

How Physical Facilities affect Students' Selection Decisions for Public TVET Institutions in Nairobi County, Kenya

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Abstract

Public Technical and Vocational Education and Training (TVET) institutions have received enormous support from the government through the establishment of TVET Act, Kenya Universities and Colleges Central Placement Service (KUCCPS), and Higher Education Loans (HELB). The formation of these bodies aimed to encourage pursuance of technical education and students' enrolment in the TVET institutions. However, these reforms caused an influx of students in some TVET institutions, while some have experienced low enrolment; hence, the question on students' selection decision. The study aimed to investigate the influence of physical facilities on students' decisions in selecting government TVET institutions in Nairobi County, Kenya. The study was informed by Jackson model. It utilized descriptive survey research design. It targeted 3505 respondents comprising of module three trainees, officers in charge of admission, and principals. Purposive sampling and stratified random sampling techniques were used in drawing a sample size of 361 respondents which comprised of 6 principals, 6 admission officers and 349 module three trainees. Questionnaires and interviews were used to collect data. The validity and reliability of research instruments was ascertained accordingly. Quantitative data was analyzed using SPSS, then computed descriptive and inferential statistics, while qualitative data was analyzed by categorizing information gathered into themes. The study's findings indicated that adequacy, availability and updatedness of training resources were important aspects of consideration when choosing a career in TVET institution. Thus, the study concluded that physical facilities had significant influence on students' decisions in selecting public TVET institutions. The study recommends that the government avail funds to develop new and modern physical facilities, while TVET institutes' managements should implement a maintenance plan for old facilities. This has implications on funding by national government, and further indicates need for collaborations with development partners.

Keywords: *Physical facilities, Students' decision, Public TVET, learning facilities, technical education, Selection of TVET*

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1.0 Introduction

The future prospects among young people is greatly influenced by their career choice. Therefore, careful consideration ought to be undertaken during the selection stage to make the right decision, including deciding the institution where the course is offered. Among many learning institutions that offer career education and training are the Technical and Vocational Education and Training institutes (TVET). TVETs are advanced levels of learning that aim to transform trainees' abilities and attitudes by equipping them with problem-solving skills and competencies that are demanded in the marketplace (Hassan & Awan, 2019; Dahalan et al., 2020).

Different countries have adopted different names for TVET institutes. Despite the names given in different countries, TVET institutes are critical in developing the human resources required by the market. Therefore, enrolling in a TVET institute increases one's chances of getting employment and/or acquiring skills that would enable one to start a self-employment venture (Tamang, 2022). Ngugi and Muthima (2017) noted that learners who are given technical skills become entrepreneurs, diligent workers, and informed citizens, all of which contribute to a country's economic prosperity. This further enhances social inclusion and human resource development in the country.

Mahangiru (2016) argues that the decision to take a course at a particular college is significant in an individual's life as the future career is built during these college years. Previous national and international researchers have found several characteristics that influence Vocational Education Training (VET) institutions'

enrolment. For example, Hong et al. (2023) shows that young people in Japan have limited access to vocational training schools because they think such courses will limit their career and educational options. Furthermore, parents are hesitant to counsel their children on career options because, doing so does not guarantee they will find a good job with a good salary.

The attractiveness of TVET institutions has been promoted through conducting research and development, formulating TVET policies, integrating knowledge and technical skills, establishing standards for human resource development, and reviewing the sector curriculum and syllabi to accommodate market and employers' current needs (Winch, 2013; Hong et al., 2023). However, only a few countries have the resources to provide high-quality technical and vocational Education. Ethiopia receives only 0.5 per cent of its technical education budget, compared to 1%, 10%, and 12.7 per cent for Ghana, Mali, and Gabon, respectively (Winch, 2013).

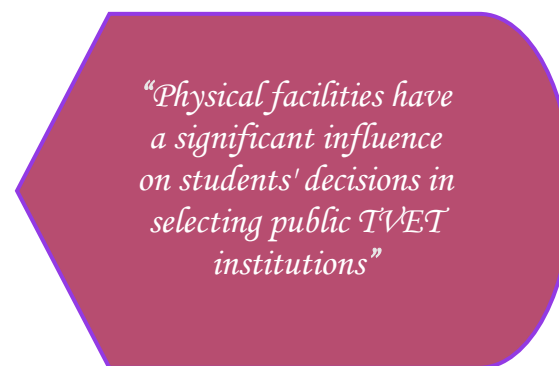
TVET institutions across the globe have experienced challenges such as diminishing demand for TVET's graduates, little clarity, fragmented unity of purpose, weak TVET standardization measures, little government support, and attitude towards TVET institutions (Hong et al., 2023; Paryono, 2017). Yiga (2022) challenged TVET institutes to upscale their competitiveness to attract more learners. In Malaysia, Pakistan, Bangladesh and India, several TVET institutions have suffered low enrolment, as noted by Omar et al. (2020), Hong et al. (2023) and Tognatta (2014). This was attributed to limited competency among

teaching staff, traditional attitudes, negative societal attitudes and dismally equipped laboratories, workshops and infrastructure (Hong et al., 2023).

Despite the little attractiveness of TVET institutions, developing nations in Africa cherish the value of TVET education in securing youth employment, gaining the country's economic development, and as a source of skilled labour (Yiga, 2022; Mumba, 2020; Chitema, 2021). In Kenya, the Ministry of Education oversaw TVET instructional management and established reforms to respond to current human resources and employers' needs in the marketplace (Kipngetich et al., 2022). Such reforms included TVET Act, which guides on admission, registration of learners, curriculum development, administration, management and evaluation of the sector performance. Moreover, career guidance offices have been established in most TVET institutes, while the HELB loan facility was expanded to TVET learners (Nawaji et al., 2022; Maiyo & Wasike, 2021; Sankale et al., 2017).

Therefore, these reforms, institutional procedures and Ministry of Education directives are expected to enhance quality service delivery, attract registration and enrolment of trainees, improve operational performance, and increase the competitiveness of TVET institutions. Despite these endeavours, some TVET institutions are still experiencing poor enrolment, while others have more than they can handle (Nawaji et al., 2022; Maiyo & Wasike, 2021; Ngware et al., 2022; Korir et al., 2020). This raises the question of aspects influencing learners' decision to select a TVET institute. Since physical facilities are very crucial in the delivery of technical

education, this study decided to investigate how they influence the student's selection decision for a public TVET. Several related past studies, such as Obwoye et al. (2016) and Omar et al. (2020) focused on college branding, curriculum implementation, while others such as Gichuki et al. (2019), and Simiyu et al. (2018) investigated competition and resource mobilization in TVET institutions; hence, the need for the current study, whose objective was to examine the influence of physical facilities on students' choice decisions for public TVET institutions in Nairobi County. The investigation aimed to test null hypothesis, H_{01} , there is no statistically significant relationship between physical facilities and students' choice decisions for public TVET institutions in Nairobi County.



Overview of physical facilities in TVET institutions

Physical facilities refer to tangible educational structures and equipment that define the physical environment and are utilized to support the delivery of an academic program. The study was based on the Jackson Model developed in 1892. The model was established to facilitate an understanding of how students make choices for joining universities and colleges (Hanson & Litten, 1982). Jackson identified the

behaviour that influenced decision-making, categorized as a learner's economic and social factors. This conclusion on economic and sociological factors influencing learner decision-making led to the establishment of three main steps. These steps were: preference, exclusion and evaluation. (Jackson, 1982; Hanson & Litten, 1982). The model is essentially helpful in addressing the physical facilities in TVETs.

Physical facilities in TVET institutions comprise tangible educational structures, including laboratories, tools, materials and infrastructures such as learning theatre, boarding facilities, classrooms, libraries, recreation facilities and equipment, workshops, studios (Munguti, 2016). Physical facilities allow students to gain hands-on experience with machinery, tools, and materials in a setting that simulates a real-world environment. This allows students to gain the confidence and skills needed to succeed in their chosen fields (Audu, et al., 2013). A review of the literature regarding physical facilities in several counties in Kenya, for example, Busia County, Kakamega County, Makeni County, Mombasa County and Nairobi County, show that most TVET institutions need more basic infrastructures such as classrooms and labs.

2.0 Materials and Methods

The study was undertaken in Nairobi County in Kenya. Descriptive survey research design was utilized in the study which best describes the students' behaviors and perceptions when selecting a particular TVET institution. The study focused on module three trainees, principals and officers in charge of admissions in TVET institutions as the target population for the study. The module three trainees were preferred because they were in

the institution for at least two years and therefore better placed to comment on physical facilities. A total of 6 public TVET institutions were selected and the 6 officers in charge of admissions, 6 principals and 3493 module three trainees were identified as key informants. Purposive sampling technique was used to select principals and officers in charge of admission, while stratified random sampling technique was used to select module three trainees, drawing a sample size of 361 respondents. The sample group comprised of 6 officers in charge of admission, 6 principals and 349 module three trainees.

Module three trainees were asked to fill questionnaires, while principals and officers in charge of admission were interviewed. The research instruments were checked for content and construct validity, while reliability was measured by computing Cronbach's alpha value. Quantitative data collected from module three trainees was analyzed by keying in the data into SPSS, and computing descriptive statistics (mean and standard deviation) and inferential analysis (Spearman correlation). The qualitative data gathered from admissions officers and principals was analyzed by categorizing information into emergent themes. The information was presented using tables and themes.

3.0 Results and Discussion

Response Rate

The study collected data from 3 categories of respondents, that is, module three trainees, principals and officers in charge of admission. Out of 349 questionnaires distributed to module three trainees, 289 questionnaires were correctly filled and

accepted for analysis, translating to 83% response rate. Out of the 12 admissions officers and principals scheduled for the interview session, only 11 were available, representing 91.7% response rate. An overall response rate of 87.4% was achieved, which was termed as acceptable according to Stedman et al. (2019) and Mugenda and Mugenda (2003).

Demographic Information of Module Three Trainees

The specific aspects of demographic information of module three trainees investigated included gender, age and education level. The findings on demographic information of module three trainees indicated that male trainees outnumbered female trainees by a small margin. The study by Miheso (2020) noted gender disparity in Kakamega County with most TVETs being male nominated. Munyite (2018) agreed with these findings in Teso North Sub-County TVET institutions that were dominated by the male gender. The results also noted that module three trainees were aged between 20-29 years. Singoei (2021) also noted that tentatively, the dominant age bracket of learners enrolled in

TVET institute in Western Kenya fall under the age bracket of between 21-24 years. Also, there was evidence of elderly trainees of above 60 years. This indicated that TVET training and education is also appealing to elderly people who seek to acquire useful skills required in labor market or entrepreneurial ventures. Agreeably, Mulondanome (2017) and Ongulu (2018) found some common trends of elder students pursuing some courses among TVETs in Kakamega and Busia Counties respectively, although they were so few. The findings on the level of education of module three trainees noted that majority of them had attained secondary school education level. This indicated that they had good experience in the institution and are knowledgeable in providing information regarding the study (Ongulu, 2018).

Results on Trainees’ Selection Decision of Public TVET Institutions

Several statements were presented to respondents requiring them to rate their agreement levels on aspects of trainees’ selection decision of public TVET institutions. The results were presented in Table 1.

Table 1

Trainees’ selection decision of public TVET institutions

Statements on the trainees’ selection decision of public TVET institutions (N = 289)	Min	Max	Mean	Std
● Students consider reputation when selecting a public TVET institute	1	5	4.03	1.204
● The employability skills of trainees determine the students’ choice of a public TVET institution	1	5	4.21	1.110
● The location of TVET institution determines the students’ choice of a public TVET institution	1	5	4.03	1.231
● Students consider conducive learning environment when selecting a public TVET institute	1	5	4.11	1.104

• Courses offered determines the students’ choice of a public TVET institution	1	5	4.04	1.230
• Student support services determine the students’ choice of a public TVET institution	1	5	4.01	1.221
• TVET institution with good physical facilities are a great determinant in students’ choice	1	5	4.05	1.147
• Adequacy of trainers determines the students’ choice of a public TVET institution	1	5	4.00	1.141
• The quality of training determines the students’ choice of a public TVET institution	1	5	4.18	1.031

According to the findings in Table 1, there was a high agreement level on all indicators regarding trainees’ selection decision of public TVET institutions. This is because each sentiment had a high mean value where the lowest is 4.00 and had a standard deviation of around 1. The high agreement level indicated students’ awareness of government policy and how it had impacted TVET education and training in Nairobi County. From the findings, it is clear that the trainees’ selection decision of public TVET institutions is informed by employability skills of trainees (mean = 4.21; SD = 1.110). This indicated that the trainees’ employability skills had a weighty impact on trainees’ selection of public TVET institutions in Nairobi County. These results agreed with the report of Obwoye and Kibor (2016) who found out that career choice and selection decision of students was influenced by infrastructural, social, financial, marketing factors and job market dynamics in North Rift region.

The above findings were consistent with views gathered from principals and heads of admission during interview. From 33 statements gotten from principals and heads

of admission, the study narrowed them by categorizing identified determinants such as, co-curricular activities, access to sponsorship opportunities, quality of training, security, accessibility of the institution (location), accommodation, and recommendation from former students among others. These findings point out the need for TVET to offer market driven courses, engage in co-curricular activities, and collaborate with industries to attract more students. The findings are consistent with findings by Maiyo and Wasike (2021), Obwoye and Kibor (2016), Miheso (2020) and Beharry-Ramraj et al. (2020); which, demonstrate the role of individual trainer competencies in influencing student selection decision to join TVET institutions for their career choices.

Results on Physical Facilities and Trainees’ choice Decision for Public TVET Institutions

In assessing this construct, several statements based on indicators regarding physical facilities, were presented to respondents requiring them to indicate their agreement levels. The responses were presented in Table 2.

Table 2

Descriptive results on physical facilities and trainees’ choice decision for Public TVET institutions

Statements on physical facilities (N= 289)	Min	Max	Mean	Std
● Facilities in the school enhances teaching and learning thereby making the process meaningful and purposeful in students’ decisions in selecting Public TVET institutions	1	5	4.12	1.102
● Availability of adequate and modern training facilities influence students’ decisions in selecting Public TVET institutions	1	5	4.26	1.069
● Availability of physical facilities encourages meaningful teaching and training	1	5	4.13	1.159
● Availability of adequate school buildings, classrooms, chairs, desks and other facilities are necessary for the attainment of education objectives	1	5	4.00	1.152
● Inadequacy of instructional materials and training facilities contributed to the in ineffectual impartation of skills among the students	1	5	4.19	1.295
● The poor state of workshop tools and equipment in TVE institutions in Kenya has resulted to great controversy among the educators.	1	5	4.17	1.221
● The lack of training facilities compromises the relevance of taught skills to market skill needs in industries and business organizations	1	5	4.04	1.263

The findings in Table 2 noted that the majority of respondents agreed that facilities in the school enhance teaching and learning; hence making the process meaningful and purposeful thus informing students’

decisions when selecting Public TVET institutions (mean = 4.12; SD = 1.102). The findings further indicate that majority of the respondents (mean = 4.260; SD = 1.069) agreed that availability of adequate and

modern training facilities influence students' decisions in selecting public TVET institutions. In addition, students were of the opinion that inadequacy of instructional materials and training facilities contributed to ineffectual impartation of skills among the students (mean = 4.19; SD = 1.295). The affirmative responses indicate that, although the state of physical facilities in TVET institution was wanting, they had capacity to influence the students' selection decisions

The principals and head of admission also concurred during interview session to the fact that the physical capacity was a real challenge in most TVET institutions. The finding agrees with (Ongulu, 2018) who indicated that teaching and learning facilities constitute an important component of the training process. Similarly, Obwoye and Kibor (2016) noted that adequacy and availability of training resources and physical infrastructure were important aspects of consideration when choosing a career in TVET institution. The principals and officers

in charge of admission suggested the need to increase the development fund by the Ministry of Education to public TVET institutes to enable them to acquire modern training machinery, expand the buildings, and put up more tuition rooms, workshop, and laboratories.

The principals and heads of admission noted various initiatives, ranging from purchase of several desktops and laptops for both the staff and the trainees, increased furniture, construction of modern training facilities; refurbishment of engineering workshops, laboratories, library, tuition rooms, walkways, and parking areas. On the same accord, Ongulu (2018) noted that students were attracted by decent laboratories, workshops, libraries, buildings, modern furniture, playgrounds and classrooms, hence a need for TVET institutions to invest by upgrading their physical facilities.

Results on Testing of Hypothesis

On testing the research hypothesis, a Spearman correlation analysis was conducted and the findings presented in Table 3.

Table 3

Correlation between physical facilities and trainees' choice decision for Public TVET institutions

		Choice decision for Public TVET institutions
Physical Facilities	Spearman Correlation	.120*
	Sig. (2-tailed)	.042
	N	287

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

According to the findings in Table 3, there is a positive association between physical facilities and the trainees' choice decision for public TVET institutions in Nairobi County, $r = .120$, $p = 0.042$. In this case, the p-value is less than 0.05 and, therefore, the association between these two variables is statistically significant. Consequently, the study rejected the null hypothesis and concluded that physical facilities had a positive and substantial linkage with the students' choice decision for public TVET institutions in Nairobi County.

It was therefore clear that the nature of physical facilities was influencing students' choice decisions for public TVET institutions in Nairobi County. These findings agree with Ongulu (2018) who found that physical facilities and resources affected student enrolment rates in TVET institutions. Moreover, the findings support Jackson's model which states that infrastructure and physical resources in the second phase are key parameters for carrying out the exclusion criteria for TVET institutions by a prospective student.

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4.0 Conclusion

The study noted a significant influence of physical facilities on students' decisions in selecting public TVET institutions. The physical facilities are crucial antecedents to practical training and learning; hence, very central to students' selection decisions for a public TVET institute.

5.0 Recommendations

Due to the significance of physical facilities in influencing students' selection decisions for public TVET institutes, the study recommends that the government avails funds to develop new and modern physical facilities, while TVET institutes managements should implement a maintenance plan for old facilities. Addressing this has an implication on government capitation for institution infrastructure. It also implies a need for TVET management to seek corroborations with development partners in ensuring establishment of requisite physical facilities. A further study should be carried out using module one trainees or fresh students so that a comparison can be done on the findings.

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