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Effectiveness of TVET Training in Harnessing Skills Development amongst the Youths in Kisumu County, Kenya

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ABSTRACT: The global challenge of TVET is ensuring that vocational education systems are inclusive, industry-relevant and aligned with the needs of the 21st-century labor market. Without addressing issues like funding, perception and curriculum development, TVET systems may continue to fall short in equipping young people with the skills needed for employment, entrepreneurship and sustainable economic development. For this reason, this study sought to examine effectiveness of TVET Training in Harnessing Skills Development Amongst the Youths in Kisumu County, Kenya. The founding theoretical frameworks were: Human capital theory, social learning theory and empowerment theory. Descriptive survey was used. Target population was 20,857 comprising of 20,814 TVET students, 42 Heads of TVET institutions and 1 County Education Officer in Kisumu County Government. A sample size of 379 was determined using Krejcie and Morgan (1970) model. Disproportionate stratified random sampling was used to select respondents. Data was collected using structured questionnaires and interview guide. Data was analyzed through content analysis, descriptive and inferential statistics. Pearson's Correlation analysis was used to determine linear relationships between variables. For the coefficient of correlation (r) of 0.96, it implied a very strong positive relationship between TVET training and skill development. Government as policy-maker was recommended to institute regular reform for reviewing the existing TVET curricula in order to incorporate feedback from students and adapt to emerging dynamics of demographic dividends.

KEYWORDS: TVET training, demographic dividends, skills development

1.0 INTRODUCTION

Globally, youth unemployment remains a significant issue. Many young people struggle to find jobs because of skills mismatches. Even in developed economies, employers often report difficulties in finding workers with the practical skills needed, particularly in technology, engineering and trades. As a result, there is growing demand for harnessing the potential of technical and vocational education and training (TVET) for inclusive, equitable and sustainable societies. This is because unlike other forms of education, TVET is more oriented on imparting practical knowledge, expertise, skills relevant and applicable in solving specific fields, occupations and industry (International Labour Organization & United Nations Educational, Scientific and Cultural Organization, ILO & UNESCO, 2019). TVET achieves this through diverse learning pathways including but not limited to apprenticeships, vocational courses, technical certifications and on-the-job training which offer flexible options for learners. Through collaborative mechanisms, TVET is recognized as the ultimate vehicle for fostering human capital development in employment, skills development Goals (SDGs) on Quality Education (SDG4), Decent Work and Economic Growth (SGD8) and Innovation, Industry, and Infrastructure (SDG9) (Mutebi & Kiplagat, 2022). It underscores the importance of TVET in capacity building and facilitating labor mobility and employability. Nevertheless, there is unending debate over the effectiveness of TVET programs in generating the desired outcomes for individual, industry and economy.

Literature is full of controversies with regard to contribution of TVET to the aspects of demographic dividends like youth skill development. For instance, while carrying out study on the challenges facing TVET institutions on youth employment in Rwanda, Hakizayezu and Maniraho (2022) found that graduates find it difficult to secure employment due to the training which was largely based on theory over practice, mismatch of acquired skills job needs and untrained trainers which impacted negatively on learners' employability. The findings from another study focusing on the relevance of the TVET curricula to the barriers to TVET institutions' capacity and labor market in Kenya by Muchira et al. (2023) found that failure to promote requisite skills that matched employment needs deaccelerated youth employability. Odondi and Imani (2023) did an exploratory study focusing on employment transition of TVET learners for the case Safaricom Foundation Scholarship Program in Kenya and revealed that students had all the competences that met job market demands. But these findings were based on descriptive analysis that lowered inferencing of the findings. Inviagu

(2019) did a related study exploring 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 skill gaps, unemployment and youth disempowerment. The findings from the reviewed studies faced contextual, geographical and generalization limitations.

As one amongst the 47-counties in Kenya, Kisumu City County holds a population of 1,155,524 people. Known for its agricultural, fishing and tourism industries, Kisumu hosts several local and international TVET institutions whose aim is to tap on the young population of youths` potentials and empower them with skills, knowledge and opportunities necessary for personal growth, employment, job creation and contribute to socioeconomic development of the area (County Government of Kisumu, 2023). This demonstrates the importance of TVET in leveraging demographic dividends as it contributes to social stability, economic growth and sustainable development of the locality as indicated by the status and levels of skills development, employment, empowerment and the general wellbeing of the society (Republic of Kenya, 2022).

By harnessing on the potentials of youth through skill development, TVET is believed to leverage on demographic dividends. In addressing youth employment challenge, TVET equips youths with practical and employment skills that are relevant to the industry needs thus enhancing their employability. Also, TVET offers diverse and specialized hands-on training skills that are industry driven to ensure that they are applicable to the workplace. Thus, the skills offered should be adaptable to the changing and evolving industry landscapes in order to foster innovation and flexibility in solving real-world challenges within workplaces. By imparting business knowledge and managerial skills, TVET ensures that the necessary attitudes and competences are imparted for starting and managing businesses. This ensures that youths become empowered to run businesses for self-employment (Republic of Kenya, 2023).

2.0 STATEMENT OF THE PROBLEM

The Global-Talent-Competitiveness-Index of 2017 ranks Kenya's talent-competitiveness into position 97 over the possible 283 globally (Kenya Institute for Public Policy Research and Analysis - KIPPRA, 2019). It places Kenya behind most of the Sub-Saharan countries in terms of TVET skills whereby a large population of TVET graduands are perceived to lack essential skills for driving economic productivity. In Kisumu City County for instance, about 41% of the youth's population remain unemployed despite having completed tertiary education including TVET (Republic of Kenya, 2019). The trend is expected to worsen as 15,000-20,000 graduates are being churned from the TVET institutions to job-market every year. The consequences of ineffective TVET can have far-reaching negative impacts on individuals, communities and the nation as a whole. For instance, ineffective TVET can lead to high youth unemployment, skills shortages in key sectors, social exclusion and inequality, brain drain and talent flight, reduced innovation and competitiveness, increased crime and social unrest, wasted human potential and limited access to basic services. If left unchecked, it may hamper the general economic growth, exacerbation of social inequalities and hinder the development of a skilled workforce required for transformation of Kenya as envisioned in the Vision-2030. Literature attributes skill mismatch to low demographic divided (Inyiagu, 2019; Hakizayezu & Maniraho, 2022; Muchira et al., 2023). While the generalization of the findings by Inyiagu (2019) and Hakizayezu and Maniraho (2022) were contextually limited to Nigeria and Rwanda geographical settings, the conceptualization of the study by Muchira et al. (2023) failed to link the context of TVET with the complex and interconnected aspects of demographic dividends. TVET is empirically claimed to strengthen entrepreneurship skills essential for productive usage and transforming youths into innovative job-creators thus contributing to economic development (Ohagwu, Nwanesi & Hassan, 2023; Muriuki & Dominic, 2022). Nevertheless, these findings faced limited inferencing due to reliance on secondary sources of data and qualitative methodologies which lowered the validity. In filling the knowledge gaps, this research aimed to explore the effects of TVET in harnessing skills development amongst the youths in Kisumu County, Kenya.

3.0 LITERATURE REVIEW

A study focusing on TVET and skills development in India was done by Tatpuj *et al.* (2022) whereby TVET interventions were found to complement with life-long, applied transformational and soft skills which enhanced students' capacity in coping with life. Tatpuj *et al.* (2022) used survey research design, purpose sample size of 25 students, structured questionnaires, descriptive and inferential analysis were used. But the sample size of 25 respondents was too small because it increases the margin of error which lowers validity of the findings. Reliance on students only as respondents increased biasness of the findings. Further, the findings were not anchored on any theoretical foundation which lowered construct validity. Moreover, the findings reflected Indian settings and not Kenyan settings. These gaps were overcome by using a large sample size of 336 TVET students, 42 teachers and an official from the Ministry of Education so as to collect diverse data to support the findings. An empirical study exploring on TVET and skills development in West Africa was pursued by Osidipe (2017) whereby inclusive approach to TVET was found to increase effectiveness of skills development for lifelong learning and responsible citizenship. Osidipe (2017) used meta-analysis, purposive sampling articles and qualitative analytical methods which limited inferencing of the findings. Reliance on qualitative methodology like purposive sampling, secondary sources of data and content analysis lowered the validity and generalizability of the findings. To overcome the gaps, this endeavour relied on quantitative and qualitative data from raw-sources, triangulate qualitative and also quantitative analytical methods so as to increase the confidence of concluding ad generalizing the findings.

In Kenya, Muyaka and Kitainge (2022) explored the link of TVET and development skills and found that TVET failed to impart youths with competence-based education and training. In that study, Muyaka and Kitainge (2022) used desktop study review, judgmental sampling, descriptive and content analysis. But the findings lost validity due to reliance on published and secondary data. The study by Muyaka and Kitainge (2022) was also not anchored on any theoretical basis thus lowering construct validity. These limitations were overcome by relying on raw data from the students, teachers and an official from the Ministry of Education supporting the effects of TVET on skill development. This endeavour used three theories namely: social learning theory, human capital theory and empowerment theory. A related empirical study was conducted by Musyimi (2021) on effectiveness of TVET institutions in skills development in Kenya whereby TVET trainings were found to improve confidence of learners because students were found to have acquired employability skills. Musyimi (2021) used cross-sectional survey, stratified random, 172 students, structured questionnaires, standard deviation, mean and ranges. However, reliance on students only as the respondents coupled with reliance on structured questionnaires void of inferential statistics lowered validity for generalizing the findings. This study collected disaggregate data from the students, teachers and an official from the Ministry of Education and analyzed it using triangulation of qualitative and quantitative methods.

Another study by Chepkoech, Khatetea and Wanjala (2021) evaluating the link between trainers' capacity and skills development among TVET graduates in Kenya found that TVET institutions were not in better positions to impart graduates with the right skills to meet development needs. Chepkoech, Khatetea and Wanjala (2021) relied on survey design, probability and non-probability sampling of 400 trainers selected from TVET institutions, interviews, questionnaires and documentary analysis, correlation and regression analysis. Nevertheless, data collection instruments were not pilot-tested for reliability and reliability. The findings were supported by human capital theory only and this lowered construct validity. In addition, the findings failed to reflect the contextual settings of Kisumu County. To overcome these gaps, human capital, social learning and empowerment theories were used to support the findings in the settings of Kisumu County.

Theoretical Framework

The study was anchored on human-capital theory, social-learning theory and empowerment theory. Developed by Gary Becker in 1964, human-capital theory states that investment in training and education enhance individual's competences and abilities to contribute socioeconomic development (White, 2021). The principle behind the human capital theory is that investment in people through education and training promotes learning and experience leading to greater economic returns (Rajabhat, 2017). In this endeavour, human capital theory played a significant role in understanding demographic dividends from effective TVET interventions. In 1960s, Albert Bandura proposed social learning theory by emphasizing the role of cognitive processes in learning. This theory which states that behaviour is obtained by observing, modelling and imitation (Cilliers, 2020). In this theory, the underlying assumption is that learning is a combination of theory, observation and experiences and that cognitive processes play a crucial role in learning processes. For this endeavour, social learning theory was helpful in the understanding of leveraging demographic dividends effectively through creation of an environment where positive work values, behaviours, skills and attitudes are learned and reinforced through effective TVET. 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. 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. Through the lens of empowerment theory, this endeavour was able to understand how skill development can effectively be leveraged through accessible, affordable, quality and relevant TVET.

Conceptual Framework



Descriptive survey anchored the study. Targeted-population was 20,857 comprising of 20,814 TVET students, 42 Heads of TVET institutions and 1 County Education Officer in Kisumu County Government. A sample size of 379 was picked using Krejcie & Morgan (1970) for sample determination. Disproportionate stratified random sampling was used to select respondents. Data was collected using structured questionnaires and interview guide. Reliability of the instruments was determined through split-half method and accepted at 0.7 Cronbach's coefficient. Qualitative data was analyzed through content analysis while quantitative data

was presented using standard deviation, mean, percentages and frequencies. Relationship between variables was determined by Pearson's Correlation method. The findings were presented in frequency tables, percentages and correlational tables.

5.0 RESULTS AND DISCUSSIONS

Demographic Data

The study achieved response rates of 84.2% for questionnaires and 58.1% for interviews, enhancing the confidence in the findings. Of the 283 questionnaire respondents, 55.8% were male and 44.2% were female, while 60% of the 25 interviewees were male implying that gender balance was fairly attained, minimizing bias. Most questionnaire respondents (62.2%) were aged 18-35, while all interviewees were aged 36-60. Although marital status was not a study variable, the majority were single (65%) for the questionnaire respondents mainly had college certificates (53.7%) and diplomas (43.5%), while 80% of interviewees held university degrees. All respondents were deemed literate enough to provide informed feedback on the effectiveness of TVET in harnessing demographic dividends. Employment status revealed 49.1% of questionnaire respondents (70%) had 0-2 years of experience, while all interviewees had at least 7 years, offering diverse perspectives on the impact of TVET on career development and economic growth.

Descriptive Findings

Skill development was measured by the following indicators: problem solving, creative thinking and networking. The descriptive findings are given in Table 1

1	2	3	4	5	Mean	Std dev
TVET offered problem0(0.0) solving skills	9(3.2)	11(3.9)	149(52.6)	114(40.3)	4.31	0.69
Through TVET0(0.0) espondent became nnovative	5(1.8)	22(7.8)	159(56.2)	97(34.3)	4.24	0.66
EVET allowed for greater0(0.0) networking with industry	6(2.1)	12(4.2)	146(51.6)	119(42.1)	4.35	0.67
TVET offered practical1(0.4)kills	7(2.5)	21(7.4)	160(56.5)	94(33.2)	4.20	0.71
VETprepared0(0.0)espondentfortechnicalxpertise	15(5.3)	13(4.6)	157(55.5)	98(34.6)	3.23	0.75
VET graduates were3(1.1) nore skillful than cademic qualifications	3(1.1)	0(0.0)	109(38.5)	168(59.3)	4.59	0.60
VET skills were demand2(0.7)	28(6.4)	16(5.7)	172(60.7)	75(26.5)	4.09	0.80

Table 1: Effectiveness of TVET Training in Harnessing Skill Development

Source: Research Data (2024)

The data in table 1 shows the descriptive findings for effectiveness of TVET training in harnessing skill development in Kisumu County, Kenya. On whether TVET offered problem solving skills, a small percentage of respondents (9 out of the total or 3.2%) disagreed that TVET training provided problem-solving skills. This suggests that a minority of the participants felt that TVET programs did not sufficiently equip them with such essential skills, which could indicate gaps in certain programs or training environments. Another small fraction (11 respondents or 3.9%) remained neutral. These individuals did not express a strong opinion on whether TVET training impacted their problem-solving skills, possibly reflecting a lack of direct experience with problem-solving in the curriculum or mixed outcomes from their training. A majority (149 respondents or 52.6%) agreed that TVET effectively offered problem-solving skills. This demonstrates that the training programs are generally perceived as beneficial for skill development in this area. It shows the positive role TVET plays in preparing individuals to tackle challenges in their future careers. A substantial number (114 respondents or 40.3%) strongly agreed with the statement, reinforcing the notion that TVET programs are considered highly effective in imparting problem-solving skills. This could indicate that the curriculum and training methods are aligning well with industry needs and the demand for critical thinking and practical problem-solving abilities. The

mean and standard deviation for this statement were 4.31 and 0.69 respectively. The high mean of 4.31 indicated a positive response that TVET offered problem solving skills and the standard deviation of 0.69 implied stability of the scores.

Regarding whether TVET respondent became innovative, a very small percentage of respondents (5 out of the total respondents or 1.8%) disagreed that TVET training fostered innovation. This group may represent individuals who either did not experience innovation-centered activities or found that the training did not adequately emphasize creativity. A modest number of respondents (22 respondents or 7.8%) remained neutral. This could imply that while they did not have negative experiences, they may not have seen clear evidence that TVET programs promoted innovation, possibly due to variation in how innovation is emphasized across different courses or instructors. A significant majority of respondents (159 respondents or 56.2%) agreed that TVET contributed to their development as innovative individuals. This indicates that most trainees recognized the role of TVET in nurturing creativity and helping them think innovatively, likely through practical projects, hands-on learning and exposure to real-world challenges. A substantial portion (97 respondents or 34.3%) strongly agreed that TVET training enhanced their innovation skills. This reflects that many participants found TVET programs to be highly effective in encouraging creative problem-solving, adaptability, and innovation, which are essential skills in today's dynamic job market. The mean score for the item was 4.24 indicated that participants strongly agreed that through TVET respondent became innovative. The data was deemed stable as indicated by the low standard deviation of 0.66.

Concerning whether TVET allowed for greater networking with industry, a very small proportion (6 respondents or 2.1%) expressed disagreement. This indicates that few individuals felt that TVET did not facilitate sufficient opportunities for networking with industry. This group may have had experiences where industry connections were limited or ineffective or they may have been in sectors with fewer direct industry links. Similarly, a small group (12 respondents, 4.2%) was neutral. This could suggest a level of uncertainty or ambivalence, potentially stemming from a lack of direct engagement with industry during their TVET programs, or a balanced experience where networking was neither notably strong nor particularly weak. The majority of respondents (146 respondents, 51.6%) agreed that TVET contributed positively to industry networking. This suggests that TVET programs generally provide substantial opportunities for students to connect with industry players, such as through internships, workshops, or collaborations, which enhances employability and professional growth. A significant number (119 respondents, 42.1%) strongly agreed, further reinforcing the view that TVET programs play a crucial role in fostering industry connections. This high level of confidence suggests that many TVET programs are well-aligned with industry needs and offer robust networking platforms for students. The mean score for the item was 4.35 which suggested that respondents were positive as they strongly agreed that TVET allowed for greater networking with industry. The data was stable around the mean as indicated by the standard deviation of 0.67. On whether TVET offered practical skills, more than half (160 respondents, 56.5%) agreed that TVET provided practical skills. This suggests that a significant portion of students or trainees view TVET as successful in equipping them with skills that can be applied directly in the workforce. Practical skills are a cornerstone of TVET and this response indicates that the programs generally meet this expectation. A substantial number of respondents (94 or 33.2%) strongly agreed, adding to the positive sentiment that TVET is delivering on its promise of practical, work-ready skills. A small group of respondents was neutral (21 or 7.4%), which could suggest either limited exposure to practical training during their TVET programs or variability in the quality of practical skill development. These respondents may feel that while TVET offers practical skills, it might not always be consistently strong across different programs or disciplines. While 7 or 2.5% disagreed or 1 (0.4% respondents strongly disagreed with the statement. This minimal dissent indicates that only a minority of individuals feel that TVET programs fail to provide practical skills. For the mean score of 4.20 it implied that respondents were positive that TVET offered practical skills to the youths. The standard deviation of 0.71 showed low variability of opinions of the respondents.

Regarding whether TVET prepared respondent for technical expertise, strongly disagreed (15 respondents or 5.3%) with the statement while 13 respondents or 4.6% were neutral. A significant portion of respondents (157 respondents or 55.5%) agreed, indicating that they feel TVET effectively prepares them for technical expertise. This endorsement suggests that many individuals find substantial value in their training, believing it equips them with the necessary skills and knowledge for their chosen fields. A considerable number of respondents (98 or 34.6% agreed that TVET prepared them for technical expertise, reflecting that they recognize the relevance of their training. While this percentage indicates a positive perception, it does not signify overwhelming confidence. However, the mean of 3.23 suggested that most of the respondents just agreed that TVET prepared respondent for technical expertise. The standard deviation of 0.75 meant that respondents' opinions did not vary greatly about the mean.

Concerning whether TVET graduates were more skillful that academic qualifications, a very small proportion of respondents strongly disagreed (3 respondents pr 1.1%) and disagreed (3 respondents, 1.1%) with the idea that TVET graduates are more skillful. This minimal dissent suggests that only a few individuals believe that academic qualifications are superior in terms of skill development. A significant number of respondents (109 or 38.5%) agreed that TVET graduates possess greater skills compared to those with academic qualifications. This indicates a strong belief in the effectiveness of TVET in developing practical competencies that are directly applicable in the workforce. Respondents (168 respondents or 59.3%) strongly agreed that TVET graduates are more skillful than their academically qualified counterparts. This overwhelming support highlights a strong perception that the

practical training provided by TVET equips graduates with skills that are often more relevant and immediately useful in various industries. This item scored a mean of 4.59 suggesting that respondents strongly agreed that TVET graduates were more skillful that academic qualifications. The standard deviation of 0.60 indicated a low difference in the opinions of respondents.

On whether TVET skills were demand driven, a very small percentage of respondents strongly disagreed (2 respondents or 0.7%) and disagreed (28 respondents or 6.4%) with the statement. This minimal dissent suggests that there is a broad recognition of the relevance of TVET training to current job market requirements. Those who disagree may have had experiences where they felt the training did not fully meet industry needs, but their numbers are quite limited. A small group of respondents (16 respondents or 5.7%) remained neutral. This neutrality may indicate uncertainty about the extent to which TVET programs adapt to changing industry demands. A significant portion of respondents (172 respondents or 60.7%) agreed that TVET skills are indeed demanddriven. This indicates a strong belief that the training provided is relevant and tailored to meet the requirements of employers. A substantial number of respondents (7 respondents or 26.5%) strongly agreed that TVET skills are aligned with demand. This reinforces the idea that many individuals believe in the effectiveness of TVET in preparing students for careers by equipping them with skills that are sought after in the job market. The mean score for this item was 4.09 which indicated that respondents generally agreed with the statement that TVET skills were demand driven. For the standard deviation of 0.80, it meant that the data had low variability around the mean which implied low variation in the opinions of the respondents and data stability.

Qualitative Findings

The qualitative responses from TVET heads highlighted several key themes illustrating how TVET training has enhanced skill development. For instance, TVET training was reportedly found to play a crucial role in skill development by providing comprehensive, creative and practical problem-solving skills that easily linked to the relevant industries of interest. Attachments and internships significantly contributed to skill acquisition and networking opportunities for students. The summarized response is,

"Here, we (TVET heads) offer practical and problem-solving skills to help students become innovative in solving the relevant industry problems. Apart from exposing students to industrial experiences through attachments and internships, it helps students to interact and network with the players in the industry leading acquisition of essential soft skills such as communication, problem-solving, time management, and adaptability. These skills are critical for professional success and are highly valued by employers. By continuously updating our TVET interventions and aligning them with the changing demands of the industry, TVET institutions can effectively prepare students for the evolving job market, ensuring they possess the necessary skills to succeed in their career". (TVET Heads).

When asked to explain the role of TVET in developing skills amongst youths, the Director of Education in Kisumu County observed that TVET was playing a crucial role in equipping young people with the necessary skills to thrive in the modern job market. The Director emphasized on the importance of TVET as essential component of the education system in Kisumu County, vital for the development of a skilled, adaptable, and resilient workforce. This finding was reinforced by the students who when asked to provide other information with regard to TVET and skill development said that TVET is equipping them with the practical skills, confidence and industry connections needed to succeed in their careers and contribute to the local economy.

The findings implied that TVET training plays a crucial role in developing practical skills among students. This implication suggests that hands-on learning provided by TVET institutions is essential for equipping students with the technical and vocational skills needed in various industries. By emphasizing practical training, TVET programs can better prepare students to meet the demands of the job market, enhancing their employability and career prospects. This finding underscores the importance of continuing to improve and expand TVET offerings to meet evolving industry needs and ensure that graduates are well-prepared for their careers. The general findings from this theme indicated that TVET Training was a critical factor for skill development amongst the students. This finding is supported by the findings from past empirical studies that showed that TVET training increased effectiveness of skills development for lifelong learning and improvement (Osidipe, 2017; Muyaka & Kitainge, 2022; Musyimi, 2021; Chepkoech, Khatetea & Wanjala, 2021). The finding is supported by the Human-Capital Theory which posits that investments in education and training increase the productivity and efficiency of workers, leading to economic growth and individual advancement supports. In the same strength, Social-Learning Theory which emphasizes the importance of observing, modeling and imitating the behaviors, attitudes and emotional reactions of others supported the findings that TVET training enhanced skills development in Kisumu County, Kenya.

Inferential Findings

The relationship between TVET training and skill development 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

		Skill development
TVET Training	Pearson Correlation	0.87**
	n	80

The data shown in Table 2 shows the relationship between TVET training and skill development amongst youths in Embu County. For the coefficient of correlation (r) of 0.87 (for p=0.00), it implied a very strong positive relationship between TVET training and skill development. Thus, an increase in TVET training would lead into a very strong positive increase in the TVET training and skill development. This indicates that TVET training is highly effective in improving the skills of the youth as indicated by greater problem solving, creativity and networking. The strong correlation suggests that the TVET programs are well-designed to equip participants with the necessary skills. It underscores the importance of maintaining high-quality training standards and continuously updating the curriculum to align with market demands.

Skill development also shows a strong positive correlation with TVET training. With coefficient of correlation value of 0.87, it is clear that TVET programs are effective in enhancing the skills of the youth. This includes technical skills related to specific professions and broader competencies such as problem-solving, critical thinking, networking and adaptability. Building on the same consensus is findings from studies conducted by Muyaka and Kitainge (2022), Musyim (2021) and Chepkoech, Khatetea and Wanjala (2021) reinforcing the idea that TVET training increases effectiveness of skills development for lifelong learning and improvement. It implies that youths with relevant and improved skill become more competitive and adaptable in the labor market. Skilled youths can drive innovation and increase productivity within various sectors. Overall, enhanced skills amongst the youths facilitate entry into diverse economic activities, reducing dependency on a few sectors.

6.0 CONCLUSION AND RECOMMENDATIONS

The study sought to establish the effectiveness of TVET training in harnessing skills development in Kisumu County, Kenya. TVET training was found to have a statistically significant contribution to skills development. It is therefore concluded that TVET training plays a crucial role in enhancing the skills development of youth in Kisumu County. This highlights the importance of TVET programs in equipping young people with the necessary skills to succeed in the workforce. Government as policy-maker was recommended to institute regular reform for reviewing the existing TVET curricula in order to incorporate feedback from students, so as to adapt to emerging dynamics of demographic dividends. TVET institutions as practitioners should improve strategic planning practices to further align training programs with labor market demands and enhance the employability of graduates. This would align with the findings that TVET training plays a crucial role in improving youth employability, skills development, and empowerment in Kisumu County, Kenya.

REFERENCES

- Chepkoech, S., Khatete, I. & Wanjala, G. (2021). Quality of trainers at public technical, vocational, education and training institutions: The missing link in Kenya's skill development. *Journal of Educational Research and Policy Studies*, 2(1), 1-8.
- Cilliers, E. J. (2020). Reflecting on Social Learning Tools to Enhance the Teaching-Learning Experience of Generation Z Learners, *Front. Educ, 5* (2022), 1-10
- 3) County Government of Kisumu (2023). County Integrated Development Plan 2023-2027, Officer Printer
- 4) County Government of Kisumu (2023). Status of TVET institutions in Kisumu County, Office printer
- Hakizayezu, J. & Maniraho, J. F. (2022). Challenges facing technical and Vocational Education and Training institutions on youth employment in Gasabo District, Rwanda. *Journal of Research Innovation and Implications in Education*, 6(3), 572 – 580
- 6) International Labour Organization (ILO, 2018). World Employment and Social Outlook: Trends 2018.
- 7) International Labour Organization and United Nations Educational, Scientific and Cultural Organization (2019). A Global Overview of TVET Teaching and Training: Current Issues, Trends and Recommendations, ILO Publishing (Rights and Licensing), Geneva, Switzerland
- 8) Inyiagu, E. E. (2019). Challenges Facing Technical and Vocational Education in Nigeria *Journal of Educational Policy* and Entrepreneurial Research (JEPER) 1 (1), 40-45
- 9) KNBS. (2019). *Kenya Population and Housing Census Volume 1: Population by County and Subcounty. Nairobi:* Kenya National Bureau of Statistics. 2019. p. 7. ISBN 978-9966-102-09-6.

- Krejcie, R.V., & Morgan, D.W., (1970). Determining Sample Size for Research Activities. Educational and Psychological Measurement.
- 11) Muchira, J. M., Kiroro, F., Mutisya, M., Ochieng, V. O., & Ngware, M. W. (2023). Assessing technical vocational education and training institutions' curriculum in Kenya: What strategies can position the youth for employment? *Journal of Adult and Continuing Education*, 29(2), 563-582
- 12) Mugenda, O.M. and Mugenda, A.G. (2003). Research Methods, Quantitative and Qualitative Approaches. ACT, Nairobi.
- 13) Muriuki, S., & Dominic, M. (2022). Retraining TVET Trainers in Kenya for Changing Global Trends and Dynamics. *Africa Journal of Technical and Vocational Education and Training*, 7(1), 61-75.
- 14) Musyimi, C. (2021). Developing Skills to Unlock Kenya's Industrial Growth: The Influence of Provision of Modern Teaching and Learning Equipment in TVET in Kenya, *Journal of Learning for Development*, 8(1), 182-191
- 15) Mutebi, R. & Kiplagat, H. (2022). TVET Response to Global Challenges of Sustainable Development, *African Journal of Research in Mathematics Science and Technology Education* 7(1), 447-456
- Muyaka, J. & Kitainge, K. M. (2022). Implementation of Whole Youth Development Skills in Kenya's TVET Institutions, *The Kenya Journal of TVET*, 4 (2022), 63-80
- 17) Ochieng, K. O. (2024). Factors Affecting Learners' Enrollment into STEM Programs in TVET Institutions within Kisumu County, Kenya: A Comparative Analysis, *Africa Journal of Technical & Vocational Education & Training*. 9 (1), 1-8
- 18) Odondi, W. & Imani, E. (2023). Exploring the Employment Transition of TVET Students: A Case of the Safaricom Foundation Scholarship Program. *Africa Journal of Technical and Vocational Education and Training*, 8(1), 111-119
- 19) Ohagwu, O., Nwanesi, P. K., & Hassan, Z. bin. (2023). Skill Acquisition (TVET) and Entrepreneurship. *International Journal of Academic Research in Business and Social Sciences*, *13*(8), 1857–1878.
- 20) Osidipe, A. (2017). TVET and Nurturing Skills for Sustainable Regional Development: Perspectives from West Africa, *Journal of Education and Practice*, 8 (30), 172-180
- 21) Population Action International. (2020). *Healthy Families Healthy Plane: Population Dynamics, Environment, and Sustainable Development in Kisumu County.* Population Action International. Washington DC.
- 22) Rajabhat, J. (2017). Human capital theory: the theory of human resource development, implications, and futures. *Humanities and Social Science 18* (2), 240-253
- 23) Republic of Kenya (2019). 2019 Kenya Population and Housing Census Report, Government Printer
- 24) Republic of Kenya (2022). TVET Knowledge and Key Highlights Report Mapping Technical and Vocational Educational and Training Data in Kenya May 2022. Government Printer
- 25) Republic of Kenya (2023). *Technical and Vocation Education and Training Strategic Plan-20230-2027*. Government Printer
- 26) Sang, A., Muthaa, G. & Mbugua, Z. (2022). Challenges Facing Technical Training in Kenya. *Creative Education*, *3*, 109-113.
- 27) UNESCO (2015). Unleashing the Potential: Transforming Technical and Vocational Education and Training
- 28) White, B. (2021). Human Capital Theory and the Defectology of Aspirations in Policy Research on Rural Youth, the European Journal of Development Research, Palgrave Macmillan; European Association of Development Research and Training Institutes, 33(1), 54-70
- 29) Zimmerman, M., Rupp, L., Sly, K., Reischl, T., Wyatt, T., Thulin, E. & Stock, J. (2020). Community-engaged neighborhood revitalization and empowerment: Busy streets theory in action. *American Journal of Community Psychology*, 65(1–2), 90–106



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