprised two elements, the personal attraction towards self-employment and perceived social valuation.

4.2.1. Personal Attraction Towards Self-Employment

Ten items in the structured questionnaire were used to measure Personal Attraction towards self-employment variables of cognitive factors. Factor analysis produced three components accounting for 82.273 percent of the total variance of the 10 items of personal attraction.

Table 3. *Personal Attraction Total Variance Explained by Extracted Factors.*

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative%	Total	% of Variance	Cumulative%
1	5.053	50.528	50.528	5.027	50.274	50.274
2	2.010	20.101	70.629	2.031	20.306	70.579
3	1.364	13.645	84.273	1.369	13.694	84.273
4	.941	9.407	93.680			
5	.632	6.320	100.000			

The three components are 'Satisfaction component', 'Success component' and 'Evaluation component'. The first component was labelled 'Satisfaction component' includes statement that measure the degree to which self-employment is considered as an alternative career to people armed with technical education, writing a business plan is a motivator towards starting own business, self-employment is preferred although faced with many challenges, being an entrepreneur is very attractive and satisfying to those involved. 'Success variable' corresponds to statements that measured the extent to which entrepreneurship education course has re-engineered students' quest for self-employment and also the degree to which students are able to make significant personal sacrifices in order to stay in business. The third component factor loading corresponds to 'Evaluation Component with items required that students respond to the allegations that technical courses have not contributed positively to student graduates becoming self–employed and that being self-employed implies more disadvantages than advantages to students. Nine items were used to measure perceived social valuation of cognitive factor. Factor analysis produced three components.

Table 4. *Perceived Social Valuation Total Variance Explained by Extracted Factors.*

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative%	Total	% of Variance	Cumulative%
1	3.459	34.586	34.586	2.870	28.704	28.704
2	1.953	19.526	54.112	2.194	21.940	50.644
3	1.144	11.436	65.548	1.490	14.904	65.548
4	.956	9.564	75.112			
5	.740	7.399	82.511			
6	.583	5.834	88.345			

4.2.2. Perceived Social Valuation

The three components are 'Mentor component', 'Value Component' and Significant Other Component'. Four items that loaded to Mentor component' included statements that measured the extent to which parents and other successful entrepreneurs have acted as role models in inculcating self-employment intentions to students; family business has increased desire for children to enhance their desire for self-employment; the role of other entrepreneurs in the community to mentor students on self-employment after graduation; and the general opinion of a family of one becoming self-employed is very important. The second component was re-named 'Value Component' included statements that measured the degree to which the immediate family was willing to add value by providing financial support to students so as enhance their self-employment intention, how culture relate with entrepreneurial activities and how the opinion of others was important in influencing students to become self-employed. The third component factor loadings corresponded to 'Significant other Component' variable. Two items that loaded to these variable included statements that measured the extent to which TVET institutions regard the construct of self-employment despite the high risk involved and the extent to which significant others encourage students to become entrepreneurs after college life.

The multiple regression models of the eleven components assumed the form:

$$Y= \beta_o + \beta_1 X_{IM} + \beta_2 X_{EM} + \beta_1 X_C + \beta_2 X_H + \beta_1 X_A + \beta_1 X_S + \beta_1 X_{SS} + \beta_2 X_E + \beta_2 X_M + \beta_2 X_V + \beta_1 X_{SO} + \varepsilon_o \quad (2)$$

Y=Self-Employment Intention, X_{IM}=Intrinsic Motivation Component

X_{EM}=Extrinsic Motivation Component, X_C=Capability Component, X_H=Hard work Component, X_A= Action Component, X_S=Satisfaction component, X_{SS}=Success component, X_E=Evaluation component, X_M=Mentor component, X_V=Value Component, X_{SO}=Significant other Component. Multiple Regressions was used to test the null hypothesis that was stated:

H_o1: There is no significant combined effect on the relationship between personality factors and cognitive factors on students' self-employment intentions.

The multiple regression models were summarized as:

Self-Employment Intention = 12.24 +.534 X_{IM}+.483 X_{EM}+.516 X_C+.460 X_H+.386 X_A+.652 X_S+ +.586 X_{SS}+.433 X_E+.350X_M+.264 X_V+ 0.579 X_{SO}. These results are summarized in Table 5.

Table 5. *Regression Analysis of the Combined Effect of Personality Traits and Cognitive Factors on Self–Employment Intention.*

	Un standardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	11.24	.528		23.2	.000
Intrinsic Motivation	.534	.018	.579	34.9	.000
Extrinsic Motivation	.483	.019	.685	41.2	.000
Capability Component	.516	.232	.409	.515	.000
Hard Work Component	.460	.048	.686	41.0	.000
Acton Component	.386	.045	.579	34.8	.000
Satisfaction Component	.652	.416	.685	41.2	.000
Success Component	.586	.450	.579	34.8	.000
Evaluation Component	.433	.580	.329	.557	.000
Mentor Component	.350	.084	.240	4.14	.000
Value Component	.264	.165	.092	1.60	.110
Significant other component	.579	.119	.575	13.2	.000

From the analysis of variance, the results are significant at.05 levels. This implies that there was a significant relationship between the combined effect variables of personality traits and cognitive factors and self-employment intention. The study thus concluded that the eleven components namely; Intrinsic Motivation, Extrinsic Motivation, Capability Component, Hard Work Component, Acton Component, Satisfaction Component, Success Component, Evaluation Component, Mentor Component, Value Component and Significant other component all have a positive effect on self-employment intention.

The null hypothesis that there was no significant combined effect on the relationship between personality factors and cognitive factors on students' self-employment intentions among students in TVET institutions in Kenya was rejected.

5. Discussion

Both personality factors and cognitive factors have jointly been found to be a significant predictor of self-employment intentions. The independent variables of this study are personality factors and cognitive factors. These factors were individually correlated with self-employment as the dependent variable. Results of correlation analysis between all the dependent variables and self-employment showed positive and significant results at.05 significant levels. This shows that self-employment intention among student are dependent upon ones need of achievement, one's internal locus of control, personal attraction towards self-employment and perceived social valuation.

To study further on the internal structure of the factors defining personality factors and cognitive factors, eleven more factors were included in the model. These are: intrinsic motivation, extrinsic motivation, capability component, hard work component, action component, satisfaction component, success component, evaluation component, mentor component, value component and significant other component, all have a positive effect on self-employment intention. The first component involves setting and meeting standards of accomplishment. These results indicate that intrinsic motivation is an important ingredient for need for accomplishment and consequently an important factor in student's self-employment intention. [8] Suggest that need for achievement should be higher in people who have the urge to start a business. The second component involves pressure exerted by the expectation of others. The results show that expectations of others for one's accomplishment drive students into self- employment intentions after college life. The third component show that capability influence of a student in TVET institution do affect self-employment intentions [6]. The fourth component indicates that indicate that one of the key factors in self-employment intention among students in TVET institutions is individual hard work. People believe that their hard work would lead them to obtain positive outcomes.

The six personality factors correspond to Action variable which explained the extent to which ones feeling determines future outcome and whether one's life may determine own action as an entrepreneur. These results observed that people with external locus of control tend to believe that the things which happen in their lives are out of their control. The first three factors defining personal attraction factors are Satisfaction component, Success component and Evaluation component. These results show that the selected number of students for this study would largely have positive attitude towards self-employment after completing their study at TVET institutions.

These findings are congruent with previous studies [9-12], who have positively associated personal attitude to intention. Factors that explain Perceived Social Valuation; Mentor component, Value Component and Significant Other Component. The results indicated that decision by students to become self-employed after graduation entirely depends on mentorship process from parents and other successful entrepreneurs in the community. In addition, results show that students' self-employment intention is cultivated through the value added to them by family members and those close to them. Finally, students' self-employment intention is enhanced through significant other such as family members and TVET institutions themselves. The research findings indicate that individuals are more likely to start a business when they have relationships with others who are entrepreneurs.

6. Conclusion

Based on the findings, the two independent variables (personality factors and cognitive factors) were found to be jointly associated with self-employment intention among engineering students in TVET institutions in Kenya. This study concluded that although personality factors and cognitive factors positively individually influenced self-employment intention, their combined association enhanced their effect further. This research makes a contribution to literature by introducing a new regression model on the joint effect between personality factors and cognitive factors on self-employment intention among engineering students in TVET institutions. A review of the existing literature discloses that there are several models explaining the nature, antecedents, and effects of Self-employment intentions. However, investigations by the researcher could not find any study that focused on combined effect of personality factors and cognitive factors on self- employment intentions. Nevertheless, the study introduced the following new model as a measure of filling this research gap: Self-Employment Intention = 12.24 + .534 X_{IM} + .483 X_{EM} + .516 X_C + .460 X_H + .386 X_A + .652 X_S + .586 X_{SS} + .433 X_E + .350X_M + .264 X_V + 0.579 X_{SO}. Where, $_{XEM}$ = Extrinsic Motivation Component, X_C = Capability Component, X_H = Hard work Component, X_A = Action Component, X_S = Satisfaction component, X_{SS} = Success component, X_E = Evaluation component, X_M = Mentor component, X_V = Value Component, X_{SO} = Significant other Component.

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