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# TECHNICAL AND VOCATIONAL SKILLS COMPETITIVENESS AS A DETERMINANT OF DEMAND FOR TECHNICAL AND VOCATIONAL TRAINING AMONG THE YOUTH IN KAJIADO COUNTY, KENYA

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### **Abstract**

**Purpose:** The study sought to investigate skills competitiveness as a determinant for the demand for technical and vocational training among the youth in Kajiado County.

**Methodology:** The study used a mixed method design of both qualitative and quantitative methods for the purposes of triangulation. Quantitative and qualitative forms of data were linked for three reasons: First, for confirming or corroborating each other via triangulation;



second, for elaborating or developing analysis, providing richer details and third, for initiating new lines of thinking through attention to new ideas coming up, as well as and providing fresh insight (Rosmann and Wilson (quoted in Miles & Huberman, 1994). The study was confined to the natural settings and attempted to interpret phenomenon in terms of the meaning that people brought as asserted by Denzin and Lincoln (2005). In executing the study, a descriptive cross- sectional survey was applied as the quantitative research design. In addition, phenomenological approach was chosen due to its strength in enabling researchers to gain a depth of understanding of the cases and situation studied. The target population for the study comprised of all students enrolled in three polytechnics in Kajiado County (namely Isinya, Namelok and Entasopia). Moreover, the management of the three polytechnics was also part of the population for the interviews and focus group discussions. The qualitative findings complemented the quantitative findings for a more comprehensive understanding of the issues explored in the study.

Findings: TVET skills were highly affirmed to be greatly suitable for employment. Respondents also attested that it is easy to perfect the use of TVET skills and apply them. Another highly rated indicator was the respect and preference the labour market accords to persons with TVET skills. Suitability of the TVET skills in the labor market was further approved by most of the informants who were of the opinion that, once the trainees are given the necessary technical skills and provided with the basic tools for the job, then they can perform. Some participants expressed strong optimism in the applicability of TVET skills in the market. However, when further probed, it was evident that the polytechnic administration does not create enough awareness to the local community on the courses offered. From the findings, it can be inferred that skills competitiveness of TVET course is key in determining the demand for the course.

Unique contribution to theory, practice and policy: To link skills development and world of work government should incorporate incubation centres within training institution as well as enhance mentorship programmes. These centres may have programmes designed to empower TVET graduates to apply the skills learnt in empowering themselves. These centres should provide start up kits to upon completion of the mentorship programme.

**Keywords:** Investigate, determinant, demand, technical, vocational training, skills competitiveness.

### 1.0 INTRODUCTION

Young people are a crucial segment of society because they are the basis for future development. As social actors of change, they can change the future of the society by acting as a pressure group to lobby governments in defining their priorities geared towards their well-being. The foundation of every nation is the education of its young people. Thus the way the youth of any nation are brought up and educated in the family, in the school and in society in general determines the future prosperity of that nation. Kenya's development plans have, over the years, consistently stated one major educational objective: producing a properly trained, disciplined and patriotic youth that can make a positive contribution to the development of the nation.



Acquisition of skills is crucial to any meaningful development in any society. Any meaningful development will be shaped by market driven skills. It's good to note that a person equipped with the right skills can survive in any environment. Skills development among the youth in Kenya cannot be over emphasized because gone are the days when jobs were available everywhere both in the private and public sectors of the economy. White-collar jobs are scarcely available. Hence many graduates are desperate to get any job to keep body and soul together. Indeed there is paradigm shift in the labour market. The evolution of Technical, Vocational Education and Training (TVET) in Kenya has experienced both structural and curricular changes that have had an impact on graduates, since independence. Indeed this sector is undergoing rapid changes that were bolstered by the passage of the TVET Act of 2013. The Republic of Kenya (2007), expressly opined that TVET is fundamental to the world of work. This supposition is based on the fact that for most people, finding a job is the anticipated outcome of their education and it is through their work that they achieve self-fulfillment. In this regard, TVET must play a major role in providing solutions by impacting the right market driven skills. This calls for changes in school curricula at all levels, so that young people become more work oriented and acquire the basic skills needed to perform productive work.

Low budgetary allocation has continued to be a major constraint in TVET sector, and yet the sector is expected to be a vehicle for rapid industrialization as outlined in Vision 2030. Other than government budgetary allocation, there has been very little technical assistance or support from development partners towards technical education at all levels. Skills development is an important element in a country's human capital development, improved competitiveness, and sustainable economic growth and development (World Bank, 2004a). It enables countries to compete effectively in manufacturing and services exports (Gemmell,1996; Lall, 1999, 2000), and to move into higher growth paths (Kimenyi, Manda, & Mwabu, 2002). Availability, acquisition and application of appropriate skills to the appropriate trade area enhances competitiveness in the industries and to the potential workforce (Lall, 1999; Tilak, 2002). Skill formation arises from formal education, vocational training, in-firm (enterprise) training, outside the firm training, and on-the-job learning (Lall, 2000).

Skills development enhances both people's capacities to work and as well as their opportunities at work, right skills enhances creativity self- satisfaction. The future prosperity of any country depends ultimately on the productivity of its working force. Skills development and economic growth determine nation development. Estimates for European countries show that a 1 per cent increase in training days leads to a 3 per cent increase in productivity, and that the share of overall productivity growth attributable to training is around 16 per cent (CEDEFOP, 2007).

There will be great need to establish the bridges between vocational education, training and skills development, and the world of work. The right skills should evolve with labour market demand. Countries should develop education and training policies which are more effective taking cognizance of existing global challenges and market trends. Its therefore important to note that Skills development is key in stimulating a sustainable development



process and can make a contribution to economic growth as well as to the changing economies as a result of new technologies in the global context. At the International Labour organization's (ILO) 2008 International Labour Conference (ILC), representatives of governments, employers and workers adopted a set of conclusions for using skills development to improve productivity, employment growth and development.

Demand for skills is affected by factors which includes culture, economic development, population growth and global changes and desired development goals. The competitive skills supply is determined by the availability, quality, and relevance of skills dedicated by the market. Development of effective skills development system depends on close coordination between government, the private sector and training institutions. The cooperation between all stakeholders which include the labour market will lead to more competitive programmes. However, there will be great need to investigate whether skills suitability and the relevance to the labour market has any bearing to the TVET demand.

## 1.1 Youth and Skills Development

The prosperity of any nation depends on the skills-base of its citizenry, quality and transfer of the skills, as well as a sound policy and legal framework to sustain quality growth in skills development and linkages with the production sector. This will ensure increased production, increased employment opportunities, reduced dependency levels, and consequently increased self-reliance among the youth and thus spurring the overall national economic growth (DYT, 2007). Knowledge and education are key factors to the full and effective participation of youth in the processes of social, economic and political development. Increased attention to improving participation rates of young people, particularly marginalized youth, is needed to ensure that they acquire the knowledge, capacities, skills and ethical values needed to fulfill their role as agents of development, good governance, social inclusion, tolerance and peace (UNESCO, 2013).

Education and training is central to development and to the improvement of the lives of young people globally, and as such has been identified as a priority area in internationally agreed development goals, including the Millennium Development Goals and the World Programme of Action for Youth. Education is important in eradicating poverty and hunger and in promoting sustained, inclusive and equitable economic growth and sustainable development. Increased efforts towards education accessibility, quality and affordability are central to global development efforts.

Industrialization is dependent on the availability of technically skilled personnel both at the middle and the upper levels. This requirement can only be realized if there exists a policy, legal and institutional frameworks at the national level in order to coordinate and supervise the curricular offered and ensure maintenance of Quality Assurance and Standards at all programme levels (MOE). Balancing supply of skills with demand in the labour market constitutes one of the fundamental issues in skills development policy. Historically, however, since economic and technological change worldwide accelerated in the 1980s the inability of most TVET systems to adequately respond to these challenges can mostly be seen as a skills mismatch due to an insufficient demand orientation in TVET. This is even



more troublesome, since the demand for skilled labour has risen significantly as a result of globalization, changes in technology, the organization of work, new development policies, including the transition to a low carbon economy, and the recent international financial crises and subsequent worldwide recession.

In many countries, TVET and existing labour market policies do not always facilitate the school to work transition, thereby handicapping young people especially in obtaining a head start in working life. For TVET systems to become more flexible and responsive to new skill demands, which tend to be difficult to foresee and increasingly diversified, there must be certain incentives for the stakeholders in the training system as well as those in key employment planning and decision-making roles. The latter would include employment services, a labour market institution that is a crucial link between the training provided, labour requirements and responsiveness to labour market conditions, therefore also for teachers/trainers and students in order to make informed choices in the teaching/training dynamics. The key questions accordingly are what kinds of reforms are needed to address the lack of cooperation and create greater synergies between training and skills development producers, and employers, public and private, in ways that render the transition from education and training to employment more responsive to labour market needs.

### 1.2 Problem Statement

Technical and vocational education provides alternative education and training opportunities which leads to employable careers which include skilled workers and technicians. They focus on imparting the necessary knowledge and skills to youth in order to enable youth to contribute to the socioeconomic development of the communities and ultimately to that of the country. By so doing, technical and vocational education and training indirectly, reduce unemployment among the youth, solve issues of idleness in rural areas and fight against poverty hunger and other challenges facing the youth.

To develop the nation's social and economic advancement, vocational training and development is expected to play two critical functions: firstly, to offer training prospects and occupation growth for school graduates and, secondly, to provide experienced labour for all levels of the country's economy (Government of Kenya (GoK), 2007, 2008). Due to scarce opportunities in paid employment, the skills developed are expected to lead to self-sufficiency and to advance Kenya's industrialization processes (UNDP, 2010). This can be achieved through identifying national TVET policies, developing appropriate programmes, providing sufficient funds, and increasing positive social outlooks for training and improved management-all of which are crucial for successful implementation of the TVET strategy (Nyerere, 2009). Skills development is especially important in ending Africa's economic marginalization by developing high and middle level skills, necessary to support global competitiveness as well as addressing other areas like poverty and disease. Skills competitiveness should be measured against suitability, relevance to the labour market Therefore, demand and certainly supply for TVET are a vital means of acquiring skills for these trades and more so market driven skills. The importance of skills cannot be over



emphasized and that's why this study is best placed to investigate whether skills competitiveness contribute to the demand of TVET among the youth in Kajiado.

### 2.0 LITERATURE REVIEW

The purpose of TVET is to make people self-employed and to be a vehicle of transition from school to the world of work (Hollander & Naing, 2009). With regards to this argument, TVET is time and again considered as a device for poverty mitigation as well as towards sustainable development through self-employment endeavours. Whilst this argument appears to be a rational one, for TVET to actually have an impact on poverty other aspects have to be in place. Moreover, for TVET graduates to efficiently be involved in productive self-employment there needs to be a labour market which can absorb the TVET graduates and provide them with productive work and an income that allows them to survive. The literature surrounding young people's perception has occupied a prominent position within research, government policies and academic debates over the past couple of decades, particularly as a mechanism through which to increase participation in higher education by students of low socio-economic backgrounds (Bradley, Noonan, Nugent & Scales, 2008).

The perception on marketability of the skills obtained in TVET is a major determinant for the demand of TVET amongst the youth. One of the Major challenges to youth employment in Kenya are the skills mismatch, search for white collar jobs and inadequate training for current and emerging labour markets, in particular in technical fields (roads, water, energy, agriculture, ICT and others). There is a wide perception that higher learning will equip one with competitive skills to earn an opportunity in the white collar jobs. However, most institutions of higher learning equip the students with theoretical knowledge and fail to understand that the demands of the job market are changing with time (Harry, 2014). In the present environment, many observers contend that different individual skills sets are needed to enhance the marketability. A more complete skills mix incorporates many generic skills such as the ability to think logically, to plan precisely, to anticipate difficulties and to be innovative and creative so as to develop and update the – necessary capacities and skills [individuals] need to enable them to be productively employed for their personal fulfillment and the common well-being (ILO, 2008).

The perceived durability of skills also determines the demand for TVET. Indeed, the long-run impact may provide the strongest justification for training in a less than optimal economic context. Yet, as alluded to, it is in this regard that the content of training becomes critical. Durability of skills matters, if TVET graduates are unable to find employment immediately upon completion of their programs, then the perceived real value of training may be in its provision of a more durable core of basic skills. Skills mix thus forms an essential component of a sustainable institutional and economic environment in which public and private enterprises enable growth, the generation of greater employment and income opportunities for all citizens, and whereby societies can achieve their goals of economic development, good living standards and social progress. Consequently, there is a demand for a more skilled labour force, with more autonomous, adaptable and multifunctional workers (ILO, 2008). This influences the demand for TVET courses.



Kenya faces a more complex skills challenge. This is particularly in the perceived ease of use of the skills. While globalization demands that the country upgrades its trainings systems to effectively compete, a large number of industries still operate on older technologies. This requires an eclectic approach to training that creates graduates who are able to adapt to varying work environments. A solid basic education remains the best preparation for a wide range of jobs (Dougherty, 1989). In fact, basic skills are what good education is about. Modern economies require a strong cognitive development as the foundation for vocational skills. Learning an occupation requires increasingly higher levels of understanding of scientific theories and the technological component of occupations. Part of this education should precede training, thus facilitating and shortening it. Workers with a good mix of practical skills and conceptual understanding of technology can adjust more easily to new and different occupations, grow in their careers, and adjust to technological changes. The real issue is not general versus super-specialized training but the solidity and depth of the basic skills taught with specialized training.

### 3.0 METHODOLOGY

This study used a mixed method design of both qualitative and quantitative methods for the purposes of triangulation. The study applied a descriptive cross- sectional survey as its quantitative research design. A description of the indicants of attributes of TVET institutions and their influence on the demand for TVETs was conducted. The researcher developed a questionnaire to collect data that was used to establish the relationships between the key study variables. The target population for this study comprised of all students enrolled in youth polytechnics in Kajiado County. Then the management of the three polytechnics in Kajiado County was also part of the population for the interviews and focus group discussions. The sampling frame for this study will be the students in three youth polytechnics in Kajiado i.e., Isinya, Namelok and Entasopia.

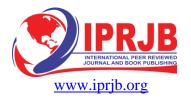
Using Slovin's Formula, the sample size was thus:

$$n = N / (1 + Ne^2) \dots$$

Where n, N and e are the number of samples, the total population and error tolerance respectively. Ariola (2006) argues that in using Slovin's formula, the error of tolerance is first determined which can range between 95% and 99% confidence level. (giving a margin error of 0.05 and 0.01 respectively). In the current study a confidence level of 95.0% was utilized thus the margin of error was 0.05. The total number of the students in the three polytechnics was 170 students. Thus, using the formula, the sample size was given by:

$$n = 170/\left(1 + 170(0.05^2)\right)$$

Therefore, the sample size was 119.29 truncated to 119 respondents (equivalent to 70% of the whole population). Stratified random sampling was used to select the TVET first year and second year students as respondents for this study from their respective youth polytechnics.



## 4.0 RESEARCH FINDINGS

## 4.1 Influence of skills competitiveness on demand for TVET among the youth

Table 1: Rating on aspects of skills competitiveness influence on demand for TVET among the youth

State	ement	Strongly Disagree	Disagre e	Not Sure	Agre e	Strongl y agree	Mean	Standard Deviation
		%	%	%	%	%		
a)	TVET skills are							
	suitable for							
	employment	3.5	1.7	7.0	33.9	53.9	4.3	0.9
b)	It is easy to							
	perfect the use	0.0	- 4	4.0	20.2	<b>7</b> 0.4		0.0
,	of TVET skills	0.9	6.1	4.3	38.3	50.4	4.3	0.9
c)	It is easy to							
	apply TVET	1.7	7.0	4.0	45.0	40.0	4.0	0.0
1)	skills	1.7	7.8	4.3	45.2	40.9	4.2	0.9
d)	The labour							
	market respect persons with							
	TVET skills	2.6	6.1	8.7	40.0	42.6	4.1	1.0
e)	Many employers	2.0	0.1	0.7	40.0	42.0	4.1	1.0
<i>C)</i>	prefer TVET							
	skills for							
	employment	0.9	1.7	13.0	52.2	32.2	4.1	0.8
f)	Employers will	0.7	1.,	13.0	32.2	32.2	1.1	0.0
-/	always prefer							
	persons with							
	TVET skills	0.9	6.1	13.0	42.6	37.4	4.1	0.9
g)	TVET skills are							
<i>U</i> ,	relevant to the							
	labour market	4.3	3.5	13.0	41.7	37.4	4.0	1.0
h)	TVET skills are							
	required across							
	every sector	3.5	5.2	15.7	40.0	35.7	4.0	1.0
i)	TVET skills are							
	highly sought							
	after in the							
	labour market	6.1	4.3	14.8	41.7	33.0	3.9	1.1
j)	TVET skills are							
	easy to acquire	7.0	15.7	7.0	31.3	39.1	3.8	1.3

As the trend indicates, respondents appraised TVET skills as highly suitable for employment, they also attested to the fact that it is easy to perfect the use of TVET skills as well as their easy application. Other highly rated indicators with an evarage mean above 4.0 were the respect and preference the labour market accords to persons with TVET skills Respondents were nonetheless not decisive on whether TVET skills are easy to acquire with



a comparatively lower mean of 3.8. The overall mean, out of 5 points, for skills competitiveness indicators as determinants of demand for TVET among youth was 4.1. This implies that, skills competitiveness of TVET course is key in determining the demand for the course.

## **4.2 Factor Analysis**

**Table 2: Rotated Component Matrix (Skills Competitiveness)** 

	Components			
Component 1: TVET skills to market		Component 2: Ease of acquisition and application of TVET skills		
Statement	Factor loading	Factor loading		
TVET skills are highly sought in the labour market.	0.724	-0.046		
The labour market respect persons with TVET skills.	0.689	0.129		
Mean	4.0			
Chronbach alpha	0.90			
TVET skills are easy to acquire.	-0.009	0.782		
It is easy to apply TVET skills.	0.049	0.641		
Mean	4.0			
Chronbach alpha	0.90			

The ease of acquisition and application of skills and relevance of TVET skills to the labour market emerged as the major components. On the ease of acquisition and application of TVET skills, it was observed that TVET skills are easy to acquire as indicated by its high factor loading and at the same time they were easy to apply. TVET skills were also highly rated by the management and the student leadership as easy to use. Participant number three claimed that, once achieved, it is easy to apply the skills as long as they are related to the specific trade area of the skills. According to Participant two: "The manner in which we train our students makes it easy for them to apply the skills out there." During one of the management's focus group discussions, one of the participants also expressed that TVET skills are very simple in their application. They are not like those complex university courses that require you to remain in books even when you are working. Another one in the discussion asserted that, 'the skills are easily applicable since our curriculum is market oriented.' Notwithstanding these assertions, Participant number thirteen, raised the concern that although most of TVET skills are utilized effectively but some graduates do not use them adequately due to the lack of sufficient support/capital to start-up. In line with this,



participant number four was also categorical that once the trainees are given necessary technical skills and provided with the basic tools for the job they can perform.

On the relevance of TVET skills to the labour market, it emerged that TVET skills are highly sought after in the labour market and the market respects persons with TVET skills. Although most of TVET graduates are reportedly in self-employment (see table 4.5), the assertion that TVET skills are highly sought after in the labour market could be as a result of the value attached to the skills. Thus could mean that although the skills are highly sought after, most graduates prefer to venture into self-employment as opposed to formal employment, where probably they perceive the earnings to be much better. They may as well be more concerned about job security, which they perceive as not guaranteed in formal employment compared to self- employment. This could be seen in the light of the fact a big number of university graduates also compete for the same employment opportunities.

There was some implied confidence in the relevance of TVET skills in the job market, because most discussants in FGDs expressed their belief that the most relevant courses for job opportunities in the market are electrical installation and dressmaking. Participant three, for instance, asserted that electrical installation is in high demand at the market and dressmaking has many opportunities to exploit. Participant five agreed with this position with the following words: "With courses like electrical installation from this polytechnic, your chances of getting a place in the job market are high."

In the same regard, Participant eleven opined that: "Dressmaking will always be marketable since people will always need to clothe themselves with all kinds of designs." Participants six, however, insisted that motor vehicle repair was also relevant in addition to the aforementioned two courses. The participant argued thus: "Motor vehicles repair has attracted a large labour market because the purchase of vehicles is high and yet they require to be serviced and repaired".

## 4.3 Variables Relationship

**Table 3: Variables Relationship** 

		Perception that TVET skills guarantees Income earning	Great personal enthusiasm for TVET skills
Ease of acquisition and application of skills	Pearson correlation	0.733(*)	0.763(*)
	Sig. (2-tailed)	0.000	0.000
	N	115	115
Relevance of TVET skills to the labour market	Pearson correlation	0.728(*)	0.779(*)
	Sig. (2-tailed)	0.000	0.000
	N	115	115



\* Correlation is significant at the 0.05 level (2-tailed)

The correlation matrix shows a correlation coefficient of 0.733 between ease of acquisition and application of skills and perception that TVET skills guarantees income earning. It also shows a correlation coefficient of 0.728 between relevance of TVET skills to the labour market and perception that TVET skills guarantees income earning. Similarly, a strong positive correlation was noted between ease of acquisition and application of skills and great personal enthusiasm for TVET skills (r = 0.763). A strong positive correlation also exists between relevance of TVET skills to the labour market and great personal enthusiasm for TVET skills (r = 0.779). This implies that the relationship between predicted value and the observed value was positive. From the findings, the low significance levels indicates a high confidence level for the findings. Significance was below 0.05 for all the variables which indicates that the results were significant above 95% confidence level. The implications are that for demand of TVET skills to be high, TVET skills competitiveness has to be high too, by ensuring that their ease of acquisition and applicability as well as their relevance in the labour market. In the present environment, many observers contend that different individual skills are needed to enhance the marketability of TVET graduates. More complete skills mix incorporates many generic skills such as the ability to think logically, to plan precisely, to anticipate difficulties and to become innovative and creative. This will help the graduates to develop and update the necessary capacities and skills needed to be productively employed for their personal fulfillment and the common well-being (ILO, 2008).

## 4.4 Regression model

Regression was done to find the relationship between the main indicators identified for skills competitiveness in the factor analysis and the demand for TVET. This was done at two levels; the first being by a multiple regression model, while the second level was the test of hypothesis. This was done separately for the two levels of demand (Perception that TVET skills guarantees income earning and Great personal enthusiasm for TVET skills).

Using the details presented in Tables 6.1 and 6.2, two regression models can be constituted as follows:

$$D_1 = \alpha_1 + \beta_1 X_1 + \beta_2 X_2 + e$$

$$D_2 = \alpha_2 + \beta_1 X_1 + \beta_2 X_2 + e$$

Where:

 $D_1$  is the Demand for TVET expressed as the Perception that TVET skills guarantees income earning;

 $D_2$  is the Demand for TVET expressed as Great personal enthusiasm for TVET skills



Table 4: Regression coefficient matrix I

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std.			
	В	Error	Beta		
(Constant)	0.77	0.25		5.97	0.02
Ease of acquisition and application of TVET skills	0.51	0.14	0.55	3.37	0.03
Relevance of TVET skills to the labour market	0.57	0.15	0.61	3.86	0.03

Dependent Variable: Perception that TVET skills guarantees income earning

## Adjusted R Square is 0.437

Table 5: Regression coefficient matrix II

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant) Ease of acquisitionand	0.71	0.23		6.39	0.01
application of TVET skills Relevance of TVET skills to	0.44	0.35	0.49	5.71	0.02
the labour market	0.51	0.29	0.57	3.55	0.02

**Dependent Variable: Great personal enthusiasm for TVET skills** 

## Adjusted R Square is 0.456

In this regard, the models can be expressed as:

$$D_1 = 0.77 + 0.55X_1 + 0.61X_2 + e$$

$$D_2 = 0.71 + 0.49X_1 + 0.57X_2 + e$$

The results are interpreted to mean that, at multivariate level, a change in one unit of Ease of acquisition and application of TVET skills and Relevance of TVET skills to the labour market would increase the Perception that TVET skills guarantees income earning. On the other hand, it would increase Great personal enthusiasm for TVET skills. The findings imply that the effect of Ease of acquisition and application of TVET skills and Relevance of TVET skills to the labour market on Great personal enthusiasm for TVET skills is greater than their effect on the Perception that TVET skills guarantees income earning. The result



implies that skills competitiveness is greatly related to the demand for TVET courses. This is an indication of relevance of skills in the labour market as opined by participant eleven who stated that, "dress making and motor vehicle are popular courses because of their demand especially in our market place".

# **4.5** Test of hypotheses

At the first level of demand (Perception that TVET skills guarantees income earning), the hypotheses tested were:

 $H0_{1a}$ : There is no significant relationship between relevance of TVET skills to the labour market and perception that TVET skills guarantees income earning

 $H0_{2a}$ : There is no significant relationship between ease of acquisition and application of TVET skills and perception that TVET skills guarantees income earning

The critical value for t at 114 degrees of freedom (d.f = 115 - 1) at 95% confidence level, 2-tail test was 1.973. Given that calculated t-scores (ease of acquisition and application of TVET skills = 3.37; Relevance of TVET skills to the labour market = 3.86)were greater than the critical value for t(1.973) for both variables, the criteria is to reject the null hypothesis for both explanatory variables. Thus, both ease of acquisition and application of TVET skills as well as Relevance of TVET skills to the labour market have a significant relationship with the perception that TVET skills guarantees income earning.

At the second level of demand (Great personal enthusiasm for TVET skills), the hypotheses tested were:

 $H0_{1b}$ : There is no significant relationship between relevance of TVET skills to the labour market and great personal enthusiasm for TVET skills

 $\mathbf{H0_{2b}}$ : There is no significant relationship between ease of acquisition and application of TVET skills and great personal enthusiasm for TVET skills

Similarly, at this level of demand, calculated t-scores (ease of acquisition and application of TVET skills = 5.71; Relevance of TVET skills to the labour market = 3.55) were greater than the critical value for t (1.973) for both variables. The null hypothesis is thus rejected for each explanatory variable. Thus, both ease of acquisition and application of TVET skills as well as Relevance of TVET skills to the labour market have a significant relationship with great personal enthusiasm for TVET skills.

# **4.6 Coefficient of Determination**

Coefficient of determination, also called R-Square ( $R^2$ ) gives the proportion of variance in the dependent variable (science) which can be predicted from the independent variables. If there are significant outliers,  $R^2$  is adjusted /corrected for errors. Coefficient of determination was computed for the two levels of demand. That is Perception that TVET skills guarantees income earning and Great personal enthusiasm for TVET skills.



Table 6: Coefficient of determination on perception that TVET skills guarantees income

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.675	0.455	0.427	0.270
0.675	0.455	0.437	0.279
Predictors: (Cons	tant), Ease of acqu	uisition and application	of skills,Relevance of TVET
skills to the labou	r market		

The coefficient of determination (R<sup>2</sup>) for Perception that TVET skills guarantees income earning was 0.455, which means that for any change in the perception that TVET skills guarantees income earning, all the predictors collectively explain up to 0.455 (that is, 45.5%) of that change.

Table 7: Coefficient of determination on Great personal enthusiasm for TVET skills

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.695	0.483	0.456	0.236
Predictors: (Constant	), Ease of a	acquisition and application	of skills,Relevance of TVET

skills to the labour market

For Great personal enthusiasm for TVET skills, the coefficient of determination (R<sup>2</sup>) was 0.483, which means that for any change in the Great personal enthusiasm for TVET skills, all the predictors collectively explain up to 0.483 (also stated as 48.3%) of that change. Comparatively, it is apparent that the predictors explain a higher proportion of the changes in Great personal enthusiasm for TVET skills than in the Perception that TVET skills guarantees income earning. This is because the coefficient of determination at the former is greater than at the latter level (0.483 is greater than 0.455).

## 5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

### **5.1 Summary of the research findings**

TVET skills were highly affirmed to be greatly suitable for employment. Respondents also attested that it is easy to perfect the use of TVET skills and apply them. Another highly rated indicator was the respect and preference the labour market accords to persons with TVET skills. Suitability of the TVET skills in the labour market was further approved by most of the informants who were of the opinion that, once the trainees are given the necessary technical skills and provided with the basic tools for the job, then they can perform. A few respondents, nonetheless, contested the suitability of TVET skills on the basis that graduates are not adequately prepared in practical skills and thus need further practical training. This, they argued, is worsened by insufficient facilities and tools; hence it will take time to gain the skills. During the in-depth interviews, some participants expressed strong optimism in the applicability of TVET skills in the market. However, when further



probed, it was evident that the polytechnic administration does not create enough awareness to the local community on the courses offered.

The coefficient of determination indicated that competitiveness of TVET skills would to some extent explain changes in students' demand for the TVET programmes in exclusion of any other indicator. When the various aspects of skills competitiveness were assessed through factor analysis, the ease of acquisition and application of skills together with the relevance of TVET skills to the labour market were identified as the major indicators. Regression analysis indicated that a change in ease of acquisition of the skills leads to an increase in demand for TVET. Similarly, a change in relevance of TVET skills to the labour market would also lead to increase in demand for TVET skills.

#### **5.2 Conclusion**

From the findings, it can be inferred that skills competitiveness of TVET course is key in determining the demand for the course. Those who seek the skills usually consider the skills as quite relevant on the ground that using the skills, one is able to venture into selfemployment or even get formal employment. They also perceive the skills as easy to use or apply. Even so, the suitability of TVET skills is marred by insufficiency of training facilities and tools in some polytechnics in meeting some course requirements. This results to some graduates being not adequately prepared in practical skills and in some instances it also causes students to take longer time to gain the skills. Although there is strong optimism in the applicability of TVET skills in the market, with the various relevant opportunities in the market for TVET skills, this is negated by lack of enough awareness to the local community on the courses offered. In this regard, although the skills could be competitive in the market with the existence of opportunities for the courses offered, quite a number of parents are less aware or informed concerning this which possibly explains why the enrolments are still low in some institutions. There is also a widespread perception that some courses in TVET are for those who are poorly educated and school dropouts; hence some youths have a negative attitude towards their relevance in the market. For this reason, the youth are not able to see market opportunities and match them with their career choices. Another issue is that a proportion of those who have had the opportunity to acquire TVET skills lack the knowhow on how to utilize their skills to empower themselves which makes them continue to struggle with the very life challenges they had prior to training. This could potentially discourage other youths from enrolling for TVET courses.

#### 5.3 Recommendations

Technical and Vocational education and training in Kenya is changing in terms of structure, programs, processes, and practices in order to be effective in improving the quality of learning outcomes, making it more accessible and attractive to all, and ensuring it is relevant and connected to the world of work. In the light of the conclusions drawn in this study, it is recommended that:

➤ It is also important that both the National and County governments put efforts to enhance awareness about competitiveness of TVET courses among parents and the youth as well. This could be done through joint campaigns in which civic education



- could be conducted on TVET. During these campaigns, TVET should be advocated and demonstrated as highly relevant in the labour market. This should involve the engagement of successful TVET graduates from within the specific locality of the campaign. This is geared towards change of the perception on TVET as a place of failures.
- To link skills development and world of work government should incorporate incubation centres within training institution as well as enhance mentorship programmes. These centres may have programmes designed to empower TVET graduates to apply the skills learnt in empowering themselves.

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