Socioeconomic Determinants of Trainees' Enrolment and Participation in Public TVETS in Nakuru County, Kenya

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Abstract

Technical, Vocational, Education and Training (TVET) focuses on providing lifelong skills that meet the needs of the work place, industry and self-employment. The importance of TVET is in the global agenda for development and refocusing education and training in the 21st Century. Purposely, this study sought to investigate individual and socioeconomic determinants of trainees' enrolment and participation in public TVETs in Nakuru County, Kenya. The objective of the study was to establish how socioeconomic status influenced trainees' enrolment and participation in public TVETs in Nakuru County, Kenya and the research hypothesis that was tested stated that there is no significant relationship between socioeconomic status and trainees' enrolment and participation in public TVETs in Nakuru County, Kenya. The study employed descriptive survey research design with a sample size 12 TVETs, 30 trainers and 331 trainees drawn from the target population of 24 public TVETs, 150 trainers and 2385 trainees from entire Nakuru County. Data collection instruments were interview guide, questionnaires and document analysis guides. Data was analysed qualitatively and quantitatively. Descriptive statistics which included frequencies percentages, means and standard deviations were generated and used in discussing the research findings. Correlation analysis and one-way analysis of variance (ANOVA) at 95% confidence interval of the difference (α =0.05) was also done. The findings showed that: there was a significant relationship between socioeconomic status and trainees' enrolment; there was a statistically significant mean difference between socioeconomic status and trainees' enrolment in public TVETs; there was statistically significant mean difference between income of parents, level of education of parents and occupation of parents and trainees' enrolment in TVETs. The findings of the correlation between socioeconomic status of trainees and enrolment in TVETs showed that, P value = .002 < P = 0.05, HO₂ was rejected and the conclusion was that there was a significant relationship between socioeconomic status of trainees and enrolment of trainees. The analysis led to the conclusion that, socioeconomic status determined enrolment in TVETs.

Key words: Technical and Vocational Education and Training (TVET), Determinants, Socioeconomic factors, Participation of trainees in TVETs, Trainee enrollment.

1.1 Introduction

Education and training is a key supporter of human capital development and an essential human right. The Sustainable Development Goals (SDGs) singled out instruction as key to advancement (UN General Assembly, 2015). The United Nations Educational Scientific and Cultural Organization (UNESCO) and International Centre for Technical, Vocational Education and Training (TVET) lays emphasis on Sustainable Development Goals (SDGs) in transforming Education with a vision of ensuring inclusive and quality Education for all and promote lifelong learning (UNESCO, 2015). The SDG No. 4 on Vocational Training Education requires member states, Kenya included ensuring more access to TVET Education programmes, increasing training for youth to enable them to get decent jobs, start entrepreneurship outlets

and become self-reliant. Technical and Vocational Education and Training (TVET) focuses on providing lifelong skills that meet the needs of the work place, industry and self-employment. A number of developed countries worldwide like Japan, Italy, Sweden Britain and China have funded TVETS heavily, an initiative that has increased chances of the youth who leave school to enroll in the TVET Institutions (Carmago, Souza, Lima, & Soares, 2015). However, in developing countries there is inadequate funding for TVETS which limit school leavers from enrolling in TVETs. UNESCO (2013) and Shaibu (2013) cited persistent challenges in enrolment in Technical Education in Nigeria due to poor implementation of policies in relation to TVET funding and resource distribution.

A survey by UNESCO (2012) in many African countries found out that, resources remain mainly with the parents and allocation of the resources is done according to priorities of families. Low socio-economic status causes students to fail to enrol in TVETS after leaving secondary school because they are expected to work and help with the family's subsistence. Some Parents insist that there is no money to support education after secondary unless a scholarship comes their way from well-wishers or government which normally targets bright students.

Studies done in Kenya on funding of TVETS by Maronga Asuma and Nyikal, (2015) have shown that TVETS in Kenya are faced by the challenges of limited funding. Kenya is grappling with the situation of few TVET Institutions and perpetual low enrolment. The country has continually enacted legal framework to address Education and Training in Kenya putting more emphasis to TVETS. The constitution of Kenya 2010, Kenya vision 2030 have placed special demands on the tertiary sector and TVETS as the leading engine to drive the economy in terms of producing adequate members of middle level professionals needed towards the attainment of the vision. The objective of the Kenya vision 2030 is to make Kenya a newly industrializing, middle-income country providing high quality life for all her citizens by the year 2030. To achieve this vision, technological innovation and development is needed hence the need to place more emphasis on TVET Education and Training so as to produce a critical mass of well qualified technologists and engineers to spur development. National Educational Sector Support Programme (NESSP) outlines the National Education Sector Strategic Plan (NESP) 2018-2022, with its elaborate causal chain that provides explicit linkages from programme activities to the NESSP 2018- 2022 strategic objectives geared towards achievement of vision 2030. NESSP 2018-2022 adopts a thematic level planning by sub-sectors, TVET being one of these sub-sectors to carry out training and skills development in science, technology and innovation for achievement of vision 2030 (MOE-NESSP 2018-2022).

Kamau (2013) in his study on challenges affecting technical and vocational training in Kiambu County in Kenya found out that, TVET is seen as a sub-par training choice appropriate for the drop-outs and less astute students'. To improve on enrolment and participation in TVETS, the government of Kenya has taken a number of measures to enhance training. The Kenya 2013 TVET Act aims to strengthen the relevance and quality of TVET. This legal document has incorporated TVETs with the private sector (Republic of Kenya, 2013). The constitution of Kenya 2010, section (2) - 9 placed TVET institutions under County governments empowering them to take charge of the institutions while the TVET Bill 2012 contains collection of lawful structures in the TVET part and accommodates the foundation of a TVET Authority (TVETA) to supervise the TVET framework. The National Policy for Vocational Training Centres (MoEST, 2014) notes that, vocational education and training is an investment with significant social rate of returns. The Sessional Paper No.1 of 2019, a Policy Framework for Reforming Education and Training for Sustainable Development in Kenya fortified the National Skills Training Strategy and the modification of the legitimate system for TVET Bill whose purpose was to reinforce the components for the execution of the essential TVET reforms (Republic of Kenya, 2019). These legal documents ensure TVET operations are streamlined to equip trainees with necessary skills. The operationalization of the TVET bill as per the constitution of Kenya requires well trained human resources in these areas and these human resources do not necessarily have to be trained in the universities. The county government, through concerted efforts by TVET institutions can develop and offer training tailored towards ensuring that, the county government meet their constitutionally delegated mandate to provide immense opportunities for youth training and subsequent youth employment in Kenya (Government of Kenya (2010), Government of Kenya (2020).

Despite County government being empowered to run TVET institutions, in Nakuru County, most of the technical institutions mainly target class eight leavers for skills training development. Information obtained from Lang'at (2015), the Technical Vocational Education and Training County Director in Nakuru County, confirms low enrolment, access and participation. In this county, the TVET institutions managers attribute low enrolment in public TVET institutions to trainees in ability to meet the training cost and examination fees of about Kenya shillings two thousand five hundred for National Industrial Training Authority examination. Records at the Ministry of Education in Nakuru County indicate that, despite TVET institutions having a capacity to accommodate many trainees; total enrolment is low and as a result, only twenty-four public TVET institutions have been registered by Technical Vocational Education and Training Authority (TVETA) in the County.

1.2 Statement of the problem

Globally, education and training is recognised as the key to human capital development. Technical Vocational Education and Training (TVET) offers human capital development through provision of lifelong skills that meet needs of work place, industry and self-employment. Unfortunately, enrolment in TVET institutions worldwide Kenya included is low and this has caused high percentage of youths legible for training in TVETs due to low socioeconomic status. Nakuru County is reeling with her share of low enrolment since her TVET institutions do not enrol trainees to the capacities they can hold. In addition, the TVET institutions in Nakuru County are few despite the fact that the county is extensive and densely populated. The Nakuru County government in her development plan, 2018-2022 has undertaken to equip existing TVET centres, recruit more trainers and respond to job market needs and even pay training fees for trainees through awarding bursaries to needy trainees in a bid to attract prospective trainees to enrol in her institutions. Infrastructure, tools and equipment have been allocated 450 million to be funded by county government, capacity building funds allocated is 12 million and funds for paying for the training fees for the youth allocation is 100 million to be funded by Nakuru County treasury (County Government of Nakuru, 2018). Despite the Nakuru County government's effort to address the gap of low enrolment in her TVET institutions, enrolment has remained low in the County TVETs putting the idle unemployable youth at risk of indulging in drugs and substance abuse. As a result of this identified gap, this study was conducted to investigate the individual and socioeconomic determinants of trainee enrolment in public, technical vocational education and training institutions in Nakuru County, Kenya, with the aim of increasing enrolment of youth to TVETs so as to equip them with employable and self-employment skills to enable them to be involved in nation building.

1.3 Research objectives

The study aimed to: To establish how socioeconomic status influenced trainees' enrolment and participation in public TVETs in Nakuru County, Kenya.

1.4 Hypothesis of the study

One hypothesis was tested:

H₀₁: There is no significant relationship between socioeconomic status and trainees' enrolment in public TVETs in Nakuru County, Kenya.

2.0 Literature Review

Socioeconomic status and trainees' enrolment in TVET institutions

Family's income and surrounding environment play important role in trainees' decision to enroll in TVET. When socio-economic status is analyzed in relation to enrolling in TVETS, trainees who come from families with lower education are more willing to enroll in TVETS rather than the trainees who live in the cities with much more higher background levels in terms of income, housing prices and also educational qualifications are less interested in enrolling in TVETS (Arregle & Mari, 2019). A study carried out in Nigeria by Akarue and Obavwunuto (2019) on attitudes of individuals based on socio- economic status revealed that societies and culture can influence the choice of where to enroll for studies and the career pathway to follow due to attitudes of people. In Nigeria, people mostly choose a job due to their social status and level in the society as well as looking to satisfy their friends and associates undermining their aptitude.

Arregle, and Mari (2019), Madhavani and Sisodia (2019), in their studies on enrolment of trainees in TVETS in Malaysia found out that income levels of parents and guardians have significant implications on preference of trainees to enroll in TVETS. Majority of trainees enrolling in TVETS were from parents and guardians of low socioeconomic status, low education and occupational background. Socioeconomic status background exerts influence on enrolment decisions. Socioeconomic status (SES) reveals inequalities in access to resources and issues related to privilege, power and control. A study carried out by (Gemechu, 2018) in Haramaya University of Eastern Ethiopia on family socioeconomic status influence on students' academic achievement found out that, low SES has significant influence on academic performance and school success in terms of enrolment and completion rates. Richardson (2002), Akarue, & Obavwunuto (2019) and Marcus & Fonseca (2019) agree with Gemechu (2018) that SES is an important individual determinant in supporting trainees to enrol and accomplish their studies in TVETs. A study done by Sandefur and Campell (2006) on sociological framework to examine the influence of family resources as a determinant of enrolment in certificate courses in 2-year and 4-year colleges in the United States showed that, students from high SES have higher probability of enrolling in 4-year college than 2-year college. This is quite practical since trainees require financial support in order to pay any training fees and acquire learning resources. Low socioeconomic status will thus result in inability to enrol or complete the course enrolled to.

Research done by Akale (2015) in Nigeria on influence of socioeconomic status of parents in sustaining learners in TVETs found out that low socioeconomic status parents could not support a student's training in any institution. UNESCO's report on Education for All prominently indicated that 66% of learners who tried out various educational programs in specialized institutions in Bangladesh and Sub-Saharan Africa pulled out before completion of specialized instruction cycle because of guardians' low pay (UNESCO, 2017). This is on the grounds that low socioeconomic status restrains parent's capacity to cater for vital expenses of training resulting in high dropout rate of trainees in specialized institutions like TVETs. Low socioeconomic status parents lack basic needs and will tend to consider furthering education after Kenya Certificate of subsidize the family's income. Research done by Kyungu and Macharia (2017) on influence of socioeconomic status families are bound to miss training than those from high socioeconomic status families on grounds of inability to pay institutions' expenses.

From these survey findings, socioeconomic status seems to influence enrolment of learners in different TVET institutions. The studies indicate that, monetary component significantly influences enrolment levels in learning institutions and TVET institutions are included. The implication could be that, improved socioeconomic status is likely to increase enrolment in TVETs and subsidizing or assisting trainees by providing bursaries and grants may go a long way in boosting enrolment and completion rates for trainees from low socioeconomic status families.

2.1 Theoretical framework

The study was based on the Social Learning Theory of Career Decision Making (SLTCDM). The theory was presented by John D. Krumboltz in 1976. Krumboltz was addressing the concern why people prefer one educational program or occupation to another. This is the same concern that was addressed by the since the preference of educational program or occupation will lead to increased enrolment where the course is offered for career development. The theory states that, psychological functioning can be explained in terms of the interaction of personal characteristics, previous behaviour (learning) and environmental conditions. Personal characteristics and learning will include the individual determinants which include the socioeconomic status, while previous behaviour and environmental conditions explain the institutional determinants like the courses on offer. The theory was thus suitable for this study on social economic determinants of trainees' enrolment in TVETs since the prospective trainees will make decision to enrol in TVETs which shall lead them to pursue technical oriented career path.

The social learning theory for career decision making identifies interactions of genetic influence, cognitive processes, emotional processes, environmental conditions' influence and performance skills on people's

career choices (Krumboltz & Mitchel, 1990). Krumboltz (1976) posited that, there are four factors that influence choice of a course or career in this theory; Genetic endowment or social abilities consisting of race, sex, physical appearances and physical defects that cannot be changed. This study has the objective of influence of socioeconomic status on enrolment which is related to environmental conditions which outside the control of any individual and will influence choosing of technical career path leading to enrolment in TVETs, Environmental conditions and events are factors usually outside the control of any individual. They are due to number and nature of job opportunities, training opportunities, social policies and procedures for selecting trainees and family resources, learning experiences act on the environment to produce certain consequences and associative learning experiences brought by external stimuli and task approach skills are set of skills, performance standards, mental sets and emotional responses that are interactions between genetic and environmental influences.

The social learning theory of career decision making was used in a study carried out on factors influencing enrolment in urban agricultural education programme in Pennsylvania university by Blannie and Levon (2004). This theory is therefore relevant for this study on individual and socioeconomic determinants of trainee enrolment in TVET institutions in that, enrolment in TVETs can be influenced by the socioecomic status of prospective trainee, the decision on career path to take and external forces like enrolment policy and enrolment process.

3.0 Research methodology

3.1 Research design

This study employed descriptive survey research design. A survey is an attempt to collect data from members of a population in order to determine the status of the population with respect to one or more variables. The design explored socioeconomic determinants of trainees' enrolment and participation in public TVET institutions. Descriptive survey is a method of collecting numerical data to answer questions about the status of the phenomena under study. The design allowed the researcher to collect data about people's opinions, attitudes, habits or any other educational issue. The design was considered appropriate because it facilitated collection of data that described specific characteristics of phenomena in order to determine the status of a population with respect to one or more variables.

3.2 Target population

The study was conducted in all registered public Technical Vocational Education and Training institutions in Nakuru County that that had operated for at least five years and had continually posted low trainees enrolment over the years. The respondents of the proposed study were drawn from the 24 registered public TVETs in the County. The study targeted 24 institutions' principals, 150 trainers and 2,385 trainees (County Director of TVET, 2019). Thus the total population targeted was 2559 respondents.

3.3 Sample size and sampling procedure

Cooper and Schindler (2014) define sample size as a smaller set of the larger. According to Gay and Airasian (2003), a sample of 20 percent to 50 percent is recommended for small target groups. Therefore 50 percent of registered public TVETs were randomly sampled to get a sample of twelve TVETs and twelve principals. Twenty percent of the trainers were taken to give a sample size of 30 trainers. Cochran (1977) formula was used to calculate the sample size of trainees. Cochran formula was appropriate for this study because the target population of the study was large. The formula is given as:

$$n_o = \frac{z^2 p q}{e^2}$$

Whereby; n_0 is the sample size, z is abscissa of the normal curve that cuts off an area at the tails, p is the estimated proportion of an attribute present in the population, q is 1-p and e is the desired level of precision. In this study, p = 0.5 (Maximum variability), q = 1-0.5, desired confidence level = 95% and level of precision= $\pm 5\%$. Using this formula, with the desired confidence level of 95% and precision level of $\pm 5\%$ the sample size for trainees was given as at least 331 respondents. Therefore, the total sample size was 373 respondents.

3.4 Data collection instruments

The tools of data collection were interview schedule for principals, questionnaires for trainers and trainees and document analysis guide. The questionnaires were used for data collection from the trainees because they offered considerable advantages in the administration, presented even stimulus to large numbers of people simultaneously and provided the researcher with an easy accumulation of data. Gay and Airasian (2003) maintain that questionnaires give respondents freedom to express their views or opinion. A document analysis guide allowed collection of secondary data by way of interrogating official records for verification of the situation on the ground.

3.5 Data analysis techniques

This was done by first cleaning, coding, entering and then analyzing. The data was analyzed both qualitatively and quantitatively. Quantitative data was edited to eliminate inconsistencies, summarized and coded for easy classification in order to facilitate tabulation and interpretation. The researcher then used Statistical Package for Social Sciences (SPSS) IBM version 20 to analyze data. Descriptive statistics was used in describing the sample data in such a way as to portray the typical respondent and to reveal the general response pattern. Qualitative data analysis was done by describing the distribution of single variables. The relationships and links between the independent and dependent variables were discussed and logical conclusions made. Inferential statistics were used; correlation coefficients and one- way ANOVA test was applied for trainers and trainees output. The one-way ANOVA test was applied to test the null hypotheses against the alternative hypotheses that not all means are the same, at $\dot{\alpha} = 0.05$ significance level to test null hypotheses and provide statistical relationship of variables.

4.0 Research findings and discussion

4.1 Influence of Socioeconomic status on trainees enrolment

To establish how socioeconomic status influenced trainees' enrolment in Public Technical, Vocational Education and Training institutions (TVETs) in Nakuru County, the researcher looked at in-depth information of the socioeconomic status and how the socioeconomic status influenced enrolment in TVETs by using items that were indicators of socioeconomic status that included level of education of parents/guardians, employment status and adequacy of income, financial ability of parents and guardians, ability of parents or guardians to pay school fees and ownership of various items in the trainees' homes. Various aspects of relationship between socioeconomic status, the enrolment were explored. A questionnaire item was constructed to establish the socioeconomic status, the enrolment and participation of trainees' learning in TVET. The responses were presented in figures and frequency tables and percentages.

4.1.1 Level of education of parents/guardians

The researcher sought to find out from the trainees the level of education of their parents or guardians since this would influence enrolment of trainees in TVETs. Parents or guardians who are highly educated are likely to ensure their children access education because they know the benefits of being educated. The trainees were asked to indicate the level of education of their parents. The responses are shown in figure 1.



Figure 1 Level of education of parents/guardians

The study revealed that majority of the parents/guardians had attained primary certificate as their highest level of education as represented by 45.32 percent, followed by those who attained secondary certificate at 17.22 percent, bachelor's degree at 16.01 percent, diploma at 14.20 percent, masters level at 6.04 percent and those who had obtained PhD at 1.21 percent. Since most of the trainees parents and guardians (45.32%) only managed to complete primary level of education, it may not be possible for them to have experienced the benefits of being highly educated and hence would fail to support their sons and daughters to enroll in institutions of higher learning, TVETs included. This is in line with the findings by Arregle, and Mari (2019), Madhavani and Sisodia (2019), in their studies on enrolment of trainees in TVETS in Malaysia who had found out that majority of trainees joining TVETS are from parents and guardians with low economic status, low education and occupational background. The middle education level of parents and guardians with secondary level of education (17.22%), certificate and diploma (14.20%) would encourage their children to enroll in TVETs while the parents with bachelors (16.01%), masters (6.04%) and PhD level of education (1.21%) are likely to encourage their children to enroll in academic oriented careers in a bid to satisfy their friends expectations of giving "the best" education to their children. In reference to the level of education of parents and guardians, highly educated parents and guardians would mean reduced enrolment in TVETs since their children would be enrolled in academic oriented institutions, moderately educated parents and guardians would lead to increased enrolment in TVETs since they will encourage their children to enroll in TVET to acquire certificates and diploma after performing poorly in KCSE (Ouma & Onsongo, 2020). The uneducated parents and guardians and the ones with low level education would not bother much with enrolling their children for further education hence would negatively influence enrolment in TVETs. This group of parents and guardians normally view their children who a form four leavers as highly educated and therefore encourage them to get employed to assist in generating income for the family.

4.1.2 Influence of employment status and adequacy of income on enrolment

The researcher sought to know from the trainees the employment status of their parents or guardians and whether the income the parents/guardians earned was adequate. The trainees responded to the items and the responses are presented in table 1.

eri	a remployment status of parents /guardians and adequacy of family income								
			Frequency	Percent	Valid	Cumulative			
					Percent	Percent			
	Employment	Employed	31	9.4	9.4	9.4			
	status	Self	70	21.1	21.1	30.5			

 Table 1 Employment status of parents /guardians and adequacy of family income

	Employed				
	Unemployed	180	54.4	54.4	84.9
	Not	50	15.1	15.1	100.0
	Applicable				
Adequacy of	Very	18	5.4	5.4	5.4
family	Adequate				
income	Adequate	51	15.4	15.4	20.8
	Inadequate	212	64.0	64.0	84.9
	Not	50	15.1	15.1	100.0
	Applicable				

The study indicates that majority of the parents/guardians are not employed as represented by 54.4 percent thus low living standards, self-employed followed at 21.1 percent, not applicable at 15.1 percent and those employed at 9.4 percent. For those employed 25.8 percent had formal employment while 74.2 percent had informal employment. The adequacy of total income in most families based on standards of living was inadequate as represented by 64.0 Percent; those who felt income was adequate were represented by 15.4 Percent, not applicable, 15.1 Percent and very adequate 5.4 Percent. According to Arregle & Mari (2019), trainees who come from families with adequate income are less likely to enroll in TVETs while those who come frome families with inadequate income are more likely to enroll in TVETs. Adequacy of income in families is centrol since those who can afford to take their children to pursue courses of their own choice which are in academic oriented careers will not bother about TVET careers due to the aspect of keeping to their standard of high living standards. Akarue and Obavwunuto (2019) in their study in Nigeria on socioeconomic status level in the society found out that, people will choose career based on income earned and to satisfy their friends and associates who view them as of high socioeconomic status. Income levels of parents or guardians were also found to influence enrolment in TVETs in Malaysia in a study carried out by Madhavani and Sisodia (2019). They found out that majority of trainees enrolling in TVETs are from families whose income and education level is low and consequently poor occupational background. With reference to the studies cited and the findings of this research, socioeconomic status has marked influence in enrolment in TVETs. Parents or guardians level of income and socioeconomic status if low causes parents and guardians to strain to cater for their basic needs hence would not think of enrolling their children in TVETs and other institutions of learning after graduating in secondary level of education

The researcher performed a correlation tabulation to show the relationship between socioeconomic status (parental/guardians level of education) and trainees enrolment. The results of the correlation are shown in Table 2

		Parent	Trainee course
		level of	enrolled in
		education	
Parent level of	Pearson	1	$.208^{**}$
education	Correlation		
	Sig. (2-tailed)		.000
	Ν	331	331
Trainee course	Pearson	.208**	1
enrolled in	Correlation		
	Sig. (2-tailed)	.000	
	N	331	331

Table 2 Correlation between parents'/guardians	' education level and trainees enrolment
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Table 2 shows relationship between socioeconomic status (parents'/guardians' level of education) and trainees' enrolment in public TVETs. The P Value is 0.00<P=0.005 shows that there is statistically significant relationship between parents' or guardians' level of education and trainees' enrolment in public TVETs since the two variables have a positive Pearson Correlation of at 0.208, the implication is that

parents' or guardians' level of education positively influences enrolment leading to increased enrolment or negatively influences enrolment leading to low enrolment in public TVETs.

The researcher also performed a correlation between socioeconomic status (employment status) and trainees' enrolment in public TVETs to find out the relationship that exists between employed or unemployed parents or guardians and enrolment. The results of the correlation are shown in Table 3

		Trainee course enrolled in	Parent source of income
Trainee course enrolled in	Pearson Correlation	1	.024
	Sig. (2-tailed)		.658
	Ν	331	331
Parent source of income	Pearson Correlation	.024	1
	Sig. (2-tailed)	.658	
	Ν	331	331

 Table 3: Correlation between employment status and trainees' enrolment

Table 3 is a correlation showing the relationship between socioeconomic status (employment status) and trainees' enrolment in public TVETs. Since P=0.658>P=0.005, the implication of the Pearson Correlation Coefficient is that there is no statistically significant relationship between parents' or guardians employment status and trainees enrolment in public TVETs. The two variables have a positive Pearson Correlation of 0.024 meaning that, employment status as a socioeconomic indicator does not increase or decrease enrolment of trainees in TVETs. This is strengthened by the fact that parents or guardians do not solely depend on employment income to enable the trainees enroll in TVETs but can source financial assistance from well-wishers, grants, donations, Community Development Fund (CDF), bursaries and fund raising to enable the trainees enroll and meet their financial obligations in the TVET.

The researcher also performed a correlation between socioeconomic status (adequacy of family income) and trainees' enrolment in public TVETs to find out the relationship that exists between adequacy of parents or guardians income and enrolment. The results of the correlation are shown in Table 4.

 Table 4: Correlation between adequacy of family income and trainees' enrolment

		course enrolled	adequacy of	
		in	income	
course enrolled	Pearson	1	016	
in	Correlation			
	Sig. (2-tailed)		.774	
	Ν	331	331	
adequacy of	Pearson	016	1	
income	Correlation			
	Sig. (2-tailed)	.774		
	Ν	331	331	

Table 4 is a correlation showing the relationship between socioeconomic status (adequacy of family income) and trainees' enrolment in public TVETs. Since P=0.774>P=0.005, the implication of the Pearson Correlation Coefficient is that there is no statistically significant relationship between adequacy of family income and trainees enrolment in public TVETs. The two variables have a negative Pearson Correlation of -0.016 meaning that, adequacy of family income as a socioeconomic indicator does not increase or decrease enrolment of trainees in TVETs. This is acceptable because parents or guardians do not solely depend on

family income earned to enable the trainees enroll in TVETs but can source financial assistance from wellwishers, grants, donations, Community Development Fund (CDF), bursaries and fund raising to enable the trainees enroll and meet their financial obligations in the TVET regardless of the amount of income they earn, whether adequate or inadequate

4.1.3 Financial ability of parents and guardians

The researcher sought to find out whether parents or guardians are able to provide all necessary training requirements for their trainees in TVETs. The respondents were asked to indicate whether their parents or guardians are able to provide for all their financial training requirements. The results are presented in Figure 2.



Figure 2 Percentage of financial ability of parents on the training requirements

The study revealed that majority of the trainees' parents and guardians have no financial stability to pay for their training requirements as represented by 71.0 percent while 29.00 percent can afford. This means that if the government of Kenya had not considered the TVETs for HELB Loans and Bursaries funding and the grant of 30,000 Kenya Shillings for those enrolled in TVETs, the enrolment would be lower than the observed rate due to inability to cater for the trainees' education in the TVETs. The training requirements include purchasing necessary material for use during the teaching learning process, payment of examination fees, providing daily transport for day scholars, clothes and shoes among other items. The findings concur with studies carried out by Akarue and Obavwunuto (2019), Arregle, and Mari (2019), Madhavani and Sisodia (2019), Richardson (2002), Adler & Snibbe (2003) and Marcus & Fonseca (2019) who posit that low socioeconomic status limits enrolment in tertiary institutions of learning, TVETs included. It is for this reason that Kenya has included TVET institutions for funding by Higher Education Loans Board (HELB) to enable trainees from low socioeconomic status enroll on TVETs. This support however seems not to be adequate and the issue of enrolment in TVETs require more attention.

4.1.4 Payment of fees for the trainees by parents and guardians

The researcher also sought to know whether the parents paid fees for the trainees on time to avoid a scenario where trainees are sent home to collect fees or are barred from sitting for examinations due to non-payment of training dues. The trainees were required to respond to the question whether their parents or guardians pay school fees in good time before they are sent home to collect the dues. The results are shown in Figure 3



do your parents/guardians pay your school fees in time

Figure 3 Percentage payments of school fees in time by parents/guardians

Majority of the parents do not pay school fees in time as represented by 71.30 percent, only 28.70 percent of the parents pay the dues in good time. This revealed that, most trainees come from the low socioeconomic status families that are working from hand to mouth. Thanks to the government of Kenya for reducing TVET fees from 96,000 shillings to 56,000 shillings and further giving a grant of 30,000 shillings. The remaining amount of 26,000 and subsistence costs are catered by the HELB Loan of 40,000 for those who qualify. This has boosted enrolment and retention rate in TVET institutions to some extent though the enrolment has not reached the intended capacity even with support from well-wishers, Community Development Fund (CDF) bursaries, and assistance from County governments. This gives an insight into the fact that enrolment could be remaining low in TVETs due to financial constraints. Education in tertiary institutions of learning is not a priority in families of low socio-economic background and therefore trainees are likely to forego enrolling in TVETs and opt to be part of unskilled labour in various sectors to supplement income for their families to meet basic needs.

4.1.5 Trainees sent home for non-payment of TVET fees

The researcher sought to know whether there were trainees sent home to collect dues owed in terms of fees to the TVET institution. The trainees were required to indicate whether they have ever been sent home due to non-payment of school fees. The findings are represented in Figure 4.



Figure 4 Percentage of trainees sent home due to non-payment of school fees

Figure 4 shows that 61.03 percent of the trainees have been sent home due to non-payment of school fees while 38.97 percent have not. This is an indication of the fact that most trainees come from family background of poor socioeconomic status. A case that can cause trainees enrolled to drop out of training and fail to complete their studies indefinitely. Trainees detest the idea of being sent home due to non-payment of fees hence for those whose parents cannot promptly clear school fees or maintain the school fees balances at acceptable levels, they opt to drop out and get employment to assist their families by their meagre earnings from unskilled labour. This scenario can also discourage prospective trainees from enrolling in TVETs in fear of the shame of being seen on the roads heading home to collect dues from parents and guardians.

4.1.6 Ownership of assets by families of TVET trainees

The research sought to know the various assets owned by the trainees' parents and guardians so as to establish socioeconomic status of trainees' background. The assets included bicycle, motor cycle, car and tractor. These were used by the researcher to determine whether the families live a luxurious life. The findings are shown in Figure 5.



Figure 5 Percentage of ownership of family items

Majority of the informants do not own any of the listed items in their families as indicated by 43.50 percent who do not own any of the listed items, 30.82 percent own bicycles, those who own a car are 12.08 percent, 11.78 percent motorcycle and 1.18 percent own tractors. This shows that most trainees were from low socioeconomic background and therefore could hardly support education in addition to catering for their basic necessities in their homes. There were no luxurious items owned by a family, an indication that families were struggling to meet basic needs and hence tertiary level education is not that basic need especially if the learner has not performed well to be placed in the university. This definitely reduces enrolment since prospective trainees will not have a chance to enroll in a TVET but will be looking for employment to subsidize income in the family to assist other young brothers and sisters gain basic education since tertiary education is not a priority. Low financial ability limits ownership of luxurious items and only those that support earning towards basic needs are acquired.

4.2 Testing hypothesis H01

A one way ANOVA test was carried out on data collected from the respondents on influence of socioeconomic status of trainees on enrolment of the trainees in the TVETs. The results of the ANOVA test were presented in Table 5.

	Sum of	df	Mean Square	F	Si
	Squares				g.
Between Groups	.011	1	.011	.061	.8
					05
Within Groups	58.539	329	.178		
Total	58.550	330			
Between Groups	2.533	3	.844	4.928	.0 02
Within Groups	56.017	327	.171		
Total	58.550	330			

Table 5 One-way ANOVA test for trainees' so	cioeconomic status and enrolment in public TVETs
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Between Groups	.321	3	.107	.600	.6
					15
Within Groups	58.229	327	.178		
Total	58.550	330			
Between Groups	31.488	2	15.744	8.569	.0
					00
Within Groups	602.657	328	1.837		
Total	634.145	330			
Between Groups	3.847	2	1.924	2.870	.0
					58
Within Groups	219.838	328	.670		
Total	223.686	330			
Between Groups	.745	2	.372	.726	.4
					84
Within Groups	168.120	32	8		
Total	168.864	33	0		

The ANOVA test performed on the data collected from trainees tested the hypothesis;

Ho1: There is no significant relationship between socioeconomic status and trainees' enrolment in public TVETs in Nakuru County, Kenya.

H₁: There is significant relationship between socioeconomic status and trainees' enrolment in public TVETs in Nakuru County, Kenya.

For hypothesis, there is no statistically significant mean difference between socioeconomic status [gender] and trainees' enrolment in public TVETs. The p-value = 0.805> P-value = 0.05, we accepted H0₂ and conclude there is no statistically significant mean difference between socioeconomic status [gender] and trainees' enrolment in public TVETs as determined by one-way ANOVA (F (2, 327) = 0.061, P=0.805).

 $H0_{2b}$: There is no statistically significant mean difference between socioeconomic status [age] and trainees' enrolment in public TVETs

H2_b: There is statistically significant mean difference between socioeconomic status [age] and trainees' enrolment in public TVETs.

Since p-value = 0.002 < P-value = 0.05, we reject H0_{2b} and conclude there is statistically significant mean difference between socioeconomic status [age] and trainees' enrolment in public TVETs as determined by one-way ANOVA (F (2, 327) = 4.928, P= 0.002).

H0_{2c}: There is no statistically significant mean difference between socioeconomic status [level of education prior to joining current institution] and trainees' enrolment in public TVETs

H2_c: There is statistically significant mean difference between socioeconomic status [level of education prior to enrolling in current institution] and trainees' enrolment in public TVETs.

Since p-value = 0.615> P-value = 0.05, H0_{2c} is not rejected and the conclusion made is that, there is no statistically significant mean difference between socioeconomic status [level of education prior to enrolling in current institution] and trainees' enrolment in public TVETs as determined by one-way ANOVA (F (2, 327) = 0.600, P= 0.615)

H0_{2d}: There is no statistically significant mean difference between socioeconomic status [parental level of education] and trainees' enrolment in public TVETs

H2_d: There is statistically significant mean difference between socioeconomic status [parental level of education] and trainees' enrolment in public TVETs

Since p-value is 0.000 < P-value = 0.05, H0_{2d} is rejected and conclusion made is that, there is statistically significant mean difference between socioeconomic status [parental level of education] and trainees' enrolment in public TVETs as determined by one-way ANOVA (F (2, 328) = 8.569, P< 0.001)

H0_{2e}: There is no statistically significant mean difference between socioeconomic status [employment status of parents] and trainees' enrolment in public TVETs

H2_e: There is statistically significant mean difference between socioeconomic status [employment status of parents] and trainees' enrolment in public TVETs

Since p-value = 0.58>P-value = 0.05, H0_{2e} is accepted and the conclusion made is that, there is no statistically significant mean difference between socioeconomic status [employment status of parents] and trainees' enrolment in public TVETs as determined by one-way ANOVA (F (2, 328) = 2.870, P= 0.58)

H0_{2f}: There is no statistically significant mean difference between socioeconomic status [adequacy of family income] and trainees' enrolment in public TVETs

H2_f: There is statistically significant mean difference between socioeconomic status [adequacy of family income] and trainees' enrolment in public TVETs

Since p-value = 0.726>P-value = 0.05, H0_{2e} is accepted and the conclusion made is that, there is no statistically significant mean difference between socioeconomic status [adequacy of family income] and trainees' enrolment in public TVETs as determined by one-way ANOVA (F (2, 328) = 0.484, P= 0.726)

5.0 Conclusion

Socioeconomic status [gender]-Enrolment of female trainees in TVETs is lower than that of males despite the fact that records in the Kenya National Examination Council (KNEC) essential report on performance for past 5 year indicated that more females scored grades C- to E than males. The reseacher hence concluded that, besides grade scored by propective trainees at KCSE, determinants of enrolment other than the grade scored in KCSE seem to influence enrolment. Socioeconomic status (Age)-Age does not influence enrolment in TVETs. A trainee can enroll at any age. Level of Education prior to enrolling in current institution does not influence enrolment in TVETs since trainees can enroll regardless of level of education but due to the courses on offer fulfilling need of trainee ad community. Socioeconomic status (Parental level of Education)-Parental level of education influences enrolment in TVETs since Educated parents would ensure their children also get educated. The socioeconomic status (Employment status of parents) does not influence enrolment since parents /guardians can have different sources of income to finance their children's education and socioeconomic status (Adequacy of family income) Adequacy of family income does not influence enrolment since other sources of income are available like grants, donations and fund raising.

6.0 Recommendations of the study

On the basis of the findings of the study, the researcher recommends that female KCSE graduates should be encouraged to enroll in TVETs as an equal opportunity for education and training so as to raise enrolment of female trainees in TVETs. To cushion parents who are unemployed and those who earn inadequate family income to be able to cater for their children's educational expenses, the parents and guardians should be exposed to alternative funding sources like applying for Higher Education Loans Board (HELB) funding, how to obtain grants, government support through Community Development Fund (CDF) and fund raising for school fees. The TVET curriculum should be industry based and demand driven to ensure TVET graduates get employment hence attracting prospective trainees who need to be employed to earn a living or support their parents or guardians financially. This in turn would result in increased enrolment. The skill development system in Kenya follows a curriculum based, time bound approach as opposed to demand driven approach and certification is based on completion of courses rather than demonstration of competency. Therefore a shift from this tradition would be in favour of increased enrolment in TVET institutions and would favour trainees from low socioeconomic status (SES) since the cost and duration of study would be reduced and the graduates would be absorbed instantly in labour market and result in improved SES. There are many service providers of curriculum development and assessment in TVET (KNEC, NITA among others) but improvement and co-ordination needs to be done to reform curriculum development and assessment for skill acquisition rather than course completion so as to ensure global competitiveness.

7.0 References

- 1. Adler, N. E., & Snibbe, A. C. (2003). The Role of Psychosocial Processes in Explaining the Gradient Between Socioecomic Status and Health. *Current Directions in Psychological Science*, 119-123.
- 2. Akale, M. A. (2015). *Socioeconomic factors influencing students performance in Nigeria*. Lagos: Odade Publishers Limited.
- 3. Akarue, B., & Obavwunuto, O. (2019). ICT and Vocational and Technical Education in Tertiary Institutions: A Case Study of College of Education, Wari Delta State, Nigeria. *International Journal of Innovative Information Systems & Technology Research*, 64-72.
- 4. Blannie, E. B., & Levon, T. E. (2004). Factors Influencing Enrollment in an Urban Agricultural Education Program. *Journal of Career and Technical Education*, 25-37.
- 5. Carmago, A., Souza, A., Lima, L & Soares, J. (2015). *Vocational Education and Training in Brazil: Knowledge Shairing Forum on Development Experiences; Comparative Experiences of Korea, Latin America and Carribean.* Brazil: Inter-American Development Bank.
- 6. County Government of Nakuru. (2018). *Nakuru County Integrated Development Plan, 2018-2022*. Nakuru, Kenya: County Government of Nakuru.
- 7. Gay, R. L., & Airasian, P. (2003). *Educational Research: Competencies for Analysis and Interpretation*. Upper Saddle River, NJ:Merrill: Prentice Hall.
- 8. Gemechu, A. G. (2018). Family Socioecomic Status: Effect on Students' Academic Achievement at College of Education in Haramaya University of Eastern Ethiopia. *Journal of Teacher Education and Educators*, 207-222.
- 9. Government of Kenya. (2020). *The County Vocational Education and Training Bill, 2020-Kenya Gazette Suppliment*. Nairobi: Government Printer. Retrieved from uon.ac.ke.
- 10. Government of Kenya. (2010). Constitution of Kenya 2010. Nairobi: Government Printer.
- 11. Kamau, S. M. (2013). Challenges affecting the technical and vocational education and training in youth polytechnics in Kiambu County. *International Journal of Social Sciences*, 679-687.
- 12. Krumboltz, J. D., & Mitchel, L. K. (1990). Social Learning Approach to Career Decision Making: Krumboltz's Theory of Career Choice and Development. San Francisco, CA: Jossey - Bass Publishers.
- 13. Krumboltz, J. D., Mitchell, A. M.; Jones, G. B. (1976). A Social Learning Theory of Career Selection. *The Counselling Psychologist*, 71-81.
- 14. Kyungu, Z., & Macharia, P. (2017). *National Policy Definition in Technical and Vocational Education: Beyond the Formal Sector*. Nairobi: Government Printer.
- 15. Lang'at, D. (2015, September 14). Skills Gap Analysis for Graduates of TVETs. (B. Tirop, Interviewer)
- Madhavani, V., & Sisodia, N. (2019). Social Inffluence of Career Choice Decisions of Business School Graduates in India: An Exploratory Analysis. *Journal of Management Concepts and Philosophy*, 463-485.
- 17. Maronga, E., Asuma, E.M. & Nyikal, E.(2015). A Critical Survey on Enrollment in Vocational training centres in Kisii Central District, Kenya. *International Journal of Scientific & Technology Research*, *4*(5), 113-120.
- 18. Marcus, B., & Fonseca, F. (2019). A Review of the Literature on Socioeconomic Status and Educational Achievement. *Journal of Teacher Education*, 7-17.
- 19. MoE-NESSP. (2018). *National Education Sector Strategic Plan for the Period 2018 2022*. Nairobi, Kenya: Government Printer.
- 20. MoEST. (2014). *Report on the Ministry's Achievement in the last one Year*. Nairobi: Government Printer.
- 21. Republic of Kenya. (2013). *Technical and Vocational Education and Training Act*. Nairobi: National Council for Law Reporting.
- 22. Republic of Kenya. (2019). Towards Realizing Quality, Relevant and Inclusive Education and Training for Sustainable Development. Nairobi: Government Printer.
- 23. Richardson, K. (2002). What IQ Tests Test. Theory & Psychology, 283-314.
- 24. Sandefur, G., & Campell, E. (2006). Family Resources, Social Capital and Colleges Attendance. *Social Science Research*, 525-553.

- 25. Shaibu, K. (2013). Challenges Affecting the Technical and Vocational Education and Training in Kiambu County. *International Journal of Scinces and Entrepreneurship*, 679-687.
- 26. UN General Assembly. (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development*. New York: UN General Assembly.
- 27. UNESCO. (2012). *Transforming TVET from Idea to Action UNEVOC International Centre for Technical and Vocational Education and Training*. UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training: UN Campus, German.
- 28. UNESCO. (2013). Status of TVET in the SADC Region: Assessment and Review of Technical and Vocational Education and Training (TVET) in Southern Development Region and the Development of Regional States for Revitalization of TVETS. Paris: UNESCO.
- 29. UNESCO. (2015). Education For All by 2015, will we make it? Paris: UNESCO.
- 30. UNESCO. (2017). Transforming TVET from idea to action UNEVOC International Centre for Technical and Vocational Education and Training, Republic of Kenya. Nairobi: Government Printer.