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Effect of Technical Competencies on Trainers' Performance in TVET Institutions in Kakamega County, Kenya

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ABSTRACT

Purpose: To examine the effect of technical competencies on trainers' performance in TVET institutions in Kakamega County, Kenya.

Design/Methodology/Approach: Trainers and human resource officers in 10 public TVET Institutions within Kakamega County were the target population of the study. Therefore 262 respondents were identified as a sample of a target population of 693 respondents by the use of Yamane formula. They employed simple random sampling and purposive sampling method. This was done as a pilot study within Kisiwa Technical in Bungoma County. The research instrument used in the study also had content and construct validity, which was done by assessing by university supervisors and content validity index. Cronbach Alpha formula was used to determine the reliability of the research instrument where a score of 0.7 was used as a benchmark. Data were obtained by means of questionnaires and interview schedules. Thematic analysis was employed in the analysis of qualitative data but quantitative data was analyzed with SPSS version 19 with descriptive and inferential statistics methods.

Findings: The findings of the study indicated a positive significance effect between technical competencies and trainers' performance (R=0.672, P=0.000)

Implications/Originality/Value: Therefore, there was adequate evident to reject the null hypothesis that posits: technical competencies have no significant effect on trainers' performance in TVET institutions in Kakamega County, Kenya.

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Introduction

Technical competencies refer to skills, knowledge and ability in a specified job or field which are necessary in carrying out tasks and activities. These skills are normally specific to a task or an instrument meaning somethings like, using software, programming, using a machine, or technical

process aptitude. Technical skills are the skills which are put into practice and often the physical ones that enable one to succeed in performing his or her office required.

In Switzerland, a series of vocational education and training is largely carried out through the collaboration of training companies as apprenticeship in three to four days during the week (Skillsonics, 2019). This is in parallel with theoretical studies at one to two days per week of a VET school (dual VET programme). However, vocational education and training may be conducted both at a full time VET school and school-based VET programmes (Seri, 2008). At the universities of applied sciences the teacher education and training takes place (Swiss Education, 2019). A teacher education is, as a rule, three years to achieve a primary degree, whereas the minimum qualification to teach subjects in lower secondary school and above is a master in teaching (SFIVET, 2019). In Switzerland, lifelong learning and continuous development is a requirement to ensure that one can remain highly competent (Skillsonics, 2019).

Japan has many levels of training on trainers; they include national, regional, municipal and even schools. Particular attention is paid to the methods of in-service professional development employed in the learning organizations (Oghly, 2023). The trainer can do this at his/her disposal. This will result in an improvement in the quality of trainers and education in general. The thing is that teachers are expected to be not only well aware of their field but also familiar with professional ethics and overall culture. In the modern dynamically developing information society, the profession of a teacher presupposes the possession of a variety of skills. The expectations on the trainees and trainers have the propensity to increase accordingly. They must learn and develop forever, in case they wish to become good trainers. The typical definition of professional development is the development of a person in his career. Whether through meetings, seminars, workshops, or follow-up activities, the formal experience is all about meeting face-to-face with the idea of learning in a structured manner, whereas the informal takes place in reading publications and watching TV shows revealed as academic (Oghly, 2023).

Malaysian government has undertaken some steps in order to enhance policy direction and regulatory systems of technical and vocational education and training (TVET) teachers to enable them to address shocks of globalization without compromising their commitment to sustainable development. As a research done by Ismail, Hassan, Bakar, Hussin, Hanafiah, and Asary (2018) found out, the three key areas that are developed on the TVET instructor in Malaysia are personal qualities, professionalism, and Technical competencies. Professional competency trainings have also been established by the government to ensure that the requirements of the businesses and other professional organizations continue to be met through technical and vocational education (TVET) teachers.

Makwinja (2017) holds that Botswana educational system aimed at coming up with creative, critical thinkers, and problem solvers. Students who have completed high school and need to pursue their studies can join universities, technical institutions or colleges of education or other privately owned or state based institutions of training. Although TVE is still a viable resource at enhancing and reducing the situation in unemployment and the skill levels, the model also promises inclusive education to everyone. TVE is a second-best option to the persons whose academic skills are not sufficient to meet the school-based curriculum standards, not the essential aspect of education in Botswana. The existing system of education is not able to satisfy students and contribute to the improving economy of the country, which leads to stagnation in the labor market because of the inability to cover the supply and demand. Also, the educational system does not allow students to achieve their potential and succeed (Motlhabane, 2018).

Most often, it is indicated in the studies that the immediate beneficiaries of professional programs are the teachers who are expected to implement teaching practice and modify teaching practices. Trainers in the TVET institutions are motivated to learn to carry out their roles according to the required standards by participating in pedagogical training services in countries like Uganda in the East Africa region (Kintu,

Kitainge, & Ferej 2019). But, the scholars discovered that, there is a necessity to clarify and explain emphatically how the model of vocational pedagogy is functional when used to diverse group of learners in various settings.

TVET in Kenya has programs and study levels that differ hence making trainers to be required to study to at least a level of trade at diploma level and pedagogical training to be considered qualified to offer training services. Given that most trainers are typically co-opted directly out of universities and teacher training colleges as basic and university educated, pedagogical training courses have been assigned a significant weight on an effort to professionalize TVET trainers (Muriuki & Dominic, 2022). The results obtained by various scholars are more positive, which encourages policy makers in developing countries to put more effort into investing in teacher professional development programs (Lu, Loyalka, Shi, Chang, Liu & Rozelle 2019).

Over the past few years, TVET in Kenya has changed in many ways as it has switched to a competency-based form of teaching and learning (CBET). Other than pedagogical education being a compulsory condition to employment of TVET trainers at the Ministry of Education, the most recent continuous professional development that the Kenyan government has been shifting to is competency-based education and training (CBET) of trainers. According to the Ministry of Education, about 1504 TVET trainers received retooling which was facilitated by the Kenya School of TVET in September of 2023 to enhance the implementation of CBET (MOE, 2023).

Several literature reviews carried in Kenya point out that professional competency development of TVET trainers is necessary (Chepkoech, Khatete, & Wanjala 2019; Mate, Atieno, & Kiganda, 2022.; Njenga 2022). It was established that building and developing the competencies of trainers positively affects the quality delivery and viability of CBET courses to make the trainees fit to face the labour market in the global world and beyond.

There are some lessons that can be learnt in relation to the new professional standards developed concerning human capital in TVET institutions. The scholars have debated that requirement by law of such professional development programs and existence of those that are ill-designed might not be desired in terms of impacts on the involved trainers in addition to restricted impacts (Odalen, Brommesson, Erlingsson, Schaffer, & Fogelgren, 2019). The factors that influence TVET institutions in Kenya are quite alike, and therefore the researcher focused the study on Western Kenya and therefore, the need of the present research: to examine the impacts of technical competencies on the performance of trainers at the TVET institutions within Kakamega County in Kenya.

Statement of the Problem

In Kenya, Technical and Vocational Education and Training (TVET) schools located within Kakamega County have been gaining prominence in fostering the necessary skills and education needed in the workforce to satisfy the dynamic needs of the job market (Muriuki & Dominic, 2022). The performance of such institutions and especially the competencies and ongoing professional development of their trainers are mostly dependent on them. According to Aledejebi (2018), even though trainers mean everything, very little empirical evidence exists on the extent to which the activities that focus on professional competencies development could influence their performance in terms of the specific regional context.

Such barriers include stale information, lack of pedagogical skills, lack of sufficient exposure to new technologies, obsolete curriculum, inadequate access to new teaching aids and limited exposure to best practice in the industry, which might deter trainers in providing quality training (Langat, Omboto, Ambuli & Ngeno 2021). In addition, the relevance and effectiveness of the available professional development programs in dealing with these challenges have not been tapped adequately. Such knowledge deficit leaves doubts on the ability of TVET trainers in Kakamega County to create a qualified and competitive workforce (Muriuki & Dominic, 2022).

This paper will thus aim at establishing the impact of professional competencies as far as the performance of trainers in the TVET institutions within Kakamega County in Kenya is concerned. Using an analysis of the connection between targeted professional development programs and the instructional efficacy of the trainers, the research aims to deliver information that might help the scenario become a top policy choice as well as part of a plan of action. At the end, the aim is to improve the technical education to make it more relevant to the national development goals and specific social economic requirement of Kakamega County in Kenya.

Objectives of the Study

To examine the effect of technical competencies on trainers' performance in TVET institutes in Kakamega County.

Research Hypothesis

Ho_2: Technical competencies have no significant effect on trainers' performance in TVET institutes in Kakamega County.

Theoretical Framework

Human Capital Theory

Nowadays human capital is perceived as the most authentic resource, which could be owned by countries, governments and other organizations. The most significant determinant of competitiveness and profitability of an organization in the present contemporary business setting is human capital. Although effective strategies require several aspects, human resource and management will probably serve as a competitive advantage of a company. Originally, the human capital theory was developed by Mincer (1958), Schultz (1961), Becker (1962), and Rosen (1976) which asserts that human resources are supposed to have a set of skills which can be increased or accumulated by way of training and education. These writers have given an astoundingly simple definition of personal income. The rationale was that human beings can become more productive because they can invest in themselves by using their abilities (human capital). This enhances production that consequently promotes revenue (Aliu & Aigbavboa, 2019).

Fix (2018) claims that human capital plays a pivotal role in the employability and earning power of the people besides being significant to the performance of an organization. Since industry is labor intensive, economic prosperity of a nation and its industries would be associated with human capital. Therefore, it is important to emphasize that the quality of staff at all the levels, starting with the initiation and ending with successful completion of the project, is vital to the successful design and implementation of any industry-relevant projects. Therefore, it is of essence to train and retrain employees with appropriate combination of skills to meet the requirements of the industry.

However, human capital theory contains several issues which are related to training and education. The main accusation of critics of the theory made in the 1960s was that it endorsed exploitative and predatory bourgeois individualism. Middle classes who were perceived as exploiters of the working classes, belonged to the bourgeoisie. In addition, the supporters of the theory claimed that it transformed workers into capitalists and individuals were to blame in case of any systemic issues (Aliu et al., 2019).

The human capital theory considers education and other skills as investments that can increase the productivity and earning power of an individual which contributes largely to the economy and outcome in labor markets. Although the theory has been faulted on its excessive over-concentration on the role of individuals and complete neglect of the structural disparities as facilitating societal and individual monetary development, it is also a good theory of knowledge on how education can be used in personal and societal economic progress. Inclusion of human capital theory with social viewpoints like cultural and social capital has made the whole understanding of opportunity and achievement more complex that can be understood easily. In such a way, the human capital theory, in spite of its flaws, still serves as a

knowledge source of efficient policies that will promote increased access to education and workforce development.

The setting of Technical and Vocational Education and Training Institutions have the potential to enhance the performance of the trainers in terms of the establishment of the class professional competence. They can be achieved through management strategies aimed at enhancing the efficiency of the current employees either through inducting new employees or giving them comprehensive training. In terms of the changes in hooks/curriculum, they retool and retrain the trainers with the latest technology in order to work effectively, (Aigbavboa, 2019).

The theory is especially applicable to this context because it is a conceptualization of education, training as well as experience as an investment in human capabilities which improve productivity and job performances. As TVET is a critical part in national human resource development, HCT offers an interesting perspective in understanding the role of trainer competencies in identifying the increased teaching quality, and institutional outcomes. Although certain criticisms have been made of the theoretical framework with respect to neglect of structural inequalities, the present study approaches HCT critically but does not discount the role of contextual factors that can impact the access of trainers to professional development and application of skills so acquired.

Conceptual Review

Colleges and universities are believed to have an academic-only emphasis on their technical education by many people (Muriuki & Dominic, 2022). Conversely, in the absence of qualified and professional TVET trainers to design the implementation of TVET courses, the needs of the industries would only be a dream. Muriuki and Dominic (2022) state that the trainers in the TVET setting must be well informed in the latest advances in the industry and the market forces by constantly accessing updated information and enhancing their skills. Moreover, the scholars argue that the TVET teachers are trained through internships by working professionals thus enabling them to perfect the art before being given a chance to teach in classrooms.

Professional competences, as mentioned by Albino (2018), involve the ability to absorb information given by different sources of information including schools, training centers or even the work place and be in a position to apply it in a manner that justifies acceptable values and attitudes in an effort to make an organization prosper. Behavioral competences in workers are composed of attitude and values, and the technical competences are comprised of knowledge and abilities in the employees (Njenga, 2022). Most of the abilities which are supposedly of value to companies end up assisting employees in giving their best (Njenga, 2022).

Among the various ways that a teacher would characterize his professionalism as indicated by Tatto (2021), is by fulfilling the various needs of their students regarding quality and applicative teaching. Educators invest many hours and efforts into teaching strategies so that students could achieve the goals of the learning process and its development. Jusinki (2021) pointed out the significance of professional educators as knowledge brokers in assisting students to acquire the technical skills that would be of use in their preferred career paths.

Empirical Review

Abdullah, Salleh, Sulaiman, and Kamarrudin (2022) focused on the idea of integrating the employability skills with the TVET trainer training program in Malaysia. Results pointed out the fact that beginner and experts trainers prioritized employability skills in different ways and that the two categories of individuals perceived the relevance of communicating, being self-disciplined, interpersonal skills and cooperation equally. In a similar manner, learning, leadership and conceptual skills were also rated low on the priority aims by both the inexperienced and seasoned trainers. As compared to the previous study that was done in Malaysia, the current study is going to be carried out in Kenya but in Kakamega

County since the two have different geographical locations.

Skills in gap in relation to motor mechanics at Meru, Kenya was tackled by Njeru and Mugi (2018). The study used descriptive survey and method of observation. Studies revealed that educational institutions training facilities were insufficient as per the requirements of the market, and that there are still skill deficiencies despite the blazing speed at which technologies in the automotives industry are advancing. This study was based on technical and vocational training learning institutions as compared to research carried out in an automobile industry.

Izekor and Ojeaga (2021) provided a refined discussion about the need of the technical and vocational educator in regard to competency that allows one to guarantee a quality job performance in technical vocational education. This research took a descriptive design. Pedagogical, problem-solving and internet networking skills are determined to be essential in making good strides within the industry of vocational and technical education according to the results. Moreover, gender had no relationship with the competence of the vocational and technical teachers. This study involved a causal research design as opposed to the descriptive survey research that was employed in the other study.

Another study carried out by Albino (2018) is on the theme of Technical and behavioural competencies on performance evaluation: Petrek leaders perspectives. The exploratory factor analysis were run first. Complexity, organization, collaboration, and delivery are the most significant skill variable sets at Petrek, both in respect of qualitative and quantitative studies. In this study, the performance of trainers in the TVET institutions was the measure and in another study, the measure of performance is with the perspective of the leader.

Wijaya and Irianto (2018) studied how the competency of managers, technicality, and strategic competency affects the performance of an electrical engineering company in Bandung. The findings indicated that in case weak ties exist, the competency of management yields a negative impact on successfulness of the firm. Also, it demonstrated that the technical competence and strategic competence influenced positively the performance of the company moderately. As opposed to this study, which will be carried out in TVET institutions, the prior one was carried out in an electrical engineering company.

Conceptual Framework

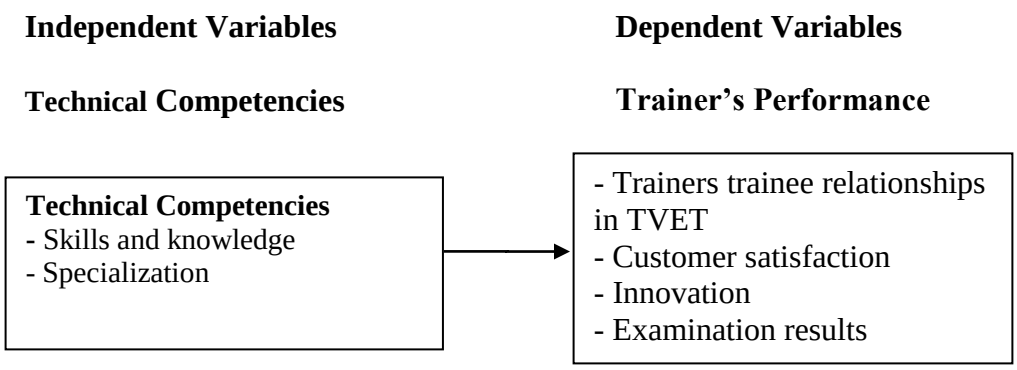

Figure 1: Conceptual Framework

Methodology

Research design: This research was carried using the causal research design. According to Kothari (2004), the causal research design is implemented when it is very important to come up with a foolproof cause-and-effect relationship. The design involves collecting and analyzing the information of a representative sample of population to identify causal explanation between dependent variable and independent variable.

Population: This research was carried using the causal research design. According to Kothari (2004), the causal research design is implemented when it is very important to come up with a foolproof cause-and-effect relationship. The design involves collecting and analyzing the information of a representative sample of population to identify causal explanation between dependent variable and independent variable.

Data collection: Trainers and trainees were given structured questionnaires to respond to questions appropriately.

Data Analysis: Descriptive data analysis techniques including frequencies, percentages, mean and standard deviation were utilized to calculate data dispersion and central tendency. Inferential statistics involved correlation and regression analysis.

Results and Discussion

Response Rate

Out of the TVET institutions which were the subject of the research, the research team succeeded in sending out 252 questionnaires, and 222 (88%) respondents completed the questionnaires. Of the 10 HROs, all attended interview session. A response rate above 49 percent is supposed to be appropriate, above 59 percent is supposed to be excellent and above 69 percent is supposed to be extremely good (Baruch 1999). In the present study, the response rate (88.35 percent) was above the 69 percent hence it was acceptable to derive viable research findings concerning the intended and sample populations.

Table 1: Technical Skills Institution Attended by the Respondents

Technical Skills Iinstitution	Frequency (%)
TVET institute	89 (40%)
University	133 (60%)
Total	**222 (100%)**

Source: Field Data (2025)

The study established that 89 (40%) got technical skills from TVET institutes while 133 (60%) got skills from universities. This indicates that most trainers in TVET institutions were sourced from university graduates as shown in Table 4.1 above.

Table 2: Effects of Technical Competencies on Trainers' Performance

Statement	**SA**		**A**		**FA**		**D**		**SD**		**Total**		
	f	**%**	***f***	**%**	***f***	**%**	***f***	**%**	***f***	**%**	**N**	**Mean**	**SD**
I possess the required technical qualifications to perform my duties as per my profession.	111	50.0	83	37.4	12	5.4	16	7.2	0	0	222	3.6	1.3
I have undergone adequate training in my field of specialization in a training institution/university.	93	41.8	61	27.5	40	18.1	28	12.6	0	0	222	3.1	1.3
My training involved industry attachment where I gained practical skills in my area of specialization/profession	111	50.0	60	27	36	16.2	12	5.4	3	1.4	222	3.2	1.3
I am a registered and practicing member of my profession.	132	59.3	49	22.3	29	13.2	10	4.4	2	0.8	222	3.6	1.1
My students are confident with my technical capabilities	119	53.6	71	32.1	22	9.9	10	4.4	0	0	222	3.9	1.1

I attended a retooling/refresher training in my area of specialization in less than one year ago	135	60.7	77	34.9	7	3.0	3	1.4	0	0	222	4.0	1.2
I am competent in the new technologies in my area of specialization.	128	57.5	67	30.4	8	3.6	19	8.5	0	0	222	4.0	1.1
I undertake at least one technical competency development training annualy to ensure I remain relevant	86	38.7	69	31.3	28	12.4	32	14.3	7	3.3	222	4.0	1.1

Source: Field Data (2025)

The research question aimed at establishing the fact whether the respondents had the necessary technical qualifications to carry out their duties based on the profession they are in. Based on the Table 2 findings, 111 (50%) strongly agreed, 83 (37.4%) agreed of which 12 (5.4%) disagreed as 16 (7.2%) strongly disagreed. This meant that majority of the trainers had the technical qualifications that were needed to undertake their tasks. The means of 3.6 and S.D of 1.3 indicated that there was a lot of deviation on the majority of the respondents who concurred.

The respondents were also required to answer on whether they had received proper training in their area of specialization in a training institute or university. The results provided that 93 (41.8%) had a strongly agree response, 61 (27.5%) had an agree response, 40 (18.1%) had a fairly agree response and 28 (12.6%) responded disagreed. Of the respondents, the average of 3.1 and a S.D of 1.3 indicated that there was a strong deviation of most respondents who were responding fairly with an agreement.
In case of industry attachment where the trainer acquired a practical experience in the specialization/profession through training, 111 (50%) strongly agreed, 60 (27%) agreed, 36 (16.2%) fairly agreed, 12 (5.4%) disagreed and 3 (1.4%) strongly disagreed. This meant that a majority of the trainers acquired more industrial skills at the attachments areas. Mean and S.D of 3.2 and 1.3 respectively indicated that there was a strong deviation with most of the respondents reporting to be in agreement.

The study also attempted to establish whether or not the trainers were practicing professional registered representatives in their profession. The findings revealed that 132 (59.3%) strongly agreed, 49 (22.3%) agreed, 29 (13.2%) fairly agreed and 10 (4.4%) disagreed and 2 (0.8%) strongly disagreed. The mean of 3.6 and S.D of 1.1 indicated that there was huge deviation on the majority of the respondents who fairly agreed.

The study also tried to establish whether the respondents were sure that their trainees were confident in their technical skills. The results proved that 119 (53.6%) of the respondents were strongly agreeing with it, 71 (32.1%) agreed, 22 (9.9%) disagreed; and 10 (4.4%) strongly disagreed. The 3.9 average and 1.1 S.D gave an indication of large deviation of the majority of respondents who agreed.
The research also intended to identify the presence of a refresher training that the respondents had attended in the one year prior to the research in the area of specialty. The strong agreement representative of male respondents, 135 (60.7%), as well as agreement 77 (34.9%) and fair agreement 7 (3.0%) and disagreement, 3 (1.4%) was strongly or highly expressed. Mean of 4.0 and S.D of 1.2 indicated that there was a large deviation regarding most of the respondents, who fairly agreed.

On the question of competency in the new technologies regarding areas of specialisation, 128 (57.5%) respondents strongly agreed 67 (30.4%) agreed and 8 (3.6%) disagreed and 19 (8.5%) strongly

disagreed. In terms of respondents who strongly agreed, agreed, fairly agreed, disagreed and strongly disagreed to the claim that workers annually participated in at least one technical competency development training to stay up to date; 86 (38.7%), 69 (31.3%), 28 (12.4%), 32 (14.3%) and 7 (3.3%) respectively. The principals do not agree on how adequately situated the teachers are. The human resource officers expressed different opinion about technical competence. A mean of 4.0 and a S.D of 1.1 implied that there was profound variance among most of the respondents who reasonably concurred.

According to HRO-002 during interviews asserted as follows 'My institution has the right trainers in terms of academic qualifications. However we advocate for professional development training which is not done annually". This collaborates with HRO-006 who gave a different version 'We do not have professional training for our trainers however we purpose to introduce the initiative".

Table 3: Trainers Performance

	SA		A		FA		D		SD		Total	
Statement	***f***	**%**	***f***	**%**	***f***	**%**	***f***	**%**	***f***	**%**	**Mean**	**SD**
My students are satisfied with the level of support I give them.	112	50.4	60	27.0	10	4.5	29	13.1	11	5	3.8	1.0
I can face and solve the daily challenges at work.	85	38.3	48	21.6	24	10.8	46	20.7	19	8.6	3.6	1.2
I can identify my trainees' characteristics and abilities and assist them accordingly.	61	27.5	50	22.5	19	8.6	75	33.8	17	7.6	3.4	1.4
Employers are confident of our graduates.	84	37.8	66	29.7	25	11.3	40	18.0	7	3.2	3.9	1.2
My students are satisfied with the knowledge and skills gained in my teaching.	104	46.8	54	24.3	19	8.6	24	10.8	21	9.5	3.3	1.3
There are no complaints from my trainees concerning my service delivery.	61	27.5	31	14.0	57	25.6	51	23	22	9.9	3.6	1.4

Source: Field Data (2025)

The research had the aim of determining whether the trainees of the respondents were happy with the kind of support given to them. These findings in Table 3 reflected that, 112 (50.4%) strongly agreed, 60 (27%) agreed, 10 (.4.5.%) fairly agreed, 29 (13.1%) disagreed and 11 (5%) strongly disagreed. The mean value of 3.8 and an S.D of 1.0 denotes a strong deviation when compared to the majority of the respondents who agreed.

The paper also aimed at determining whether the respondents were able to confront and resolve everyday challenges in the work place; 85 (38.3%) of the respondents strongly agreed, 48 (21.6%%) agreed, 24 (10.8%) fairly agreed and 46 (20.7%) disagreed where 19 (8.6%) strongly disagreed. The average of 3.9 and a S.D of 1.0 indicated that there was great deviation with the majority of the correspondents agreeing.

The rate of answers on being able to identify trainees characteristics and abilities and supporting them accordingly was with 61 (27.5%) strongly agreeing, 50 (22.5%) agreeing, 19 (8.6%) fairly agreeing, 75 (33.8%) disagreeing and 17 (7.6%) agreeing strongly. The mean and S.D of 3.9 and 1.2 respectively

implied that there was a great variance compared to the majority respondents on agreement.

In terms of the degree of confidence that the employers had in the graduates of the respondents even after their training, 83 (37.8%) strongly agreed with 66(29.7%) agreeing, 25 (11.3%) agreeing fairly and 40(18%) disagreeing with 7(3.2%) being strong dissenters. Mean 3.4 and a standard deviation 1.4 indicates that there was great deviation among most correspondents who quite agreed.

The other aspect that has been aimed at being determined by the study was whether the trainees of the respondents would be satisfied with the knowledge and skills they acquired in their teaching. A greater number of the respondents, 104 (46.8%) strongly agreed, 54 (24.3%) agreed, 19 (8.6%) fairly agreed and 24 (10.8%), disagreed as 21(9.5%) strongly disagreed. A mean of 3.3 and a S.D of 1.3 demonstrates that there was a huge deviation among majority of the respondents who fairly agreed.

The research paper has lastly tried to determine whether or not the trainees of the respondents complained about their service delivery; 61 (27.5%) strongly agreed, 31 (14%) agreed, 57 (25.6%) fairly agreed, 51 (23%) disagreed and 22 (9.9%) strongly disagreed. The value of 3.56 with 1.4 as S.D meant that the overall findings were far off the consensus of majority of the respondents who agreed.
When interviewed, it was noted by HRO-04 and HRO-05 *that customers/students are rarely satisfied* with services offered especially in this transition period to competency based curriculum which leads to challenges in shifting to the new curriculum.

Table 4: Pearson Correlation Matrix

		TC	**TP**
TC: Technical competencies	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	222	
TP: Trainers Performance	Pearson Correlation	. 672**	1
	Sig. (2-tailed)	.000	
	N	222	222

Source: Field Data (2025)

The relationship between technical competencies and trainers' performance is 0.672 ($p = 0.000$), which is statistically significant at the 95% level of certainty. Consequently, a rise in technical competencies will boost trainer's performance in TVETs. These results corroborated the conclusions reached by Yang's research (2021), that technical skills had a positive significant effect on performance of institutions.

Table 5: Technical Competencies

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.672[a]	.452	.443	.221594

a. Predictors: (Constant), Technical Competencies

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38.022	1	38.022	63.150	.000[b]
	Residual	46.360	220	.602		
	Total	84.382	221			

a. Dependent Variable: Trainers Performance
b. Predictors: (Constant), Technical Competencies

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.899	.329		2.736	.000
	Technical Competencies	.690	.087	.671	7.947	.000

a. Dependent Variable: Trainers Performance

Source: Field Data (2025)

Based on the results of the study as shown in Table 5, the R-square value =0.452. This means the technical competencies explained 45.2 percent variance in trainers performance in the TVET institutions in Kakamega County. Based on the results, the ANOVA test results having a significance level of 0.05 detected that an independent variable, technical competencies, plays an important role in predicting the performance of trainers in TVET institutions in Kakamega County since its significance level showed a value of 0.000 which was lower than the level of significance of 0.05 ($p=0.000 <0.05$).

Based on Table 4.16, the research findings showed that the technical competencies contributed greatly to the performance of the trainers in the TVET institutions located in Kakamega County ($t=7.947$, p-value=$0.000<0.05$). Thus in the case of the level of significance at 5 per cent, the null hypothesis was rejected, and this shows that there is an important relationship between technical competencies and the performance of trainers in TVET institutions in Kakamega County. Therefore, with an increase in units on the technical competencies, the performance of trainers in the TVET institutions increased by 0.690 in Kakamega county. Wijaya and Irianto (2018) affirmed this conclusion and stated that technical competence had a modest positive impact on the performance of a company. However, the findings conflicted with the findings of Njeru and Mugi (2018) who said that the training facilities in educational institutions were less than what the market required, and there still existed skill gaps despite the super-fast technological changes.

Conclusions

It is evident that TVET institutions in Kakamega County Kenya have implemented technical competencies such as skills and knowledge as well as specialization to enhance their trainers' performance. With these technical competencies as found out in this study, there is enhanced specialization which makes employees more knowledgeable. These have resulted to significant improvement in trainers' performance. Therefore, the study concluded that technical competencies have significant effect on performance of trainers in TVET institutions in Kakamega County, Kenya.

Recommendations

With regard to technical competence, the study recommended that as TVETs realize the power of technical competencies, TVETs need to employ and improve skills and knowledge technical competencies to better their trainers' performance. Government through ministry of education is urged to implement skill-based policies that encourage trainers to enhance skills.

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