



# Effects of TVET Training on Youth Empowerment: A Case Study of Kisumu County, Kenya

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## Abstract

TVET is recognized for equipping learners with practical, industry-relevant skills, empowering them for self-employment and entrepreneurship which enhances productivity and innovation leading to national economic growth and development. Nevertheless, the effectiveness of TVET in empowerment has been critiqued both academic and practical spheres. Critics argue that while TVET holds potential for skill development and economic inclusion, its actual impact is often undermined by issues such as poor-quality training, limited alignment with labor market needs and inadequate industry collaboration. In an attempt to address these critiques, this study sought to evaluate the effectiveness of TVET training in enhancing youth empowerment Kisumu County, Kenya. The study was anchored on empowerment theory. The study focused on a population of 20,857 individuals, which included 20,814 TVET students, 42 heads of TVET institutions, and 1 County Education Officer from the Kisumu County Government. A sample size of 379 was calculated using the Krejcie and Morgan (1970) formula. Sampling was conducted using disproportionate stratified random sampling. Data collection was carried out through structured questionnaires and an interview guide. The analysis of the data involved content analysis, along with descriptive and inferential statistics. The linear relationships between variables were examined using Pearson's Correlation analysis. The coefficient of relationship between TVET training and empowerment was  $r = 0.95$ , indicating a very strong positive relationship. The government should increase allocation of financial resources to TVET institutions and regularly review TVET curricula to ensure they reflect the evolving demands of the labor market. Professionals in TVET should promote industry-TVET collaborations and develop training programs that not only focus on technical skills but also incorporate soft skills, entrepreneurship, and leadership training to empower youth holistically.

**Keywords:** *TVET training, youth empowerment, Kisumu County, Kenya*

## 1.0 INTRODUCTION

TVET has gained global recognition due to immense influence on economic development, reducing unemployment and enhancing social inclusion. Significantly, TVET has potential to empower youth by equipping them with relevant capacities necessary for the entrepreneurship and self-employment. TVET training helps in addressing the existing capacity gaps and encourages entrepreneurial skills, enabling young people to start their own businesses, thereby contributing to economic growth (Witenstein & Iyengar, 2023). This leads into reduction of unemployment, support social inclusion. In developed countries like in Europe like Germany, Canada, France as well as in USA and Australia, TVET system combines TVET sector combines various practical skill development programs tailored to industry needs. The United Kingdom has a robust apprenticeship system that combines work experience with academic learning, enabling students to gain practical skills in various fields (Gyimah, 2020). The role of TVET in youth empowerment is increasingly gaining recognition among in Africa. For example, Rwanda and Ethiopia taken strides in integrating TVET into their socioeconomic development agendas with special focus on skills development. Another

case is South Africa whereby the government emphasizes on skills development to address unemployment and economic growth through a dual system of TVET which includes public TVET colleges and private training providers. In Tanzania', the government has designed TVET system to ensure quality standards and relevance of training programs youth employability and support to the country's economic growth.

In the strive to become a newly industrializing middle-income as envisioned in Vision 2030, the Kenya's government has acknowledged the critical role of TVET in driving economic transformation. Through this recognition, TVET is prioritized as the ultimate means of equipping youth with relevant skills that meet the demands of the labor market, thereby fostering employment opportunities and enhancing productivity. In Kenya, TVET is designed with the intention of bridging the skills gap, promote entrepreneurship and support sustainable economic growth and development goals (Mutebi & Kiplagat, 2022). For instance, Kenya has put into place the TVET Act of 2013 to create a legal framework for TVET, promoting quality education and enhancing access to vocational training. Another intervention is the establishment of the National Industrial Training Authority (NITA) which oversees the development and implementation of industrial training programs, ensuring they meet the needs of the labor market (Republic of Kenya, 2022). Nevertheless, TVET programs suffer from outdated curricula and inadequate facilities, leading to a gap in capacities needed for effective empowerment. In Kisumu County in Kenya, TVET is valued as a potential tool for youth empowerment offering pathways to employment and entrepreneurship. By providing relevant skills and training, TVET programs are aimed to equip young people with the necessary competencies to thrive in the job market and foster economic development in the region. Despite the potential of TVET in empowering youth, there exists challenges such as inadequate funding, outdated curricula and negative perceptions about vocational training persist. This study provides theoretical and practical basis for addressing these issues by focuses on the effects of TVET in promoting youth empowerment in Kisumu County, Kenya.

Numerous studies have demonstrated a positive correlation between TVET training and youth employability. For instance, the findings from a study by Inyagu (2019) on the challenges facing TVET education in Nigeria found that failure to align the economic and industry needs resulted into ineffective TVET interventions which failed to reduce the burden of youth disempowerment. The findings from a related study by Muriuki and Dominic (2022) found that graduates of TVET programs were more empowered for employment compared to their counterparts from general education backgrounds. This finding recognized the importance of practical training and industry exposure significantly enhance graduates' capacities. Similarly, Muchira et al. (2023) highlighted that TVET graduates in Kenya experienced a smoother transition into employment due to better empowerment due to their acquisition of relevant technical skills. TVET programs have been shown to effectively enhance specific skill sets required in various sectors in Rwanda (Hakizayezu & Maniraho, 2022). Furthermore, Ohagwu et al. (2023) explored the relationship between TVET and entrepreneurship skills. They found that TVET programs equipped students with not only vocational skills but also essential entrepreneurial competencies, fostering a culture of innovation among graduates. In Kenyan context, KIPPRA (2019) reports that enhancing TVET could help in youth empowerment. The study pointed out that integrating TVET into national development strategies could lead to substantial improvements in economic resilience.

## 2.0 STATEMENT OF THE PROBLEM

The Global Talent Competitiveness Index of 2017 ranks Kenya at 97 out of 283 countries, highlighting its struggles with talent competitiveness, particularly in Technical and Vocational Education and Training (TVET) skills. Many TVET graduates lack essential skills for enhancing economic productivity, contributing to high unemployment rates, especially in Kisumu City County, where 41% of the youth are unemployed despite having completed tertiary education. With 15,000-20,000 graduates entering the job market annually, the situation is expected to worsen (Republic of Kenya, 2019). While TVET empirically recognized as crucial approach towards youth empowerment (Muchira et al., 2023; Maniraho, 2022; Ohagwu et al., 2023), methodological, theoretical, contextual and generalization knowledge gaps were identified from the literature. For instance, utilization of qualitative methods adequately measured the specific impact of TVET training on empowerment. The studies lacked robust theoretical frameworks to explain the mechanisms through which TVET impacts empowerment and entrepreneurship. Due to contextual and geographical limitations of the studies' settings, it made it difficult to generalize the findings across different contexts and settings, particularly in diverse economies like in Kisumu County in Kenya due to its unique

socio-economic landscape, cultural dynamics and local industry needs. Hence the reason for carrying out this study on the effects of TVET training on youth empowerment in Kisumu County, Kenya.

### 3.0 LITERATURE REVIEW

#### 3.1 Empirical Literature Review

An empirical study by Ohagwu, Nwanes and Hassan (2023) sought to establish the link between TVET and youth empowerment in entrepreneurship in Malaysia where it was revealed that TVET was useful in empowering youth with entrepreneurship capacities for socioeconomic development. Ohagwu, Nwanes and Hassan (2023) used analytical survey, unstructured interviews, purposive sampling of 30 graduates, content analysis and descriptive statistics were adopted. But reliance on nonprobability sampling, qualitative data only limited inferencing. The sample size of 30 of students only was too small and lowered the internal validity of the findings. Instead, the study used a randomized large sample size of 377 respondents, relied on both interviews and questionnaires in the collection of data and used inferential statistics so as to increase confidence for concluding and generalizing the findings.

In Nigeria, Iro-Idoro and Jimoh (2020) did research on youth empowerment for self-reliance through TVET whereby TVET was found to be instrumental to youth empowerment for self-reliance. Iro-Idoro and Jimoh (2020) adopted survey research design, random sample of 300 TVET youths, 4-point structured questionnaire, frequency counts, percentages and least squares. But the instruments were not pilot-tested. The findings were supported by human capital theory only. The findings reflected the contextual settings of Nigeria thus limiting generalization. To overcome the limitations, the endeavour tested the reliability and validity through pilot study in Kisumu. Further, human capital, social learning and empowerment theories was used to support of the findings. The endeavour was carried out in the settings of Kisumu County in Kenya for better contextualization and understanding of the problem.

In Rwanda, Nyataya (2019) examining the relationship between TVET and youth empowerment found that TVET adequately prepared and empowered youth for entrepreneurship roles where it was revealed that TVET trainings adequately prepared and empowered youth for entrepreneurship roles. Nyataya, (2019) used descriptive survey, unclear sample size of TVET graduates and trainers, structured questionnaires, inferential and descriptive analysis showed. However, the generalization of the findings was limited to the settings of Rwandan. The findings had no theoretical support. But this endeavor used human capital, social learning and empowerment theories to support of the findings.

In Kenya, Koros (2022b) did a survey on TVET and youths' empowerment in entrepreneurship in Nairobi County in Kenya. Koros (2022b) found that learners were not empowered well for entrepreneurial roles. Koros (2022b) used descriptive survey, census of 91 trainees, structured questionnaires, content and descriptive statistics. But the study relied on quantitative data only collected from students and ignored views of trainers which lowered internal validity. It also failed to use inferential statistics for generalization of the findings. In overcoming these gaps, this endeavor relied on raw or primary data that was acquired from the trainees, trainers and an official from the Ministry of Education for greater validity. The study combined both inferential and descriptive stations as well as qualitative analytical methods.

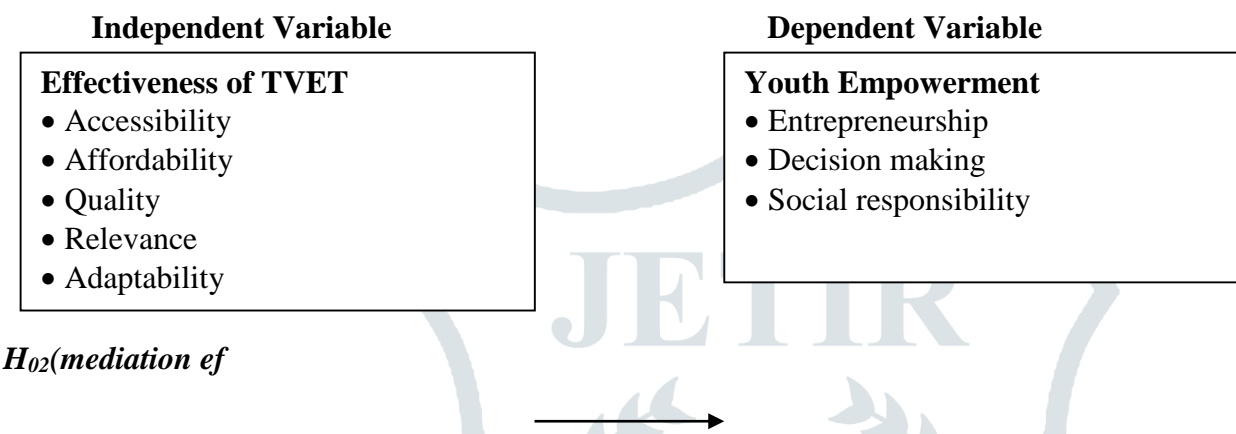
Still in Kenya, Mwaura and Ombui (2017) examined TVET and youth empowerment in Kiambu County in Kenya and it was revealed that TVET provided the necessary empowerment interventions for reducing youth socioeconomic dependency. Mwaura and Ombui (2017) used observation design, focused on students' behavior and content analysis. But reliance on observation design led to subjective and biased findings that failed to capture the context or intent of the students. Also, use of qualitative methodology faced limited generalization of the findings. The study used mixed approaches to collection and analysis of data so as to boost generalization and conclusion of the findings.

#### 3.2 Theoretical Framework

Empowerment theory was developed by Marc Zimmerman to emphasize on open-endedness while enhancing individuals' abilities and capabilities in exploiting opportunities (Zimmerman et al., 2020). It thus states that empowerment is not an outcome but rather the process which involves boosting one's ability to take control of this live and circumstance. This theory is founded on the principle of enhancing the existing strengths and resources and

fostering a sense of self-efficacy and control. Empowerment theory stresses on participation, collaboration, critical awareness, and autonomy (Dennerlein & Kirkman, 2023). It presumes that people have strengths and abilities to harness and to initiate change and that power dynamics and social systems significantly impact empowerment process. Empowerment theory has been instrumental in shaping the social work and community development in promoting self-determination, resilience and social justice. It has also played acritical role in shaping education and training as it informs creation of programs that impart technical skills and foster a sense of critical thinking, agency and problem-solving among learners. Through the lens of empowerment theory, this endeavor was able to understand how youth empowerment was leveraged on TVET training through accessible, affordable, quality and relevance.

3.3 Conceptual Framework



4.0 METHODOLOGY

4.0 RESEARCH METHODOLOGY

The study employed a descriptive survey design, targeting a population of 20,857 individuals, including 20,814 TVET students, 42 heads of TVET institutions, and 1 County Education Officer from the Kisumu County Government. A sample size of 379 was determined using the Krejcie & Morgan (1970) formula, with respondents selected through disproportionate stratified random sampling. Data collection methods included structured questionnaires and an interview guide. Instrument reliability was evaluated using the split-half method, resulting in a Cronbach’s coefficient of 0.7, indicating acceptable reliability. Qualitative data was analyzed using content analysis, while quantitative data was presented using means, standard deviations, percentages, and frequencies. Pearson’s Correlation method was used to explore the relationship between variables, with findings presented in frequency tables, percentages, and correlation tables.

5.0 KEY FINDINGS AND DISCUSSIONS

The indicators for youth empowerment were as follows: entrepreneurship, decision making and social responsibility. Seven statements were subjected to respondents. The descriptive findings summarized in Table 1. In the brackets are the percentages.



Table 1: Effectiveness of TVET Training in Harnessing Youth Empowerment

	Mean		Std-dev	
Through TVET, respondent became an entrepreneur	4.30	0.69		
With TVET, it was easier for respondent to make better and informed decisions	4.22	0.64		
TVET prepared one to become socially responsible	4.32	0.66		
TVET had contributed respondent's sense of empowerment	4.19	0.70		
Through TVET, respondent was now a better leader	4.20	0.75		
Respondent felt a sense of autonomy, thanks to TVET	4.55	0.63		
TVET gave respondent opportunity to reflect on his strengths	4.06	0.90		

Source: Research Data (2024)

Table 1 shows the descriptive results effectiveness of TVET training in harnessing youth empowerment in Kisumu County, Kenya. The first item stated that through TVET, respondent became an entrepreneur whereby 9 (3.2%), 11 (3.9%), 149 (52.6%) and 114 (40.3%) respondents disagreed, were neutral, agreed and strongly agreed that through TVET, respondent became an entrepreneur respectively. This statement had a mean and standard deviation 4.30 and 0.69 respectively. While the high mean of 4.30 indicated a positive response that through TVET, respondent became an entrepreneur, the standard deviation of 0.69 suggested that most respondents' opinion had low variation about the mean. In the second item, it was stated that with TVET, it was easier for respondent to make better and informed decisions and was responded as follows: 5 (1.8%), 22 (7.8%), 159 (56.1%) and 97 (34.3%) implying disagreement, neutrality, agreement and strong agreement that with TVET, it was easier for respondent to make better and informed decisions respectively. The mean score and standard deviation for this statement were 4.22 and 0.64 respectively. The mean of 4.22 indicated that participants strongly agreed with TVET, it was easier for respondent to make better and informed decisions. The data was deemed stable as indicated by the low standard deviation of 0.64.

The third item stated that TVET prepared one to become socially responsible and was answered as follows: 6 (2.1%), 12 (4.2%), 146 (51.7%) and 119 (42.0%) indicating that respondents disagreed, were neutral, agreed and strongly agreed that TVET prepared one to become socially responsible respectively. The mean score was 4.32 which suggested that respondents were positive as they strongly agreed that TVET prepared one to become socially responsible. The data was stable around the mean as indicated by the standard deviation of 0.66. The fourth statement focused TVET had contributed respondent's sense of empowerment and it was responded as follows: 1 (0.4%), 7 (2.5%), 21 (7.4%), 160 (56.5) and 94 (33.2%) respondents strongly disagreed, disagreed, were neutral, agreed and strongly agreed that TVET had contributed respondent's sense of empowerment respectively. For the mean score of 4.19 it implied that respondents affirmed that TVET had contributed respondent's sense of empowerment amongst the youths. The standard deviation of 0.70 showed low variability of opinions.

The fifth item stated that through TVET, respondent was now a better leader and the respondents answered it as follows: 15 (5.3%), 13 (4.6%), 157 (55.5%) and 98 (34.6%) respondents disagreed, were neutral, agreed and strongly agreed that through TVET, respondent was now a better leader respectively. The mean of 4.20 suggested that most of the respondents just agreed with this item that through TVET, respondent was now a better leader. The standard deviation of 0.75 meant that respondents' opinions had low variation about the mean. The sixth item stated that

respondent felt a sense of autonomy, thanks to TVET and the responses were: 3 (1.1%), 3 (1.1%), 109 (38.5%) and 168 (59.3%) respondents were in strong disagreement, neutral, agreement and strong agreement that respondent felt a sense of autonomy, thanks to TVET respectively. This item scored a mean of 4.55 suggesting that respondents were in strong agreement that respondent felt a sense of autonomy, thanks to TVET. The standard deviation of 0.63 indicated insignificant difference in opinions among the respondents.

The seventh item stated that TVET gave respondent opportunity to reflect on his strengths whereby: 2 (0.7%), 18 (6.4%), 16 (5.7%), 172 (60.7%) and 75 (26.5%) respondents strongly disagree, disagreed, were neutral, agreed and strongly agreed that TVET gave respondent opportunity to reflect on his strengths respectively. The mean score for this item was 4.06 indicated that respondents generally agreed with the statement that TVET gave respondent opportunity to reflect on his strengths. For the standard deviation of 0.90, it meant that the data had relatively low variability about the mean which implies commonness of opinions of the respondents.

The findings from qualitative data analysis supported that TVET training was an important enabler of youth empowerment in Kisumu County in Kenya. This was demonstrated from the feedback obtained from TVET Heads when asked to describe the contribution of TVET training to youth empowerment whereby TVET training was reported to promote entrepreneurship, decision making and social responsibility amongst the youths. The TVET Heads highlighted that TVET training played a pivotal role in youth empowerment by providing them with the skills, confidence, and opportunities needed to succeed in the workforce and contribute to their person, social and economic growth social. The summarized response was,

“TVET empowered students towards entrepreneurship and equipping them with relevant decision-making skills essential for solving industry problems. We (TVET) also prepare them to become socially responsible which has greatly contributed personal sense of empowerment. We (TVET) mold them to become responsible leaders at their own level and at community level. This gives them the sense of autonomy” (TVET Heads).

Similar findings were established from the qualitative responses of the Director of Education in Kisumu County when asked the same question. The education officer underscored that TVET training is a critical enabler of youth empowerment in Kisumu County. The officer supported his statement by pointing out how TVET has continued to provide practical skills, economic opportunities and fostering a sense of confidence and adaptability. He concluded that TVET training cannot be ignored in improving the lives of young people and contributing to the overall development of Kisumu County. The TVET students supported that TVET training has empowered them to become skilled professionals, confident, problem-solvers and active community contributors. They reported increased self-esteem and a sense of accomplishment. The findings that TVET training was an important enabler of youth empowerment in Kisumu County in Kenya implied that TVET equips youth with practical skills that improving youths' chances of securing employment. By empowering youth with the right mindset, TVET contributes positively to community progress whereby youth can apply the hard and soft skills acquired in starting businesses for local prosperity and social cohesion. It also implies that TVET provides opportunities for upward social mobility and improving the general quality of life amongst the youth.

All the finding from qualitative, descriptive and correlational data analysis conceded that TVET training was a critical contributor to youth empowerment. TVET training helped students to feel more prepared and competitive. It becomes apparent that investing in and expanding TVET programs can be a powerful strategy for youth development and empowerment. This assertion is corroborated by numerous related studies led by Iro-Idoro and Jimoh (2020) and Nyataya, (2019) which illustrate that TVET training provided the necessary empowerment interventions that prepared youth for entrepreneurship roles for self-reliance. This is further supported by Mwaura's and Ombui's (2017) study that TVET training provided the necessary empowerment interventions for reducing youth socioeconomic dependency. The findings that TVET training empowers youth by providing them with essential skills, boosting their confidence, enhancing employability and fostering entrepreneurial potential is supported by Human Capital Theory which emphasizes on investment in training and education to enhance individual's competences and abilities to contribute socioeconomic development and empowerment. The finding is further strengthened by the Social Learning Theory that individuals acquire the skills, behaviors and attitudes necessary for empowerment to successful ventures.

Moreover, the findings that TVET training is a powerful tool for youth empowerment aligns closely with the principles of Empowerment Theory by fostering personal, community, and economic empowerment. Through skill development, confidence building, and creating economic opportunities, TVET enables individuals to gain control over their lives and contribute meaningfully to their communities. This holistic approach improves individual livelihoods and promotes broader socioeconomic development.

The relationship between TVET training and youth empowerment among the youths in Kisumu County was determined by use of Pearson’s Product Moment Correlation analysis. Table 2 provides the correlational results

Correlation Results

		Youth Empowerment
TVET Training	Pearson Correlation	.95**
	sig. (2-tailed)	.00
		0

The data shown in Table 2 shows correlation coefficient (r-values) for the strength and direction of the relationship between TVET training and youth empowerment in Kisumu County, Kenya. The coefficient for correlation for TVET training and youth empowerment was  $r = 0.95$ , indicating a very strong positive relationship. This suggests that an increase in TVET training would result into a very strong positive increase in youth empowerment. It implies that TVET training plays a very significant role in enhancing empowerment as indicated by increased level of entrepreneurship, decision making abilities and social responsibility.

Youth empowerment has very strong positive relationship with TVET training. Empowerment encompassed entrepreneurship, decision making, enhancing social responsibility and the ability to actively participate in socioeconomic development activities. Relevant to this finding is a recent study by Iro-Idoro and Jimoh (2020) and Nyataya, (2019) and Mwaura and Ombui (2017) emphasize that TVET training provided the necessary empowerment interventions that prepared youth for entrepreneurship roles for self-reliance. It implied that empowered youth are more likely to take initiative and innovate with potential to contributing to positive societal impacts. For instance, empowerment can lead to reduced crime rates, improved health outcomes and more robust civic participation. Furthermore, empowered youth can contribute more effectively to economic activities, driving local and national growth. Empowerment theory supports the idea that youth empowerment has a strong positive relationship with TVET training. According to this theory, empowerment involves equipping individuals with the necessary skills, knowledge, and confidence to take control of their own lives and make meaningful contributions to their communities (Zimmerman et al., 2020; Dennerlein & Kirkman, 2023). In the context of TVET, training programs provide youth with practical, industry-relevant skills that enhance their employability and economic potential.

6.0 CONCLUSION AND RECOMMENDATIONS

This study examined the effectiveness of TVET training in promoting youth empowerment in Kisumu County, Kenya. The findings from descriptive and inferential statistics revealed that TVET training had significant contribution to youth empowerment ( $r=0.95$ ). Similar findings were found from the content analysis of the qualitative data that TVET training empowered youth towards entrepreneurship, informed decision making and social responsibility. The study demonstrated that TVET training is effective in enhancing youth employability in Kisumu County. Hence the conclusion that expansion of TVET programs would further support the employment prospects of young people in Kisumu County. However, it was found that TVET graduates tend to be overambitious in securing jobs immediately after completing their training.



Based on the findings of the study, the government should consider prioritizing expansion of TVET programs to accommodate more students and diversify the courses offered to align with the evolving needs of the labor market. Such interventions may include increasing access to TVET institutions, especially in rural areas, to ensure equitable opportunities for all youth. Professionals in the TVET sector should continuously review and adapt the curriculum to integrate emerging trends and technologies in various industries. Ensuring that the training content remains relevant will help graduates meet employer expectations.

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