DETERMINANTS OF PARTNERSHIP PRACTICES AND PERFORMANCE OF
SELECTED TECHNICAL VOCATIONAL AND TRAINING EDUCATION
INSTITUTIONS IN NAIROBI CITY COUNTY, KENYA

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D133/CTY/PT/33413/2015

A RESEARCH PROJECT SUBMITTED TO SCHOOL OF BUSINESS IN PARTIAL
FULFILMENT FOR THE AWARD OF DEGREE IN EXECUTIVE MASTER OF
BUSINESS ADMINISTRATION OF KENYATTA UNIVERSITY

JULY, 2019
DECLARATION

This research project is my original work and has not been presented for a degree or other award in any other University. No part of this research project should be reproduced without authority of the author or/and Kenyatta University.

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This research project has been submitted to the university with my approval as University supervisor.

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Department of Business Administration
Kenyatta University
DEDICATION

I would like to dedicate this work to my loving wife and children who were always on my side during my studies.
ACKNOWLEDGEMENT

I thank the Almighty God for the great gift of life. My sincere appreciation goes to my supervisor Dr. Samuel Maina for his patience, support, guidance and direction during the entire period of my study and research work. Special thanks also go to my wife, lovely children, my mum and grandfather, for their prayers and emotional support.
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# ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AU</td>
<td>African Union</td>
</tr>
<tr>
<td>DTE</td>
<td>Directorate of Technical Education</td>
</tr>
<tr>
<td>EASA</td>
<td>East African School of Aviation</td>
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<td>GLOVAL</td>
<td>Global Value</td>
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<tr>
<td>KBT</td>
<td>Knowledge Based Theory</td>
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<td>KICD</td>
<td>Kenya Institute of Curriculum Development</td>
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<td>KNEC</td>
<td>Kenya National Examination Council (KNEC)</td>
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<tr>
<td>MOE</td>
<td>Ministry of Education</td>
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<tr>
<td>RBT</td>
<td>Resource Based Theory</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<tr>
<td>TVET</td>
<td>Technical Vocational and Training Education</td>
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<td>TVETA</td>
<td>Technical Vocational and Training Education Authority</td>
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<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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OPERATIONAL DEFINITION OF TERMS

Active partnership: Refer to an ongoing collaboration between TVET institutions and universities.

Brand status: Refers to the ability of a TVET institution to position itself in the market in terms of the quality, demand and attractiveness of its programmes to potential customers.

Capability: Refers to the set of learned processes and activities that enable an institution to produce a particular outcome, for instance in terms of performance by TVET institutions.

Credit transfer: Refers to the mechanisms put in place to reward TVET learners with some exception grades to progress rapidly to the higher level with exemption of some units of study.

Infrastructure: Refers to the facilities and equipment that are fundamental to the provision of quality and relevant TVET education to prospective learners.

Organization performance: Refers to the level of activity in an organization or institution like TVETs for a specified timeframe in an attempt to achieve the stated objectives.

Partnership: Involves collaboration, engagement, resource sharing, coalitions, alliances and agreements between TVET institutions for mutual benefits.
**Technical training:** Is the programmes imparting knowledge and skills to enable TVET learners to attain middle level professional training in the workplace.

**TVET institutions:** Are the post-secondary middle level technical institutions in Kenya purposed for development, equipping and provision of learning from public funds by the Government, parents and communities.

**TVETA:** Refer to the body that governs the operations of TVET institutions in Kenya as stipulated in the TVET Act of 2013.

**Vocational education:** Refers to organized activity enabling learning in TVET institutions with preparation for jobs in designated occupations or trades.
ABSTRACT

TVET institutions are partnering with universities to enhance performance, remain sustainable and enhance competitiveness. However, performance of TVET institutions in Kenya has challenges hindering the objectives of the programme. Some public and private TVET institutions have introduced programmes without proper authorization. Poor infrastructure, inadequate and lack of qualified teachers is a challenge that has continuously compromised quality training offered to trainees in TVET institutions. TVET graduates lack competence since they acquire facts, theories and principles for examination purposes but lack the requisite skills and competencies needed in the labour market. The study investigated the determinants of partnership practices and performance of selected Technical Vocational and Training Education institutions in Nairobi City County, Kenya. The study was premised on the following specific objectives: to establish the effect of infrastructure on the performance of TVET institutions in Nairobi City County; to determine the effect of brand status on the performance of TVET institutions in Nairobi City County and finally to assess the effect of credit transfers on the performance of TVET institutions in Nairobi City County. The study design was descriptive research design. The target population comprised of eight TVET institutions that have active strategic partnerships with universities. The sample size consisted of a list of 145 respondents. The study used self-administered questionnaires as the main tool for collecting the data. Data analysis was through descriptive and inferential statistical forms. Findings established that a significant positive relationship existed between infrastructure sharing and performance of TVET institutions. The findings established presence of a significant positive relationship between brand status and performance of TVET institutions. The findings further indicated that strategic partnership in credit transfer has enhanced the competitiveness of the institution’s programmes. It was established that significant positive relationship existed between credit transfer and performance of TVET institutions. The study recommended that the management of TVET institutions should be proactive in creating strategic partnership with institutions of higher learning to benefit from shared infrastructure. This will improve the overall performance of these institutions. The study recommended that to improve performance, the management of TVET institutions should continuously engage in strategic partnership to reinvigorate their programmes, image and overall brand. Finally, the study recommended was that to enhance performance, TVET institutions should get into partnerships with other institutions of higher learning with clear roadmaps on credit transfer policies. An area for further research is a comparative study on determinants of partnership practices on performance of TVET institutions in other counties in Kenya.
CHAPTER ONE: INTRODUCTION

1.1. Background of the Study

Performance in TVET institutions is increasingly becoming important in times of rapid social and technological change globally. Employees need more updated skills to participate and perform exemplary in the knowledge economy as the competencies they acquire increasingly become quickly outdated (Neal, 2013). In both developing and developed world, awareness of the importance of the important role played by TVET in promotion of economic performance through provision of lifelong education and impacting of skills is known (Kigwilu, 2014). TVET is expected to be a reservoir for provision of opportunities for individuals to learn the skills geared to elevate their practical, personal and social abilities to perform effectively, efficiently and exceptionally in the field of work (Saad, Sabo & Abdullahi, 2015). Currently the main challenge facing TVET institutions is enhancement of their performance to ensure the skills imparted on the learners are essential and worthwhile to create relevance in the workplaces.

Throughout the world, education and other learning programmes for the youth has received a lot of attention with massive investment in this sector. One area that has witnessed this attention is enhancement of the performance of Technical Vocational and Training Education (TVET) through investment of funding (Neal, 2013). TVET is an internationally recognized acronym for Technical Vocational and Training Education (Badawi, 2013). According to Ayonmike (2014) technical education refers to programmes that assist in inculcating knowledge, skills and attitudes to learners who are in the verge on enrolling into middle level college training. Technical education may focus on courses in engineering and related scientific disciplines.
Muvawala and Hisali further add that vocation education is the programmes aimed at impact specific occupation skills to learners preparing to get into the world of work.

According to Adelakun, Oyiawe abd Barfa (2015) fifty percent of the learners in upper secondary school level usually enroll in TVET education. Similarly, in India, China and South East Asia, about thirty-five to forty percent of the learners join TVET institutions while in Africa the situation is dire since less than twenty percent of these learners are willing to enroll in TVET institutions. African governments recognize the role and importance of performance in TVET institutions for social and economic development. African Union (2016) observed that TVET is undertaken as part of tertiary level of education and focuses on skills preparation for the labour market. It provides a means for a complementary system of education, with possibilities of credit transfer to higher education. Thus, for effective performance in TVET there is need for designing and delivering of the curriculum in close partnership with prospective employers with a view of providing vital skills to the increased numbers of young people completing basic education programmes.

UNESCO (2014) noted that TVET institutions need to explore different sources of funding to improve on performance. UNESCO further observed that for quality performance, TVET institutions should invest in regular workshops to enhance the skills of the tutors to reputable standards. They should also enhance the quality and quantity of the equipment through ensuring that adequate repairs and maintenance is undertaken on timely basis. The quality of TVET graduates in many African countries has continued to decline as a result of outdated training methodologies and use of obsolete instruction equipment. Further, in many developing countries there is lack of regular refresher courses for equipping the trainers with basic industrial related
technological. Regular workshops seminars and industrial attachment for upcoming trainers to gain much needed work experience are also missing (UNESCO, 2014). Nyerere (2009) as cited in Adelakun et al. (2015) observed that lack of industrial attachment, to a great extent, compromises quality of education in TVET institutions especially when resources are lacking. He further noted that teachers in the TVET institutions rarely go for refresher courses thus putting them at the mercy of their students who are more exposed.

Mustapha (2015) warned that performance of TVET institutions has faced a number of challenges emanating from the aftermath of the global economic crises in Asia-Pacific region. In this region, most of the TVET institutions have not been able to produce enough graduates into the job market with requisite skills to meet the demands of these economies. They have also encountered the realities of decreased financial support from the governments which for a long time have acted as the main sponsors of these institutions. On the other hand, King and palmer (2013) have contextualized that a challenge facing the TVET institutions is that the curricula in use does not have the requisite modules to make the graduates compete in the world of work. The curricula also face the challenge of not being flexible enough to meet the realities of technological advancement resulting from globalization and the needs of consumers.

1.1.1. Partnership Practices in TVET institutions

Globally, both the public and private organizations have realized the important role played by partnerships in addressing and realizing the set management objectives. Institutions only establish partnership when seriously threatened through competition or government policies (Tong, 2013). Wollenburg, Mowatt, Ross and Renneisen (2013) argued that management styles, involvement of staff, reputation or brand enhancement, allocation of financing and resources,
building trust and other issues greatly impact on the realization of the quality of the interactions in a partnership. To successfully establish a working partnership calls for sacrifice and investment by the parties involved. Partnership works well and is usually beneficial to the parties where the leadership has the will to invest in the success of such interactions. Proactive leadership play a great role in bridging the cultural divides in a partnership through mutual power sharing agreements and readiness to overcome the expected and unexpected outcomes (UNESCO, 2014).

The endeavour to forge a working partnership between TVET institutions and other institutions of higher education like universities can have a number of undesired consequences to the relating parties. One of the challenges is that TVET institutions and universities have diverse visions, missions and organization cultures which can create friction in the relationship (UNESCO, 2014). There are many determinants for establishing partnerships of such organizations They include need to access industry skills and facilities, ease of access to infrastructures, need to enhance to financial capacity, need to enhance the research capability, creating a platform for sharing the available resources, adding value to the job opportunities of the human capital and increasing the capacity for credit transfer for the learners (Tong, 2013).

According to Ayonmike (2014) forging of partnership between TVET institutions and universities can creating a platform for generating extra revenue for the parties, may assist the parties to fill the revenue gap after decrease in government sponsorship, may enhance credit transfer of learners and may also further the development and revision of the curricula used by the parties to the market expected level. The partnership may also result in more scholarship opportunities for the tutors and the learners as well as expansion of the existing programmes in these institutions.
Zhang et al. further stated that through partnership, opportunities for participating in joint research programmes for the partners is created. The joint exchange programme may eventually enable the parties to enhance the knowledge and technology transfer at the individual and organizational levels. Through partnership, the parties may gain from sharing in the existing resources like infrastructures, development of the vocational and academic abilities of the tutors as well as enhancing job training of the existing workforce (Helmy, 2014). Those TVET institutions that have participated in enhancing their partnerships and with ample abilities to forge widespread relationships with other institutions with reputable track records have often realized expansion of programmes, facilities and population of learners (Helmy, 2014). Sharing of resources through partnership is a beneficial strategy for TVET institutions to enhance their track record in the society (Wollenburg et al., 2013).

1.1.2. Organizational Performance

Organizational performance is one of the most important aspects for effective output of any organization whether public or private. Organizational managers should possess requisite to awareness and insight of those factors that influence the performance of their organization in order to create the necessary mechanisms to initiate and support the achievement of stated goals (Parnel & Wright, 2013). Adeyi et al. (2018) focused on performance as a broader concept that may comprise of productivity, consistency, quality and many other factors. He affirmed that the measures of performance may be criterion (result-oriented) or normative (relative) measures. They further attributed performance to comprise of economy, efficiency and effectiveness attributes of a given activity. On the other hand, organization performance is the measure of effective and efficiency use of available resources by management as stated by Marope, Chakroun and Holmes (2015).
Mahmood and Hafeez (2013) stated that the aspect of performance in TVET institutions relate foremost to the intricate knowledge of achieving the expected objectives through effective and efficient utilization of the available resources. Daft added that the paramount question to ask is why some organizations succeed while other failed. Researchers such as Parnel and Wright (2013), Thomas and Ramaswamy (2011) and Adeyi et al. (2018) have used other financial-oriented measures of organizational performance such as profitability, gross profit, Return on Asset (ROA), Return on Investment (ROI), Return on Equity (ROE), Return on Sale (ROS), revenue growth and sales growth as measurements of organization performance. On the other hand, Ricardo (2011) stated that financial and non-financial trends may be utilized in enumerating the aspect of organization performance.

Mahmood and Hafeez (2013) posited that that the aspect of performance in organizations may be gauged from the angle of financial and operationalized form of performance. Operational performance may involve focusing on the levels of employee output in the workplace, productivity of the organization and the satisfaction level of the customers. Jerome (2013) suggested that financial performance in partnership institutions may involve the focus on profits, revenues generated and the widespread growth of the organization within a given period of time. Nowadays, measures such as employee and customer levels of satisfaction as well as profits margins are some of the commonly used measure of performance (Helmy, 2014).

1.1.3. Performance of TVET Institutions in Kenya

For the success of the Kenyan goal of achievement of Vision 2030 through industrialization, TVET sector has the mandate of playing a major role. The sector is tasked with the responsibility of enhancing the achievement of mid-level skills that are necessary drivers of the economy.
Failure to improve the performance level and other related parameters have the possibility of curtailing the achievement of Vision 2030 of transforming the economy from the current developing to rapidly developing status. Therefore, TVET sector has a critical role of inculcating technical and vocational workforce to the youths and other human capital for the effective achievement of development status of the economy (Ngamua, 2015).

A number of local scholars have researched on TVET institutions in Kenya. They include: Yewah (2015) study on the role played by institutionalized attributes in enhancing the quality vocational and entrepreneurship training in Siaya. The influence of the TVET skills imparted on the ability to acquire industrial attachment and relativity of the skills acquire to meet the job market needs was also sought. Descriptive design was used with a sample size of 188 participants. The study established that TVET institutions have the challenge of matching the training skills offered to the requirements of the job market.

Ngure (2013) observed that performance of the TVET graduates is usually poor and does not match to the requisite requirements in the field of work. Findings of this study also indicated that TVET training is usually costly where parents and guardians are the sole sponsors. The finding concurred with Economic Survey (2016) which stated that the government spending on TVET institutions has been on the decline for a lengthy period of time and this has created challenges arising from the continuity of the underfunding.

Ngatiah (2014) investigated on the factors leading to effectiveness performance of TVET institutions in the former Central and Eastern Kenya provinces. The study applied the use of cross-sectional research design with a sample size of 239 participants. The study revealed that a number of institutional factors have caused challenges in the performance of TVET institutions.
Some of these factors range from motivation of human capital like inadequate training modalities, inadequacy of teachers and demotivation of teaching force. Others include challenges related to indiscipline of tutors and learners among many others. The findings further indicated that inability of the institutions to equip the tutors with the requisite resources led to ineffectiveness in achievement of desired levels of performance.

The study further suggested that though TVET institutions had posted improved performance of learners in the period 2015-2016, performance related challenges abound. These challenges include low morale amongst teachers and learners, lack of teachers, low levels of supervision and inspection of programmes, undisciplined learners and other varied hindrances.

Karemu and Gongera (2014) study was an assessment of the relationship between strategy implementation and performance of TVET institutions in Kiambu County. Four variables used in this study included institutional management, human capital, access to finance and availability of resources. The research design was cross-sectional with a sample size of 180 participants. Findings indicated that TVET education played an important role of empowering the youth to develop the culture of self-reliance through obtaining of requisite technical skills for self-employment and economic development. The findings also showed that the government has awarded more status to the primary, secondary and university education and neglected TVET education. This has resulted in dwindling performance of TVET education with facilities that were initially established as TVET centres converted into universities.

Obwoge, Mwangi and Nyongesa (2013) study focused on factors leading to interrelationship and collaboration of TVET institutions and job market. The study used cross-sectional research design with a sample size of 340 participants. Data collection was through questionnaires with
analysis undertaken through descriptive and inferential statistics. The findings were that on the factors attributed to the relationship, industrial attachment had significant relationship with job market. The study also found that absence of initiatives to link the programmes offered to the job market considerably affected the intended linkages.

Karemu and Gongera (2014) have suggested that partnership among institutions should lead to the quality of the programmes being offered. This will result from the fact that collaboration should take advantage of the strengths existing in individual partner’s strong areas that create room for the enhancement of the weaker partner’s ability. Collaboration should also assist the partners in diversifying the programmes existing by incorporating the courses offered by the stronger partner. This will lead to the partner’s acquisition of more learners due to the enhancement of the branding ability and in effect resulting to increased retention of learners and increased partnerships.

Kenya experiences a phenomenon of large population of young population graduating from secondary schools just like many other developing economies. According to the Kenya National Bureau of Statistics (KNBS) (2016), there were more than eight million youths looking for training from various tertiary institutions. The average age of these young people ranged from 17-24 years. Those that were pursuing university education were about 10% of the total youth population census while the others could only benefit from TVET institutions. In order to achieve basic development and social harmony, the Government of Kenya understands the important role played by quality, accessible and relevant education.

In order to realize this policy, the Government of Kenya established the Vision 2030 as a milestone for putting in place tangible and critical goals necessary for the development and
expansion of the economy. Borrowing from the Sessional paper No. 1 of 2005, the government has grouped education and training of the youth population into three distinct clusters. The three clusters are basic education that include primary and secondary school level education, TVET education offered at post-secondary education level and university education for the youths who perform well in the secondary school level (Mahmood & Hafeez, 2013). The key parameters for establishing the TVET education is to impart the youths with practical vocational and technical skills to enable them fully participate in development of the economy. In Kenya, the TVET sector is under the National Industrial Training Authority (NITA) which is involved in establishing the policy framework, accreditation and financing of the TVET institutions.

The Industrial Training Act 2012 is the legal framework that established NITA which is a body with the mandate of levying a fee purposely used for administration of in-service TVET training in Kenya. The TVET Act 2013 established the TVET Authority (TVETA), the TVET fund and the TVET curriculum assessment and certification board as a way of streamlining management in TVET in the country. For the development of the curricula for the TVET institutions in Kenya, the Kenya Institute of Curriculum Development (KICD) is charged with the mandate of performing the task. Further, the Kenya National Examination Council (KNEC) has the legal obligation of administering examinations for the TVET institutions as well as regulating examinations from other affiliated examination organizations (Republic of Kenya, 2016).

Despite the growth in the TVET sector, both in enrolment and funding, the sector faces a number of performance related challenges including inadequacy in partnerships with other institutions, negative attitude from stakeholders like parents and learners who brand the sector as suitable for the poor and for those who fail to attain test grades required to join university education.
(Kwigilu, 2014). Other performance related challenges facing the TVET sector include: insufficiency in facilities, inadequacy of tutors, inadequacy TVET institutions with requisite facilities, shortage of equipment and related facilities, lack of affiliation from stakeholders and shortage of research and development (Kinara, 2014).

TVET institutions also suffer from shortage of institutions especially in the remote parts of the country with most of them concentrated in and around urban areas. Additionally, there is low enrolment of female students in science related courses that create gender imbalance among the graduates of these institutions. Moreover, TVET institutions have not adapted their facilities to be friendly to youths with disabilities and in the process limiting their enrolment. Furthermore, TVET institutions in Kenya majorly operate at own ways with uncoordinated programmes of admitting new and continuing learners. This creates the problem of setting standards to be achieved by these institutions. Lack of awareness among the stakeholders on the courses offered by TVET institutions and the high costs related to training in the technical courses offered has resulted to low enrolment. These challenges have resulted in condemning the graduates of TVET institutions to fail to acquire the requisite skills in demand in the job market and they result to enroll in other unrelated and cheap programmes (Kigwilu, 2014).

Although public investment in TVET training institutions has been on an upward trend in the last decade, the paucity of skilled human resources in Kenya is a problem that has persisted over the last decade. Biggs and Srivastava (2015) in a survey of TVET institutions in Zimbabwe, Ghana and Kenya found that Kenyan institutions did not have adequate technical staff at diploma and certificate level. The Kenya Vision 2030 and the Sessional Paper No 14 on education and
training of 2013 also identify the mismatch in TVET trainee’s skills as a challenge to the country’s development objectives.

To promote the bearing of the TVET institutions in Kenya, efforts should be placed on the need to boost the performance levels in order to overcome the numerous challenges facing the sector (Raihan, Hasan, Shamim, & Professor, 2013). In Kenya, one of the proposed remedy to the challenges facing the TVET sector is collaboration with industrial firms and educational institutions to enable for mutual benefits among the players (Yewah, 2015). Yewah further proposed for the extension of the partnership between the TVET institutions and public universities to enhance the brand image of the former especially where such collaboration is intended to enhance the skills of the TVET tutors and trainees. Further, such collaborations would be deemed to be productive if it promotes the branding of the programmes of the TVET institutions as well as the outward image.

To overcome these challenges, there is need for TVET institutions to invest in partnership with stakeholders who are going to elevate their level of appeal and interest to learners and potential employers Kigwilu (2014). Partnership will act as a catalyst for boosting the level of performance both at individual and organizational levels. Out of this, potential stakeholders will be attracted to these institutions and create rapport due to excellent appeal and performance. Kinara (2014) suggested that the relevant bodies should constantly monitor the partnerships between TVET institutions and universities to ensure that the necessary standards of operations are followed by the parties. This will also create the avenue for establishment of the requisite quality standards. Through forging meaningful partnerships, mutual relationships will be established leading to flow of finances that will boost the standing of the TVET institutions.
Through partnerships, TVET institutions will benefit from financial sponsorship from partnering organizations that will also create an avenue for employment of the graduates Kigwilu (2014).

1.1.4. TVET Institutions in Nairobi City County

A number of TVET institutions operate in Nairobi City County. One of the main challenges for these institutions is lack of active strategic partnerships with universities. The documented TVET institutions with active collaboration are Kenya School of Monetary Studies, Kenya College of Insurance, Kenya College of communication and Technology for Telecommunications and Kenya School of Revenue Administration. This has a negative impact on the performance levels. Other challenges facing TVET institutions in Nairobi City County range from high demand for learning arising from overpopulation. This has led to negative proportional of teacher-learner ratio leading to overworked teaching force. The end result has been the lowered quality of education, inadequacy of resources from the county government, pressure over the existing infrastructure among other related challenges (Yewah, 2015). The challenges related to levels of performance of these institutions have not been well documented. Therefore, the study endeavors to create an understanding of these challenges on the determinants of partnerships practices and performance levels of these institutions.

1.2. Statement of the Problem

Performance of TVET institutions in Kenya has challenges hindering the objectives of the programme. There are infrastructural, branding and credit transfer challenges facing these institutions. Statistics indicate that only 4.6% of the total allocation by the government to the Ministry of Education went to TVET in 2015-2017 and close to 95% of the allocation to TVET hence the challenge of infrastructures (Fatmah, 2017). Additionally, some public and private
TVET institutions have introduced programmes without proper authorization leading to branding issues (Kigwilu, 2014).

Mango (2015) stated that poor infrastructure, credit transfer, branding, inadequate and lack of qualified teachers is a challenge that has continuously compromised quality training offered to trainees. Rambo (2017) found that 67% of TVET institutions continue to face quality related challenges such as low enrolment, high labor turnover and even low morale among employees (Rambo, 2017). Muchemi, Muthoni, Mutahi and Origa (2013) stated that 80% of TVET graduates lack competence since they acquire facts, theories and principles for examination purposes but lack the requisite skills and competencies needed in the labour market.

To overcome the challenges, TVET institutions are partnering with universities to enhance performance, remain sustainable and enhance competitiveness (Mwangi & Nyongesa, 2013). The partnership is geared towards sharing of infrastructure, branding of the TVET institutions, enhancing the quality of the programmes and credit transfer on TVET graduates by universities (Kigwilu, Akala & Wambua, 2016). Despite the new development in the partnership, only a few local scholars have focused their research on partnership practices between TVET institutions and universities. Obwoge et al., (2013) studied on the linkages among TVET institutions and universities in Kenya. Fatma (2017) on the other hand studied on the factors influencing life skills training in TVET institutions in Nairobi, Kenya. The overall problems addressed in this study is that even after partnership with universities, few studies have attempted to establish the key partnership practices to establish whether there is marked improvement in the performance of TVET institutions in Kenya. This study sought to fill this gap.
1.3. Research Objectives

1.3.1. General Objective

The general objective of the study is to investigate the determinants of partnership practices and performance of selected Technical Vocational and Training Education institutions in Nairobi City County, Kenya.

1.3.2. Specific Objectives

The specific objectives were:

i. To establish the effect of infrastructure on the performance of TVET institutions in Nairobi City County.

ii. To determine the effect of brand status on the performance of TVET institutions in Nairobi City County.

iii. To assess the effect of credit transfers on the performance of TVET institutions in Nairobi City County.

1.4. Null Hypotheses

The hypotheses of the study were:

\( H_{01} \): There is no statistical significant relationship between infrastructure and performance of TVET institutions in Nairobi City County.

\( H_{02} \): There is no statistical significant relationship between brand status and performance of TVET institutions in Nairobi City County.

\( H_{03} \): There is no statistical significant relationship between credit transfers and performance of TVET institutions in Nairobi City County.
1.5. **Significance of the Study**

There were various benefits accruing from the findings of this study. To start with, the Ministry of Education (MOE) and in particular the Directorate of Technical Education (DTE) may use the findings to develop policies that ensure effective partnership practices between the universities and the TVET institutions. This may further the performance levels of the collaboration. Moreover, the DTE may use the findings to enact policies that enhance the quality and relevance of the performance of the TVET institutions. Besides, by shedding light on the determinants of partnership practices between the universities and the TVET institutions, the management of the two institutions may adapt strategies that would enhance effective performance of these institutions.

Furthermore, it is envisaged that the findings of the study may invoke further research in the area of partnership elements and the performance of TVET institutions which is critical especially in addressing the increased need for quality post-secondary education and training. As earlier noted, this area is under-researched. Finally, given the paucity of literature on determinants of partnership practices elements on the performance of TVET institutions in Kenya, it is hoped that the findings may provide literature for use by scholars and practitioners in the field of TVET education in Kenya.

1.6. **Scope of the Study**

The study focused on assessing the determinants of partnership practices and performance of selected TVET institutions in Nairobi City County. The study specifically focused on three independent variables, infrastructure, brand status and credit transfers and performance of TVET institutions as dependent variable. Nairobi City County was selected since it has the largest number of TVET institutions that are in collaborations with universities in Kenya. The study was
undertaken in eight (8) TVET institutions that had partnership with universities in Nairobi City County. The study covered the period 2017-2018.

1.7 Limitations of the Study

The researcher was limited by the fact that the targeted respondents did not fully cooperate in willingly providing the intended information due to fear of infringement of confidentiality. The challenge was overcome by carrying out a census of all respondents. The respondents were also found to be suspicious of the intention of the research. The researcher assured the respondents on confidentiality and integrity of this research. Qualitative questions were not comprehensively answered by respondents. The researcher mostly relied on quantitative information to overcome this challenge.

1.8. Organization of the Study

The study is clustered into five chapters. Chapter one captures the background of the study, statement of the problem, objectives, significance of the study, scope and limitations as well as organization of the study. In chapter two, literature is reviewed including the theoretical review of theories anchoring the study, knowledge gaps and summary of the chapter. Chapter three gives the outline the methodology that will be used in this study which is the description and analysis of data, estimation methods and the rationale for their use. Chapter four presents results of the study and interpretation. The summary, conclusions, recommendations and area for further studies is presented in chapter five.
CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

The chapter presented analyzes of the literature reviewed in this study. It comprised of the theoretical framework, conceptual framework, empirical review, research gap and the summary of the chapter.

2.2. Theoretical Framework

The existing literature identifies a number of theories with regards to determinants of partnership practices elements and performance of TVET institutions. The study is anchored by four theories; Institutional theory, Human Capital theory, Resource Based theory as well as Dynamic capability theories.

2.1.1. Institutional Theory

The theoretical foundation of the dependent variable in this study will be the institutional theory as proposed by Morhardt, Baird and Freeman in 2002. Institutional theory explains the evolution and diffusion of the attempt at creating order and systems in organizations management practices in an attempt to legitimize Montiel and Delgado-Ceballos (2014). Due to the fact that performance differ in organizations, an attempt at creating order can be set to start at this level. This creates the first forum of changing the institution operations.

Advocates of institution theory recognize on the need to understand the differences within the organization set up as the basis for injecting the necessary strategies to bring about institutional change (Porter & Kramer, 2011). This may for example find TVET institutions forging partnerships with universities as a strategy to inject institutional change to enhance the level of performance. Institutionalization in this study refers to the attempt at legitimizing the injection of
change within the organization set up to create enhanced performance (DiMaggio & Powel, 1988). This process may involve collaborative practices aimed at furthering the performance levels of institutions. In similar vein, universities and TVET institutions may take innovative measures aimed at improving levels of performance ranging from credit sharing, branding and sharing of infrastructures.

The acceptable strategies of changing the level of performance may be viewed as ideal policies, practices and standards for institutionalization of organization. The forms evolve from micro to macro variations. Institutional theory stipulates that that institutionalization of organization stems from the willingness and desire of the management of a given institution to require change in operations. This acceptance creates legitimacy from which the organization uses as a springboard to achieve the desired goals (DiMaggio & Powel, 1988). To legitimize organization institutionalization, there must be communication to the stakeholders and the partnering entities on the parameters agreed.

Communication is the glue that bides the parties together and creates the legitimacy to achieve desired goals (Schultz & Wehmeier, 2010). Universities and TVET institutions usually creates legitimacy in the collaborative practices by informing the Commission for Higher Education (CUE) on areas of mutual collaboration. This is usually legitimized by open channels of communication revolving around CUE, universities and TVET institutions. This theory is thus relevant in anchoring performance of TVET institutions.

2.2.2. Human Capital Theory

The Human Capital theory as proposed by Schultz (1961) assumes that the presence of formalized education and training stimulates performance of employees through injecting
competencies and skills to achieve the set institutional goals. This theory relates directly to TVET because of its orientation towards the desire of the employees to have the impetus to achieve the set institutional goals for example, imparting technical skills to the learners represented by the grading system of the institutions. Moreover, TVET institutions have trained and skilled tutors have the capacity to impart the desired technical skills to the learners for them to be productive in the economy. To this end, it increases the productivity of workers just the same way machines increase productivity in entrepreneurship (Montiel & Delgado-Ceballos, 2014).

This is why education is considered as a capital good responsible for developing human skills required for production of goods and services in the economy. Empirical studies (WB, 1993), show that there is a strong connection between access to TVET institutions with capacity to offer to the youth technical skills and economic growth in developing economies. However, the critics of human capital theory posit that the theory has not created clarity on the level of education and training that is mostly desirable in imparting the ideal skills for participating in economic development by the youth (Moneva, Archel & Correa, 2006). Moreover, the theory fails to account for a growing gap between increased expansion of education and the diminishing number of commensurate jobs especially in developing countries. Another criticism is that the theory has not fully mitigated on the disparity between downward economic growth in developing economies and declining standards of education and the role of TVET institutions in solving the problem.

The theory envisions improvement of the declining education standards of TVET learners as a way of improving economic performance of emerging economies. Investing in enhancing the
skills of the learners is pathway to guaranteed economic empowerment. Collaborative efforts of learning institutions through impetus that ensures performance levels from one institution is transferable to another of higher rank is the pathway for enhancing standards of education (Hasanefendic, Heitor & Horta, 2016). Throughout the theory, the importance of employee’s knowledge and experience is emphasized. TVET institutions should aim at having experienced and skilled tutors to impart desired technical and vocational skills to the learners.

If the skills and experience is lacking in the workforce, partnership with relevant organizations like universities may offer a solution. For the learner’s credit transfers through the tutorage of skilled and experienced tutors is a desirable solution. Human capital theory is applicable to this study in that it calls for the transfer of commensurate level of education from one institution to another. If a TVET institution or university has a pool of knowledge; it can partner with others institutions through credit transfer to enhance the education status of learners. This will go far in stimulating the internal and the external performance of the learners in the collaborating institutions. This theory instigates the construct of credit transfer.

### 2.2.3. Resource Based View

The proponent of this theory was Penrose (Barney, 1991). This is a widely acceptable theory in the field of management and organizational performance set up. Is creates awareness on the role of the role of the resources held by an organization in creating a competitive advantage for the entity to match the rivals (Kraaijenbrink, Spender, & Groen, 2010). The theory stipulates that the ability of an organization to compete with rivals rest on the ability to possess resources that are not easily replicated, that have desired synergy and are not easily substitutable by competitors (Roos & Roos, 1997). When resources held by TVET institutions such as infrastructure,
partnership and ability to transact credit transfer for learners have the stated qualities; the institution will be able to compete well in the market. Where the organization has no possession of such resources, it has to look out for collaborations and partnership with that organization possessing the qualities. This is where TVET institutions desire for partnership with universities. Penrose highlighted the growth characterizing a normal and stable organization and which depends on the availability of desired resources. Penrose emphasized that of importance is the innovativeness of the organization in efficiently use of the available resources to create a competitive edge. The ability or inability of an organization to create a competitive edge may signal the success or failure (Barney & Clark, 2007).

The resource based theory considers the knowledge possessed by an entity on the best way of utilizing the available resources as the key ingredients of guaranteeing performance (Alavi & Leidner, 2001). An organization with leadership that understands the strengths of the available resources in stimulating performance will offer competition to rivals. An organization that utilizes its various resources to attain the set objectives is stated as one that understands its internal capabilities. Employees is one of the key resource held by an institution and that may instigate strive for desired performance. Infrastructures held by an organization is another resource that may enable and institutional to have competitive edge over potential competitors (Peppard & Rylander, 2001). The assets held by TVET institutions like buildings, land and others may offer competitive edge only if the leadership understands the competitiveness of such utilities.

Where institutions have shortages of key infrastructures, partnership with potential stakeholders may install their competitiveness. Therefore, managers of TVET institutions need to be able to
identify the resources held by the institutions and which may create a parameter for desired performance in their organizations. Where shortages are recognized, measures should be undertaken to forge partnership with like-minded institutions like universities. RBT is applicable in the study since it identifies key resources vital in TVET institutions such as adequacy or inadequacy of infrastructures that can be met through partnership. This theory instigates the construct of institution infrastructure.

2.2.4. Dynamic Capabilities Theory

This theory explains capabilities as the organization activities and practices that are acquire through learning. The learned activities create capacity and desire for organizations to achieve the intended goals. For organizations, learned and acquired capabilities are like best practices since they enable organizations to achieve its desired objectives. They usually originate from one organization and are then cascaded to others who desire to benefit from the superior performances (Teece, 2013).

For organizations, dynamic capabilities are superior, unique practices that create a competitive edge of rivals. They are crystallized in the vision and mission of an organization where the human capital is guided by the principles rooted in the capacity to perform better those potential competitors. Dynamic capabilities form the backbone of the superior performance of an entity and are usually difficult to imitate (Lynda & Gratton, 2013).

With the onset of globalization and dynamic technological changes, resources held by an organization may create various dimensions of dynamic capabilities (Bollen, 2014). These resources may characterize the success of failure of the organization. The competitiveness of any organization rests on its ability to identify the superiority of the resources it hold and the
potential of creating a competitive edge over rivals. Thus the capacity to succeed or fail is the sole responsibility of the organizational leadership and the ability to brand the organization superiorities in performance and resources. The theory focuses on utilization of the unique resources held by an organization to map its line of success (Teece, 2013).

This theory is applicable in this study since its expresses the importance of the brand status that a TVET institutions is recognizable with by the clients and competitors. A TVET institution with a superior brand status will have the capability to link with other superior institutions and therefore enhance its outlook and performance levels. This theory instigates the construct of institution brand status.

2.3. Empirical Literature Review

2.3.1. Infrastructure and Performance

The facilities and equipment held by an organization are relevant and fundamental in the endeavour of to impart quality and relevant TVET education to the potential learners. Adequate teaching learning resources contribute to self-directed responsibility for learning to the trainees. Messah and Mucai posited that adequacy of the quality of infrastructure in use in an organization and the academic performance has significant relationship. There, inference can be eluded that availability of adequate resources enhances the performance of organizations and specifically the learning institutions. Where an organization has a challenge in terms of adequacy of instructional equipment, a hindrance to achievement of learning outcomes is realized (Saad, Sabo & Abdullahi, 2015).

Kitui (2015) stated that the schools infrastructure like classrooms, libraries, desks, laboratories, books and playing fields have a direct impact on learners’ performance in schools. Research done by Gurney in London noted that successful teaching and learning occur in place in school
buildings that are safe, clean, quiet, comfortable and healthy (Adeyi et al., 2018). He further observed that lack of such facilities affects the effectiveness of the learning process while poorly maintained physical facilities affects the learners ability to succeed because they impact on factors like learners attitude towards the school, self-esteem, security, comfort and social behavior.

Ngatiah (2014) additionally argued that TVET institution should have adequate teaching and learning facilities and updated infrastructures. Physical facilities including adequate buildings, land, equipment, stationeries, human resources and other requisite facilities will guarantee quality imparting of skills. Institutions with shortages especially related to discrepancies between the population of learners and availability of infrastructure and regular access to teaching and learning facilities will have challenges in producing skilled graduates. Resources such as learning and teaching materials like books are important in achievement of desired quality and standards of the output graduating from TVET institutions (Ngure, 2013).

It is eluded that there is need for the government and other relevant stakeholders to adequately equip TVET institutions in Kenya with up to date scientific amenities and other related equipment for effective impacting of necessary skills to learners (Republic of Kenya, 1988). Additionally, Raihan (2014) had the opinion that institutions with sound and requisite resources have reliable academic performance. The distinction between high and low academic achievements is dependent on availability of requisite resources.

Adeyemi (2013) study in Nigeria on quality educational output revealed that availability of physical facilities like text books, laboratories and other equipment’s was vital for effective teaching and learning. Adeyemi noted that lack of such facilities compromises quality teaching
which affects enrolment in educational institutions and the general performance. Ngunzo (2014) was on the relationship between school infrastructure and access to education in Kisumu Municipality that schools with modern facilities like laboratories and up-to-date equipment significantly attract and enroll more students, perform better and have large transition rates to University and other colleges than those without.

Mukhwana, Too and Kande (2018) suggested that TVET institutions in Kenya as well as in other countries in Africa are characterized by challenges related to lack of infrastructures and shortage of essential amenities. Ngure (2013) further revealed that TVET institutions require workshops and adequate laboratory facilities as well as machineries for reasonable learning to take place. Other studies have also shown the relationship between lack of teaching and learning facilities and curriculum implementation in TVET institutions (Oviawe, Uwameiye & Uddin, 2017).

Baah-Boateng (2016) noted that the challenge of adequate learning facilities is occasioned by shortages of funding by the government that have led to limitations in availability of equipment, training materials for practical lessons and delay in repairs of damaged items and these have led to constraints in curriculum implementation efforts in TVET institutions. Moreover, as suggested by Walters, Yang and Roslander (2014), outdated learning equipment creates constraints in TVET institutions in Kenya that compromise the quality of training given to the youth. UNESCO (2013) also established Zambian technical and vocational institutions are faced by challenges related to inadequacy in classroom, outdated workshops, furniture as well as textbooks. However, to overcome the inadequacy, some TVET institutions have resulted to partnerships with other related public institutions to accord practical lesson to learners.
Tong (2013) studied on factors impacting on enrolment levels and performance of TVET institutions in Malaysia. The study adopted the use of cross-sectional design with the sample size comprising of 185 respondents. The findings of this study were that the school fees charges by the institutions have significant relationship with levels of learner’s enrolment and performance. Institutional fees were a major consideration that learners and parents focused on in determining the enrolment levels. The findings also indicated that parental level of income determined the enrolment levels and performance of learners. This study mostly made use of desktop review for data collection. Additionally, the study variables included parental income levels and school fees charged while the current study is on partnership and performance of TVET institutions in Kenya.

Wanjiku (2016) researched on the relationship between partnership techniques and performance of industrial banks in Kenya. The study found that significant relationship existed between strategic partnership and performance of these institutions. Further, findings revealed that significant relationship between strategic partnership and performance levels of industrial banks in Kenya. The study also suggested that lack of teaching resources is related to shortage of funding in banking institutions. The context of this study was in industrial banks in Kenya while the current study focused on TVET institutions. Kigwilu, Akala and Wambua (2016) conducted a study on the influence of TVET education in Rwanda. Findings indicated there was significant relationship between strategic partnership and performance of institution. The context of this study was in Rwanda while current study is in Kenya.

Musobo and Gaga (2013) stated that the major hindrance to the performance of TVET in Rwanda was related to high cost of materials, facilities, equipment as well as repairs of consumer
and training materials. This study was in Rwanda, a country with differing TVET approach from Kenya. Mango (2015) sought to seek for factors related to access to TVET education and training in Bungoma East sub county. The study established that choice of career opportunities in Youth Polytechnics was majorly influenced by the desire to get employment even though poor infrastructure, inadequate and lack of qualified teachers compromised quality training offered to trainees. The focus of this study was on access to TVET education with current study on performance of TVET institutions. Thus, generalizability of findings is not possible.

2.3.2. Brand status and Organizational Performance

Historically, TVET has been positioned as an alternative education for those who perform poorly in academics (Ministry of Education, 2013). This notion has continued to reinforce poor positioning of TVET programs in many emerging economies, Kenya included. Moustafa (un-dated) argues that TVET programs in Africa face challenges of perception by parents, communities and stakeholders, and are often labeled as the ‘second choice’ and education ‘meant for those who have failed’ or are unable to compete in the ‘formal’ education system.

These sentiments are supported by the Ministry of Education which acknowledges that there is poor perception on TVET and particularly on VET that is the preserve of those who are poor performing and this eventually affect negatively learner enrolment expansion (MoE, 2013). Moustafa further posits that TVET institutions should endevour at advertising and investing in strategic marketing tactics to address the various challenges facing the sector. This will create the impetus for development of sound brand status that will be significant in developing the TVET sector especially in developing countries (Moustafa, un-dated). Creation of vocational
programmes is a barrier that hinders the achievement of the goal of creating enabling the brightest students to have the desire to join institutions.

Collaboration with the industry is an important mechanism to understanding the market in order to tailor the programs. According to Amedorme and Yesuenyeagbe (2013) very few TVETs in the emerging economies have stakeholder engagement plans beyond industrial attachment for their students. However, there exist various modalities of partnership between TVET and other tertiary institutions such as universities and national polytechnics. They include such collaboration as development of linkages in curriculum and learning materials, training instructors (Raihan, 2014), provision of practical training in the work-place (Obwoge, 2013), facility improvement and employment opportunities. Raihan (2014) observes that collaboration should focus on improving technical capacities, exploitation of commercialization potentials, bridging the demand and supply gap and promotion of the exchange of knowledge between the institutions involved.

For an organization, creating a viable brand status is important since branding is an important avenue for enhancing the well-being of the organization to potential stakeholders (Mahmood & Hafeez, 2013). Further, they intimated that brand encompasses the overall experience that the user obtains from using a given product and that gives the organization a competitive edge over the potential competitors. Ngamau, (2015) also noted that parties in a given partnership may sometimes be unable to forge strong relationship especially where one of the parties have more strength over the other. In such a case the weaker partner has a dependency syndrome over the stronger one. In the case of the partnership between TVET institutions and universities, the leadership of the TVET institutions should strive to ensure that this situation does not arise. For
the partnership to be complete, parameters of growth as well as the collaboration rules should be clearly spelt out to each of the partners. To overcome the emerging challenges, ad hoc meetings on opportunity analysis should be conducted.

Ravichadran et al. (2013) attempted to show that the strategic partnership and brand status within the area of infrastructure had an impact on organizational performance. As a result the strategic alliances are able to enhance organizational overall performance and strengthening the brand status in a mutual linkage. Additionally, strategic partnerships may avail new markets, new clients, boost up new product development cycles, and enhance employers competitive positioning. Again, strategic partnership create capabilities enable the partnership to be effective and efficient enhancing the level of performance. Kangogo (2016) found that KCB Group limited has established strategic partnerships with Safaricom, Airtel, USAID and general electric. This strategic partnership has helped the bank enter new markets, reduce costs, improve brand visibility and develop products and services that are innovative. Kangongo further stated that strategic partnerships have reduced customer attrition through improved service delivery that has led to higher customer retention, repeated business and enhanced customer satisfaction in the bank.

Kigwilu (2014) study was attempting to assess the factors that determine the effectiveness of implementation of artisan course in TVET institutions in Nairobi. The findings entailed that attitude of teachers and learners, applied strategies used by teachers, motivation of teachers, and workload of teachers in schools and propensity of attending in-service courses led to effective implementation of the courses. However, issues related to industrial attachment and collaboration between institutions and community had poor relationship with implementation of
The study recommended that adequacy of facilities, lack of qualified teachers and collaboration between college and community should be invested in to enhance effective implementation. The context of this study was on effectiveness of implementation of artisan courses while current study is on performance of TVET institutions. This creates a limitation for generalizability of findings.

It is however noteworthy to understand that, strategic partnerships are not a universal remedy for branding status of every company and every situation. Ngatia (2014) conducted a study on effectiveness of public middle level TVET colleges in Central and Eastern Provinces in Kenya. The findings were that strategic partnerships enabled organizations to enhance effectiveness of organizations. It enables organizations to join new markets, share emerging risks leading to success in performance. Further, strategic partnership is used to enhance the competitive edge in organizations and through this specific set up strategic branding of TVET institutions enhance their level of performance. This focus of this study was TVET institutions in Eastern and Central provinces while the current study is based in Nairobi City County. Thus generalization of findings may not be feasible.

2.3.3. Credit Transfer and Performance of TVET

According to Nyerere (2009) as cited in Raihan (2014) stated that the perception in Kenya is that learners who enroll in TVET institutions are usually those that have failed to succeed in academic performance. Raihan further notes that the curriculum offered in secondary school is devoid of technical subjects. He recommended for the need to re-introduce the subjects in secondary schools to enable the learners have some skills on these subjects. Maustapha (2015), notes that TVET for greater access of the poor and underprivileged are some of the requisites for
producing a new generation of educated and skilled employees who are flexible, analytical, and can serve as driving forces for innovation and growth.

In Kenya 70% of the learners are transiting from primary schools to secondary schools with the other 30% of the population contributing to the school leavers who enroll for TVET training. There are numerous TVET institutions spread throughout the 47 counties in Kenya, but they exist only as institutions for those who have failed to progress to university education and are usually viewed negatively by the potential stakeholders (MoE, 2016). The students’ entry grades in TVET are usually low as compared to those joining the university education. TVET is considered as a second choice and often times attributed to those who do not make it for university admission.

Nduhiu (2014) observes that in the developed and developing countries, majority of the youth enroll in technical and vocational education soon after secondary school education. The programmes offered in technical and vocational institutions are often streamlined to fit the modalities expected in workplaces, including formalized apprenticeship. The training relates well to that offered my institution higher in ranking from the TVET ones. However, while transiting to institutions of higher learning, graduates of TVET institutions have challenges of getting credit transfers equivalent to the skills obtained at TVET institutions.

Rameli et al. (2014) admitted that challenges towards credit transfer face many youths trained in tertiary training institutions and advocates for the need to invest in rapid and smooth transfer from one level of training to another. Credibility in partnership policies that are effective and efficient is one parameter of solving the challenges of credit transfer between collaborating institutions. This is one of the sure ways of enhancing learning opportunities and transfer of
essential skills from one institution to another. NICHE (2010) suggested that there is need for changing the existing organization culture that creates obstacles that hinder credit transfers from one organization to another. The leadership of TVET institutions should therefore ensure that binding agreements are put in place when partnership modalities are being negotiated. This means then that courses offered should not only provide for lengthy mobility but creative transfer of credit to the comparable level as well. In many African countries, state funded TVET institutions face the challenge of attracting students who are top-achievers.

Raihan (2014) conducted a study on collaboration between TVET institutions and industries in Bangladesh. The findings were that managers of industries usually have negative attitude towards TVET institutions. They also tend to believe that education offered in TVET institutions is manual, difficult for the youths to undertake and sometimes dangerous. Additionally, lack of cohesion and partnership in credit transfer between such institutions affects the general enrolment and the eventual performance. The focus of this study was TVET institutions in Bangladesh while the current study is based in Nairobi City County. Thus generalization of findings may not be feasible.

Woyo (2013) conducted a study on challenges facing TVET institutions in producing competent graduates in Zimbabwe. The findings showed that TVET institutions in Zimbabwe were criticized by potential stakeholders for their inability to attract learners with good grades at secondary school education and some of the institutions have training programmes that are perceived to be costly and out of reach for the youths. Another cause of criticism is the fact that graduates of TVET institutions sometimes have the challenge of getting meaningful employment; skills acquired are not trusted by potential employers and are not aligned to the
requirements of the job market. The focus of this study was TVET institutions in Zimbabwe while the current study is based in Nairobi City County. Thus generalization of findings may not be feasible.

Obwoge, Mwangi and Nyongesa conducted a study on linkages of TVET institutions and industry in Kenya. The findings were that career guidance may transform the appeal of the programmes offered by TVET institutions by increasing permeability between the transferring of credits in TVET and industries in Kenya. They further found that career guidance have a role to play in promoting knowledge of the courses offered in TVET institutions and creating a link with potential employers. Further, career guidance may also market the programmes to other potential stakeholders, especially if they are tailored to increasing the opportunities for students to request for credit transfer in comparative courses and in turn encourage informed attitudes towards TVET. The context of this study was on linkage of TVET institutions with industries while current study is on performance of TVET institutions. This creates a limitation for generalizability of findings. Therefore, generalizability of findings in current study is not possible.
2.3.4. Summary of Research Gaps

The summary of the research gaps is highlighted in this section. It comprises of empirical studies from international and local scholars.

Table 2.1 Summary of research Gaps

<table>
<thead>
<tr>
<th>Author</th>
<th>Focus of the Study</th>
<th>Findings</th>
<th>Knowledge Gaps</th>
<th>Focus on the Current Study</th>
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<tbody>
<tr>
<td>Yewah (2015)</td>
<td>The institutional factors that influence quality training in TVET institutions in Siaya Sub-county.</td>
<td>Established that there was need for proper remuneration of the teaching staff alongside provision of the relevant facilities.</td>
<td>Focused on training but not on partnership</td>
<td>Focus on determinants of partnership practices and performance of selected TVET institutions in Nairobi City County</td>
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<tr>
<td>Mango (2015)</td>
<td>The factors influencing access to TVET institutions in Bungoma East sub-county</td>
<td>Established that choice of career opportunities in Youth Polytechnics was majorly influenced by the desire to get employment even though poor infrastructure, inadequate and lack of qualified teachers compromised quality training offered to trainees.</td>
<td>Focused on choice of career opportunities but not on partnership</td>
<td>Focus on determinants of partnership practices and performance of selected TVET institutions in Nairobi City County.</td>
</tr>
<tr>
<td>Kigwilu (2014)</td>
<td>Determinants of effective implementation of Artisan and Craft courses in Catholic sponsored community colleges in Nairobi region.</td>
<td>Challenges facing the performance include attitude of teachers and students, teaching strategies, adequacy of teaching and learning resources, teacher motivation, teaching workload and attending of in-service courses.</td>
<td>Focused on attitude of teachers and students but not on partnership</td>
<td>Focus on determinants of partnership practices among universities and TVET institutions in Nairobi City County.</td>
</tr>
<tr>
<td>Ngatiah (2014)</td>
<td>Factors leading to effectiveness performance of TVET institutions in Central and Eastern Provinces in Kenya.</td>
<td>Established that the provision of staff and personal is mandatory if effectiveness of performance is to be realized in TVET.</td>
<td>Focused on the performance of technical training institutions but on partnership</td>
<td>Focus on determinants of partnership practices and performance of TVET institutions in Nairobi City County.</td>
</tr>
<tr>
<td>Obwoge, Mwang</td>
<td>Linkages between industries and TVET institutions</td>
<td>Established that industrial attachment was the most pronounced linkage. Lack of</td>
<td>Focused on use of correlation research design</td>
<td>Focus on using descriptive research design</td>
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<tr>
<td>Source: Researcher</td>
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### 2.5 Conceptual Framework

Conceptual framework of a research study is a graphical presentation of the study constructs. It highlights the relationship between the independent, dependent, moderating and intervening variables. It also stipulates the direction of the relationship graphically and diagrammatically (Orodho, 2008). The sub-variables creating the main variables are usually presented in a conceptual framework. Derivations of the variables relates to the literature reviewed and the theoretical framework anchoring the study. The study sought to examine the determinants of partnership practices and performance of TVET institutions in Nairobi City County. The
independent variables of the study are influence of infrastructure, brand status and credit transfer with performance of TVETs as the dependent variable. Their relationship is moderated by environmental factors (see Figure 2.1).

2.5.1. Determinants of Partnership Practices

The diagrammatic representation of the study variables is highlighted in this section. It shows the relationship between the independent variables (infrastructure, brand status and credit transfer) and dependent variable (performance of TVETs).

**Figure 2.1 Conceptual Framework**

Source: Author (2018)
CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Introduction

In this chapter, the research design is presented as well as the target population, sampling and sample size technique. In addition, research instruments, data collection procedures together with data analysis and presentation are highlighted.

3.2. Research Design

According to Sekaran and Bougie (2010) research design refer to the plan stipulating the steps to be taken in conducting research. In this study, the appropriate research design was descriptive design. Sekaran and Bougie further attest that descriptive research design is used mostly in exploratory and preliminary researches to collect, summarize, interpret and present information analyzed in a clear and systematic way. The design was applicable in this study as the researcher gathered appropriate information and report comparatively on the establishment of determinants of partnership practices and performance of TVET institutions in Nairobi City County, Kenya.

3.3. Target Population

In research, target population points at the persons, groups as well as elements that the researcher has an interest in and desires to study. The elements should generally have similarities relating to the sample population targeted by researcher (Cooper & Schindler, 2014). The target population comprised of the all the academic and administrative staff of TVET institutions located in Nairobi City County and with strategic partnership with universities. The study specifically involved eight (8) TVET institutions that have active strategic partnerships with universities. They include Highlands College, Institute of Advanced Training (IAT), Regional College, East African School of Aviation (EASA), Kenya Institute of Professional Studies (KIPS), Kenya
School of Monetary Studies (KEMS), Kenya College of Insurance, and Kenya School of Revenue Administration (KESRA) (TVETA, www.tvetauthority.go.ke, 2018).

<table>
<thead>
<tr>
<th>Category</th>
<th>Academic staff</th>
<th>Administrative staff</th>
<th>Target Population</th>
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<td>KEMS</td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>KESRA</td>
<td>15</td>
<td>20</td>
<td>35</td>
</tr>
<tr>
<td>KIPS</td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Highlands</td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>IAT</td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Regional College</td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>EASA</td>
<td>10</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>College of Insurance</td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>90</strong></td>
<td><strong>145</strong></td>
</tr>
</tbody>
</table>


3.4. Sample Frame

A sampling frame as defined by Särndal, Swensson and Wretman (2003) is a list comprising of the detailed explanation of individuals or elements targeted by researcher. The sample frame of this study consisted of a list of 145 academic and administrative staff of the eight TVET institutions namely: Highlands College, Institute of Advanced Training (IAT), Regional College, EASA, Kenya Institute of Professional Studies (KIPS), Kenya School of Monetary Studies (KEMS), Kenya College of Insurance, and Kenya School of Revenue Administration (KESRA) (TVETA, www.tvetauthority.go.ke, 2018).

3.5. Sampling Technique and Sample Size

Since the total target population was not too large for this study, a census of all the 145 respondents was used for administration of the questionnaires. Creswell (2014) stated that census is an appropriate sampling technique where the population is significantly small.
3.6. **Research Collection Instruments**

This study used one set of self-administered survey questionnaires as the major data collection tool. In order to adequately collect data, the questionnaire was designed on a five-point Likert scale. The use of self-administered questionnaires enabled the researcher to collect open-ended as well as close-ended questions. Open-ended questions are crucial in gathering in-depth information from the participants including feelings and after thoughts (Kombo & Tromp, 2006). Every question was generated with specific objectives in mind so as to achieve the desirable response from respondents. Questionnaires are appropriate for ensuring that the information gathered id relevant, consistent and comparable (Sekaran & Bougie, 2010).

3.7. **Pilot Test**

Pilot test was conducted on randomly chosen TVET institutions in Nairobi City County to check for ambiguous items, to test for flaws and related irregularities in the instrument. It provided room for the researcher to undertake revision of the incorrect items in the instrument. Generally, the correct size of the adequate sample for pilot testing should comprise of 10% of the sampled population (Cooper & Schindler, 2014). In this study, 10 respondents participated in pilot testing carried out in TVET institutions in Nairobi City County. These participants were excluded from the main study.

3.7.1. **Reliability of Data Collection Instrument**

Reliability of research instrument refers to the degree of consistency of the appearance of results of a given test (Kombo & Tromp, 2006). Reliability test in the current study involved computation of Cronbach Alpha test of the results obtained. Cronbach Alpha is one of the commonly used tests in ascertaining reliability in social sciences (Cooper & Schindler, 2014).
The rule of the thumb stipulates that the use of Cronbach Alpha scores should not be lower than 0.7 or 70%. This study strictly adhered to this directive where constructs had to achieve Cronbach score of above 70% to be acceptable as reliable.

3.7.2. Validity of Data Collection Instruments

Validity refers to degree of truthfulness of the results of the instruments. It checks at the truthfulness of measurements of the intended concepts (Sekaran & Bougie, 2010). This study adopted face, content and construct validity. Content validity refers to the degree that the instrument covers the content that it is supposed to measure (Yaghmaie, 2003). To validate the questionnaires, the study adopted three types of validity; face, construct and content validity. Face validity involved the supervisor using reviews and comments on the content to enhance the quality of the instruments. The instrument was then adjusted from the results obtained from validation exercise to minimize errors and ambiguity.

Bless, Higson and Kagee (2007) suggested that construct validity assesses the relationship between data collection instruments and the theory anchoring a given construct. The interaction of a theory and a supporting theory highlights the relevance of construct validity. Through using Explanatory Factor Analysis (EFA) the loading of each construct predicting the dependent variable was correlated in order to express its truthfulness. Content validity was done by designing the questionnaires according to the study variables and their respective indicators of measurement; construct validity, was done through restricting the questions to the conceptualizations of the variables and ensuring that the indicators of a particular variable fall within the same construct.
3.8. Operationalization of Study Variables

Operationalization of partnership elements and performance of TVET institutions was undertaken through the use of the study variables. The independent variables included; institutions infrastructure, brand status and credit transfer. Their influence on the dependent variable was highlighted.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Operationalization</th>
<th>Scales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure</td>
<td>Sharing of equipment</td>
<td>Five point Likert scale question</td>
</tr>
<tr>
<td></td>
<td>Sharing of human capital</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sharing of programmes</td>
<td></td>
</tr>
<tr>
<td>Brand status</td>
<td>Reputation</td>
<td>Five point Likert scale question</td>
</tr>
<tr>
<td></td>
<td>Creation of appeal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Track record</td>
<td></td>
</tr>
<tr>
<td>Credit transfer</td>
<td>Efficiency in grade transfer</td>
<td>Five point Likert scale question</td>
</tr>
<tr>
<td></td>
<td>Effectiveness in grade transfer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accreditation policies</td>
<td></td>
</tr>
<tr>
<td>TVET institution performance</td>
<td>Increase in programmes</td>
<td>Five point Likert scale question</td>
</tr>
<tr>
<td></td>
<td>More enrolment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expansion of TVET institutions</td>
<td></td>
</tr>
</tbody>
</table>

3.9. Data Analysis and Processing

According to Cooper and Schindler (2014), data analysis is the process of scaling down the gathered information from the field into manageable size for the purposes of smooth analysis. The use of summaries and logical patterns through the application of statistical methodologies is the way to manage data analysis. The study was generated both qualitative and quantitative data. The first step involved coding of the raw information by assigning appropriate numbers and symbols to each information, followed by entry of data through the use of Statistical Package for Social Sciences (SPSS) software version 22.

Two methods of data analysis were involved in the study; descriptive and inferential statistical forms. Through descriptive statistical analysis, quantitative data was analyzed. Shushil and
Verma (2010) argued that descriptive statistical analysis employs the use of graphical and numerical methods to generate logical patterns in a data set. It used mean, percentages and standard deviations to present the data in accordance with the Likert scale used. Inferential statistical analysis was used in analyzing the relationship between independent and dependent variables through correlation and regression tests. Qualitative data was analyzed using content analysis and narrative reporting.

A number of diagnostic tests were done to assess the quality of the data collected and analyzed. Before data analysis, factor loading of the independent variables was tested through Explanatory Factor Analysis (EFA) to remove redundant data. Pearson product moment correlation was applied to generate correlational test information on the relationship between variables. To explain the extent of the variations between the independent and dependent variables, linear regression analysis was used. Analysis of Variance (ANOVA) was applied to attest whether the model was able to explain the interrelationship between the independent and dependent variables.

To assess the possibility of collinearity, where some independent variables are expressing each other, multicollinearity test was done through correlation matrix. Additionally, to assess whether the variances of the error term are multiplicative in one or more predictor variables, Heteroscedasticity test was conducted. Finally, normality test was performed to assess the skewness and kurtosis of the data.

### 3.10. Multiple Regression Model

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon \]

Where:
Y = Represents the dependent variable (Performance of TVET institutions)

$\beta_0$ = Constant

$\beta_1$...........$\beta_3$=Represents the regression coefficients

$X_1$ = infrastructure sharing

$X_2$ = Brand status

$X_3$ = credit transfers

$\epsilon$ = Represents the error term

3.11. Ethical Consideration

The researcher sought permission from selected institutions to collect data before the data collection exercise commenced. Research authorization was sought from Kenyatta University and research permit obtained from National Commission for Science, Technology and Innovation (NACOSTI). The respondents were assured that participation in the exercise was voluntary and they may withdraw if they felt like. Consent to participate was duly signed by each participant. All the participants and stakeholders were informed and the objective of the research explained to enhance willingness and high response rates from the respondents.
CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION

4.1. **Introduction**

The general objective of the study was to investigate the determinants of partnership practices and performance of selected Technical Vocational and Training Education institutions in Nairobi City County, Kenya. Three specific objectives were used in the study: infrastructure sharing, brand status and credit transfers. This chapter contains the findings from the research study that were analyzed using the SPSS tool. The chapter contains interpretation of the data that was collected and analyzed based on the research objectives.

4.2. **Response Rate**

The study sought to acquire the response rate from the participants in terms of data collection process. The study focused on all the academic and administrative staff of TVET institutions located in Nairobi City County and with strategic partnership with universities. The study targeted eight TVET institutions that have active strategic partnerships with universities and a total of 145 questionnaires were sent out. The results are shown in Table 4.1.

<table>
<thead>
<tr>
<th>Questionnaires</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filled and collected</td>
<td>112</td>
<td>77.25</td>
</tr>
<tr>
<td>Not filled</td>
<td>33</td>
<td>22.75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>145</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The results indicate that the researcher managed to retrieve a total of 112 questionnaires. This gave a response rate of 77.25%. The response rate helped to produce accurate useful results that represent the target population. Bryman and Bell (2015) stated that a return rate of 70% and above is ideal in social sciences related studies.
4.3. Pilot Test Results

It was necessary to conduct a pilot test in order to detect the weaknesses in the instruments used in data collection and then rectify the anomalies from the results of the pilot test. The pre-testing of the instruments was similar to the one used in carrying out the final data collection process. Pilot test was carried out on 15 respondents who were excluded from the main study. The findings of the reliability and validity of the instrument after the pilot test are shown in Table 4.2 and 4.3.

4.3.1 Reliability Analysis

Cronbach Alpha reliability coefficient was applied to indicate the degree of correlation between the items of the instrument used in the study. In this study, Cronbach Alpha was used to measure the internal consistency of the instruments. Shushil and Verma (2010) points out that the closer the values of Cronbach Alpha are closer to 1, the higher the reliability index of the instrument. The results are as indicated in Table 4.2.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Cronbach’s Alpha</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit transfer</td>
<td>10</td>
<td>.982</td>
<td>Reliable</td>
</tr>
<tr>
<td>Performance of TVETS</td>
<td>10</td>
<td>.924</td>
<td>Reliable</td>
</tr>
<tr>
<td>Brand status</td>
<td>11</td>
<td>.775</td>
<td>Reliable</td>
</tr>
<tr>
<td>Infrastructure sharing</td>
<td>10</td>
<td>.776</td>
<td>Reliable</td>
</tr>
<tr>
<td>Overall</td>
<td>41</td>
<td>.950</td>
<td>Reliable</td>
</tr>
</tbody>
</table>
The results show that internal consistency of the items of the variables was assessed using Cronbach’s Alpha. The Cronbach’s Alpha values for credit transfer, performance of TVETs, brand status and infrastructure sharing were 0.982, 0.924, 0.775, 0.776 and 0.950 respectively. Further, all the items of the questionnaire for both the independent and dependent variable were reliable since they posted Cronbach Alpha values of above 0.7 as recommended by Cooper and Schindler (2014). The results indicated good subscale reliability

4.3.2 Validity of Research Instrument

In this study, validity test was conducted to ascertain that the items used in the instrument were truthful in measuring the attributes they intended to measure. This involved the supervisor using reviews and comments on the content to enhance the quality of the instruments. The instrument was then adjusted from the results obtained from validation exercise to minimize errors and ambiguity.

4.4. Demographics

This section presents the results on the personal information of the respondents. The information sought includes gender, age, educational level and duration in partnership practices.

4.4.1. Gender

Gender of respondents in the study was analyzed. The results are shown in Figure 4.1.

![Figure 4.1: Gender of respondents](image)

Figure 4.1 Gender of respondents
The study showed majority of the respondents were male respondents with a percentage of 59%. Female respondents were 41 % as shown in the Figure 4.1. This implies that gender composition of the respondents.

4.4.2. Age of the Respondent

The study attempted at analyzing the age distribution of the respondents. The results are as shown in Figure 4.2.

![Figure 4.2 Age of respondents](image)

The results showed that a majority of respondents were between the ages of 40-50 with a percentage of 45%. Respondents falling under the age of 30-39 brackets followed and they were 23%. This was followed by respondents with 51 years and above representing 21% .12% of the respondents were between the ages of 20-29. This shows that institutions in partnership practices have employees from a variety of the ages.

4.4.3. Education Level

Level of education was divided into five categories that included the secondary, tertiary, undergraduate, masters and doctorate levels. The results are as shown in Figure 4.3.
The findings showed that respondents that reached high school were the lowest with 1%. They were followed by respondents that have reached tertiary level representing 4%, undergraduate respondents attained 14%, Majority 54% of the respondents had master’s qualifications and those that reached doctorate level were represented by 28% of the respondents. This is an indicator that the TVET institutions have qualified personnel working in them.

4.4.4. Partnership Programmes

The distribution of the partnering with the eight TVET institutions was analyzed. The findings are presented in the Figure 4.4.
The results show that majority 43% of the partnership programmes were with Moi University. This was closely followed by JKUAT at 33% and Maseno with 10%. This means that partnership programmes are undertaken in all the targeted institutions.

### 4.4.5. Number of Years in Strategic Leadership

The study focused on the number of years involved in strategic leadership. The results are provided in Figure 4.5.

![Figure 4.5 Duration of strategic partnership](image)

The findings showed that a majority 49% of respondents were in strategic leadership for a period between 4-5 years. 24% were in strategic leadership for more than 5 years, 20% were in leadership between 3-4 years and 7% between 2-3 years as indicated in Figure 4.5. This is an indicator that the personnel working in the TVET institutions had requisite experience.

### 4.5. Descriptive Analysis of Study Variables

This study aimed at investigating the determinants of partnership practices and performance of selected Technical Vocational and Training Education institutions in Nairobi City County, Kenya. This objective was evaluated by consideration of the results of the measures of central tendencies, correlation, regression analysis and analysis of variance. The Likert scale ranged from: Not at All (NA) 2. Little Extent (LE) 3. Moderate Extent (ME) 4. Large Extent (LE) 5. Very Large Extent (VLE)
4.5.1. Infrastructure Sharing

The respondents were asked to indicate information on how sharing of infrastructures influences performance of TVET institutions in Nairobi City County. The findings are shown in Table 4.3.

<table>
<thead>
<tr>
<th>Infrastructure Sharing</th>
<th>NA (%)</th>
<th>LE (%)</th>
<th>ME (%)</th>
<th>LAE (%)</th>
<th>VLE (%)</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The institution has adequate physical facilities like lecture halls, hostels and offices.</td>
<td>5</td>
<td>38</td>
<td>26</td>
<td>19</td>
<td>12</td>
<td>2.93</td>
<td>1.121</td>
</tr>
<tr>
<td>The institution has modern physical facilities.</td>
<td>3</td>
<td>14</td>
<td>42</td>
<td>24</td>
<td>17</td>
<td>3.38</td>
<td>1.016</td>
</tr>
<tr>
<td>The physical facilities are well maintained.</td>
<td>4</td>
<td>16</td>
<td>27</td>
<td>43</td>
<td>11</td>
<td>3.41</td>
<td>1.000</td>
</tr>
<tr>
<td>The institution has adequate human capital like lecturers and administrative staff.</td>
<td>1</td>
<td>13</td>
<td>40</td>
<td>28</td>
<td>19</td>
<td>3.51</td>
<td>.968</td>
</tr>
<tr>
<td>The human capital is well trained to cater for the needs of the institution.</td>
<td>2</td>
<td>8</td>
<td>29</td>
<td>45</td>
<td>17</td>
<td>3.67</td>
<td>.914</td>
</tr>
<tr>
<td>The learners have access to teaching and learning facilities.</td>
<td>1</td>
<td>19</td>
<td>23</td>
<td>32</td>
<td>25</td>
<td>3.62</td>
<td>1.084</td>
</tr>
<tr>
<td>The institution owns a well-stocked library.</td>
<td>3</td>
<td>7</td>
<td>25</td>
<td>39</td>
<td>26</td>
<td>3.79</td>
<td>.999</td>
</tr>
<tr>
<td>The institution gets new programmes from our partners.</td>
<td>3</td>
<td>20</td>
<td>30</td>
<td>29</td>
<td>18</td>
<td>3.40</td>
<td>1.078</td>
</tr>
<tr>
<td>The institution relies on our partner’s lecturers to acquire quality programmes.</td>
<td>6</td>
<td>21</td>
<td>29</td>
<td>34</td>
<td>10</td>
<td>3.20</td>
<td>1.081</td>
</tr>
<tr>
<td>Our partners assist in ensuring quality learning is conducted in the institution.</td>
<td>1</td>
<td>13</td>
<td>29</td>
<td>40</td>
<td>16</td>
<td>3.57</td>
<td>.946</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3.44</td>
<td>0.9209</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results indicate that the aggregate mean was 3.44 and the standard deviation of 0.9209. This indicates that the mean and standard scale rating was moderately high. The average scale ratings ranged from 2.93 to 3.79. This indicated that the respondents rated low to moderate levels of
infrastructure sharing. The highest mean rating was 3.79 for the statement “The institution owns a well-stocked library.” (SD= 0.999). The statement with the lowest mean rating of 2.93 was “physical facilities like lecture halls, hostels and offices.” (SD= 1.121).

Based on the results, the respondents stated that to a moderate extent, TVET institutions have modern physical facilities (42%). The findings disagreed with Ngatiah (2014) who stated that for a long time, TVET institutions have for a long time suffered from the challenge of underfunding coupled with lack of facilities and equipment for training of the learners. UNESCO (2013) further observed that lack of such requisite facilities affects the effectiveness of the learning process while poorly maintained physical facilities affects the learners ability to succeed because they impact on factors like learners attitude towards the school, self-esteem, security, comfort and social behavior. Musobo and Gaga (2013) had also stated that the major hindrance to the performance of TVET in Rwanda was related to high cost of materials, facilities, equipment as well as repairs of consumer and training materials. The implication for this study is that with strategic partnership, TVET institutions have the chance to come across better equipment and facilities from the collaborating partners. Similarly, 43% stated that to a large extent, the physical facilities are well maintained. UNESCO (2014) suggested that TVET institutions in Kenya as well as in other countries in Africa are characterized by challenges related not only to lack of infrastructures and shortage of essential amenities but also basic maintenance of the existing ones. This means that through strategic partnership, the learners in TVET institutions are exposed to better quality facilities and equipment from the collaborating partners.

Further, 40% argued that to a moderate extent, the institution has adequate human capital like lecturers and administrative staff. The findings agreed with Ngatiah (2014) who had stated that a
major challenge to TVET institutions is lack of trainers with experience and knowledge to offer skills to the learners. The implications for this study is that strategic collaboration has a chance of enhancing the skills and experience of the tutors especially through interaction with others with superior or such advance qualities. It also has the potential of ensuring that the learners have contact with experienced and skilled trainers from the collaborating institutions.

Finally, 40% stated that to a large extent the partnership assist in ensuring quality learning is conducted in the institution. The findings support UNESCO (2013) assertion that linkages of TVET institutions have the potential of uplifting the standards of education through access to fundamental knowledge and equipment. Further, outdated learning and teaching equipment are a major hindrance to quality education in TVET institutions in Kenya that compromise the quality of training given to the youth. UNESCO (2013) also established Zambian technical and vocational institutions are faced by challenges related to inadequacy in classroom, outdated workshops, furniture as well as textbooks. However, to overcome the inadequacy, some TVET institutions have resulted to partnerships with other related public institutions to accord practical lesson to learners. The implication for this study is that strategic partnership has the benefit of enhancing the quality of teaching and learning of the learners and thus uplifting the standards of education in these institutions.

4.5.2. Brand Status

The respondents were asked to indicate the influence of brand status on performance of TVET institutions in Nairobi City County. The findings presented in Table 4.4.
Table 4. 4 Brand status

<table>
<thead>
<tr>
<th>Brand Status</th>
<th>NA (%)</th>
<th>LE (%)</th>
<th>ME (%)</th>
<th>LAE (%)</th>
<th>VLE (%)</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The institution has attracted new partners due to the new image.</td>
<td>2</td>
<td>30</td>
<td>32</td>
<td>20</td>
<td>16</td>
<td>3.18</td>
<td>1.092</td>
</tr>
<tr>
<td>The reputation of the institution’s programmes has been enhanced.</td>
<td>1</td>
<td>13</td>
<td>43</td>
<td>30</td>
<td>13</td>
<td>3.44</td>
<td>.888</td>
</tr>
<tr>
<td>The students have more appeal in the institution after partnership.</td>
<td>1</td>
<td>14</td>
<td>24</td>
<td>46</td>
<td>15</td>
<td>3.60</td>
<td>.944</td>
</tr>
<tr>
<td>The institution is admitting students from other institutions.</td>
<td>9</td>
<td>36</td>
<td>39</td>
<td>16</td>
<td></td>
<td>3.63</td>
<td>.861</td>
</tr>
<tr>
<td>The stakeholders have confidence with the programmes offered in the institution.</td>
<td>7</td>
<td>26</td>
<td>40</td>
<td>27</td>
<td></td>
<td>3.87</td>
<td>.895</td>
</tr>
<tr>
<td>More learners are willing to complete their programmes in the institution.</td>
<td>14</td>
<td>26</td>
<td>34</td>
<td>26</td>
<td></td>
<td>3.71</td>
<td>1.008</td>
</tr>
<tr>
<td>The institution is currently experiencing an increase in student’s population.</td>
<td>21</td>
<td>25</td>
<td>37</td>
<td>18</td>
<td></td>
<td>3.52</td>
<td>1.013</td>
</tr>
<tr>
<td>The institution is attracting students with high grades at Form 4 level.</td>
<td>17</td>
<td>25</td>
<td>38</td>
<td>21</td>
<td></td>
<td>3.62</td>
<td>.998</td>
</tr>
<tr>
<td>The institution graduates are currently competing favorably in the job market.</td>
<td>9</td>
<td>24</td>
<td>40</td>
<td>27</td>
<td></td>
<td>3.85</td>
<td>.922</td>
</tr>
<tr>
<td>The students are easily getting attachments from potential employers due to the track record.</td>
<td>4</td>
<td>31</td>
<td>42</td>
<td>23</td>
<td></td>
<td>3.85</td>
<td>.819</td>
</tr>
<tr>
<td>The institution has a record progressive vision and mission statements.</td>
<td>4</td>
<td>19</td>
<td>38</td>
<td>39</td>
<td></td>
<td>4.13</td>
<td>.844</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>3.34</strong></td>
<td><strong>0.934</strong></td>
</tr>
</tbody>
</table>

The results indicate that the aggregate mean was 3.34 and the standard deviation of 0.934. This indicates that the mean and standard scale rating was moderately high. Average scale ratings ranged from 3.18 to 4.13. This indicated that the respondents rated low to moderate levels of brand status. The highest mean rating was 4.13 for the statement “The institution has a record
progressive vision and mission statements.” (SD= 0.844). The statement with the lowest mean rating of 3.18 “The institution has attracted new partners due to the new image.” (SD= 1.092).

The findings showed that 43% of the respondents argued that in a moderate extent, reputation of the institution’s programmes has been enhanced by the partnership. The findings support Ravichadran et al. (2013) who stated that for TVET institutions, strategic partnership and brand status within the area of infrastructure improvement has an impact on organizational performance. Moustafa (un-dated) also supported the results by stating that for a TVET institution, creating a viable brand status is important since branding is an important avenue for enhancing the reputation and well-being of the organization to potential stakeholders. This is an indicator that through strategic partnership, TVET institutions are able to enhance their brand and reputation to potential stakeholders like learners.

Similarly, 46% stated that in a large extent, students have more appeal in the institution after partnership. The findings are in line with Raihan (2014) observation that strategic collaboration enables TVET institutions to gain from improved technical capacities and promotion of the exchange of knowledge between the institutions involved. Kwigilu (2014) had also stated that strategic collaboration rebrands and institution enable it to have better appeal and reputation resulting from the quality facilities and equipment acquired from the partners. The implication for the study is that through branding, TVET institutions have the potential of enhancing their appeal and status that improving the quality of education imparted on the learners.

In addition, 40% pointed that in a large extent, the stakeholders have confidence with the programmes offered in the institution. According to Ngamua (2015) strategic partnerships enables organizations to enhance competitiveness of organizations that reassuring the
stakeholders. Amedome and Yesuenyeagbe (2013) also suggested that through strategic collaboration, institutions are enabled to join new markets, share emerging risks leading to success in performance. Further, strategic partnership is used to enhance the competitive edge in organizations and through this specific set up strategic branding of TVET institutions enhance their level of performance. This implies that the influence of brand status may create confidence in learners and other potential stakeholders through creating confidence on the quality of learning being offered thus improving the appeal and performance of TVET institutions.

Moreover, 40% argued that in a large extent, institution graduates are currently competing favorably in the job market. The findings contrasts the sentiments by Moustafa (un-dated) who stated that TVET programs in Africa face challenges of perception by stakeholders such as the parents, communities and stakeholders, and are often labeled as the ‘second choice’ and education ‘meant for those who have failed’ or are unable to compete in the ‘formal’ education system. In the same breadth Kwigilu (2014) had pointed to the fact that for a long time, graduates of TVET institutions have been unable to favorably compete with others to to this stigma held by the society. For this study, the change in response may be occasioned by the fact that stakeholder’s attitude and perception about the quality of TVET graduates is changing due to strategic partnership that is currently being undertaken in these institutions.

Finally, 42% had the opinion that to a large extent, the students are easily getting attachments from potential employers due to the track record. The findings contrast Kigwilu (2014) that attitude of stakeholders and other potential employers to TVET graduates is still negative since mostly, collaboration usually ends after attachment. According to Amedome and Yesuenyeagbe (2013) very few TVETs in the emerging economies have stakeholder engagement plans beyond
industrial attachment for their students. Collaboration with the industry is an important mechanism to understanding the market in order to tailor the programs. The implication for this study is that strategic partnership is changing the outlook of the graduates of TVET institutions.

4.5.3. **Credit Transfer**
The respondents were asked to indicate how credit transfer influences performance of TVET institutions in Nairobi City County. The findings presented in Table 4.5.

**Table 4.5 Credit transfer**

<table>
<thead>
<tr>
<th>Credit Transfer</th>
<th>NA (%)</th>
<th>LE (%)</th>
<th>ME (%)</th>
<th>LAE (%)</th>
<th>VLE (%)</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic partnership in credit transfer has enhanced the competitiveness of the institution’s programmes.</td>
<td>11</td>
<td>41</td>
<td>20</td>
<td>20</td>
<td>8</td>
<td>2.54</td>
<td>1.388</td>
</tr>
<tr>
<td>Strategic partnership in credit transfer has led to an increase in student’s population.</td>
<td>19</td>
<td>15</td>
<td>28</td>
<td>24</td>
<td>14</td>
<td>2.82</td>
<td>1.435</td>
</tr>
<tr>
<td>The institution has an effective policy of credit transfer for the qualified students.</td>
<td>20</td>
<td>5</td>
<td>22</td>
<td>42</td>
<td>11</td>
<td>2.68</td>
<td>1.453</td>
</tr>
<tr>
<td>The institutions credit transfer policy meets the requirements of the Ministry of Education.</td>
<td>27</td>
<td>19</td>
<td>17</td>
<td>21</td>
<td>17</td>
<td>2.82</td>
<td>1.459</td>
</tr>
<tr>
<td>There is an existing consensus on credit transfer among the partners in the institution.</td>
<td>25</td>
<td>10</td>
<td>19</td>
<td>36</td>
<td>11</td>
<td>2.79</td>
<td>1.430</td>
</tr>
<tr>
<td>The institution and the partners have qualified personnel to efficiently harmonize the credit transfer policy.</td>
<td>20</td>
<td>13</td>
<td>17</td>
<td>40</td>
<td>10</td>
<td>2.77</td>
<td>1.414</td>
</tr>
<tr>
<td>The efficiency of the credit transfer policy has led to an increase in the uptake of our programmes.</td>
<td>29</td>
<td>16</td>
<td>14</td>
<td>30</td>
<td>11</td>
<td>2.74</td>
<td>1.493</td>
</tr>
<tr>
<td>The credit transfer policy has enhanced the achievement of the institutions short and long-term goals.</td>
<td>17</td>
<td>37</td>
<td>14</td>
<td>20</td>
<td>12</td>
<td>2.73</td>
<td>1.501</td>
</tr>
<tr>
<td>The credit transfer policy has boosted the image of the institution among the stakeholders.</td>
<td>24</td>
<td>11</td>
<td>42</td>
<td>10</td>
<td>13</td>
<td>2.79</td>
<td>1.509</td>
</tr>
<tr>
<td>Our partners have confidence in the credit transfer policy.</td>
<td>29</td>
<td>13</td>
<td>20</td>
<td>25</td>
<td>13</td>
<td>2.80</td>
<td>1.438</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>2.64</strong></td>
<td></td>
</tr>
</tbody>
</table>
The results indicate that the aggregate mean was 2.64 and the standard deviation of 1.452. This indicates that the mean and standard scale rating was relatively average. Average scale ratings ranged from 2.54 to 2.82. This indicated that the respondents rated low to moderate levels of Credit Transfer. The highest mean rating was 2.82 for the statement “The institutions credit transfer policy meets the requirements of the Ministry of Education.” (SD= 1.459). The statement with the lowest mean rating of 2.82 was “Strategic partnership in credit transfer has enhanced the competitiveness of the institution’s programmes.” (SD= 1.388).

The findings indicated that to a little extent, 41% of the respondent’s believed strategic partnership in credit transfer has enhanced the competitiveness of the institution’s programmes. The findings support Nduhiu (2014) observation that credit transfer is a major hindrance for the transition of graduates of TVET institutions into higher learning. Nduhiu further stated that partnership with institutions of higher education is one way that TVET institutions can enrich the quality of the courses provided and enable students to make progress in transferring their grades to higher education. Adeyi et al. (2018) also added that programmes offered in technical and vocational institutions are often streamlined to fit the modalities expected in workplaces, including formalized apprenticeship. However, while transiting to institutions of higher learning, graduates of TVET institutions have challenges of getting credit transfers equivalent to the skills obtained at TVET institutions. This implies that strategic partnership may be a solution for the TVET institutions on the barrier of credit transfer.

Further, 42% to a large extent stated that institutions have an effective policy of credit transfer for the qualified students. The finding disagree with Adeyi et al. (2018) argument that while transiting to institutions of higher learning, graduates of TVET institutions have challenges of
getting credit transfers equivalent to the skills obtained at TVET institutions. According to Nyerere (2009), the perception in Kenya is that learners who enroll in TVET institutions are usually those that have failed to succeed in academic performance and this in effect conflict with the credit transfer policies put in place in institutions of higher learning. The implication for the study is that through partnership programmes with institutions of higher learning like universities, the challenge of conflict in TVET policies on credit transfer will be solved.

Additionally, 40% to a large extent showed that institutions and the partners have qualified personnel to efficiently harmonize the credit transfer policy. The finding contrast Adeyi et al. (2018) statement that TVET institutions are criticized by potential stakeholders for their inability to attract experienced and skillful tutors to advance the level of training. The available tutors are ill motivated and have no basic facilities and equipment to undertake meaningful teaching. They also fail to attract learners with good grades at secondary school education and some of the institutions have training programmes. Another cause of criticism is the fact that graduates of TVET institutions sometimes have the challenge of getting meaningful employment. The implication for this study is that TVET institutions should invest more in partnership programmes with institutions of higher learning. This is due to the fact that they will have access to quality tutors and even the existing tutors will gain more experience and skills through the partnership.

Finally, 40% stated that to a moderate extent, the credit transfer policy has boosted the image of the institution among the stakeholders. The findings support UNESCO (2014) suggestion that there is need for changing the existing organization culture that creates obstacles that hinder credit transfers from one organization to another. The leadership of TVET institutions should
therefore ensure that binding agreements are put in place when partnership modalities are being negotiated to gain from the partnership. This means that strategic partnership presents a major boost for the image and programmes of TVET institutions.

4.5.4. Performance of TVET Institutions

The respondents were asked to rate items measuring performance of TVET institutions in Nairobi City County. The findings presented in Table 4.6.

Table 4.6 Performance of TVETs

<table>
<thead>
<tr>
<th>Performance of TVETS</th>
<th>NA (%)</th>
<th>LE (%)</th>
<th>ME (%)</th>
<th>LAE (%)</th>
<th>VLE (%)</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic partnership has led to an increase in new programmes.</td>
<td>12</td>
<td>29</td>
<td>28</td>
<td>15</td>
<td>17</td>
<td>2.97</td>
<td>1.262</td>
</tr>
<tr>
<td>The strategic partnership has increased the student’s enrolment.</td>
<td>4</td>
<td>11</td>
<td>46</td>
<td>28</td>
<td>12</td>
<td>3.33</td>
<td>.943</td>
</tr>
<tr>
<td>The strategic partnership has enhanced the sharing of new ideas</td>
<td>5</td>
<td>15</td>
<td>27</td>
<td>38</td>
<td>15</td>
<td>3.42</td>
<td>1.088</td>
</tr>
<tr>
<td>Strategic partnership has availed enough resources.</td>
<td>4</td>
<td>21</td>
<td>49</td>
<td>11</td>
<td>14</td>
<td>3.21</td>
<td>1.052</td>
</tr>
<tr>
<td>Employees work goals are clearly defined.</td>
<td>4</td>
<td>24</td>
<td>32</td>
<td>26</td>
<td>14</td>
<td>3.36</td>
<td>1.012</td>
</tr>
<tr>
<td>Strategic partnership has enhanced institution’s expertise and skills.</td>
<td>4</td>
<td>18</td>
<td>35</td>
<td>35</td>
<td>9</td>
<td>3.28</td>
<td>.979</td>
</tr>
<tr>
<td>Partnership has enhanced efficiency in external working.</td>
<td>3</td>
<td>20</td>
<td>30</td>
<td>35</td>
<td>13</td>
<td>3.35</td>
<td>1.020</td>
</tr>
<tr>
<td>Strategic partnership has led to internal working of the institution.</td>
<td>5</td>
<td>16</td>
<td>40</td>
<td>25</td>
<td>13</td>
<td>3.25</td>
<td>1.053</td>
</tr>
<tr>
<td>Partnership has led to an increase in the number of experienced staffs.</td>
<td>1</td>
<td>17</td>
<td>25</td>
<td>46</td>
<td>12</td>
<td>3.40</td>
<td>.934</td>
</tr>
<tr>
<td>Partnership has led to opening of new campuses.</td>
<td>8</td>
<td>13</td>
<td>37</td>
<td>28</td>
<td>14</td>
<td>3.27</td>
<td>1.115</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>3.281</strong></td>
<td><strong>0.95</strong></td>
</tr>
</tbody>
</table>

The results indicate that the aggregate mean was 3.281 and the standard deviation of 0.95. This indicates that the mean and standard scale rating was moderately high. Average scale ratings ranged from 2.97 to 3.42. This indicated that the respondents rated low to moderate levels of
performance of TVET. The highest mean rating was 3.42 for the statement “The strategic partnership has enhanced the sharing of new and innovative ideas with partners and stakeholders.” (SD= 1.088). The statement with the lowest mean rating of 2.97 “Strategic partnership has led to an increase in the number of programmes offered by the institution.” (SD= 1.262).

The findings indicated that to a moderate extent, 46% of the respondents stated that strategic partnership has increased the student’s enrolment. The finding support Ngatiah (2014) who intimated that through partnership of TVET institutions with higher education institutions, performance of learners in the period 2015-2016 has improved. However, Ngatiah revealed that a number of institutional factors have caused challenges in the performance of TVET institutions. Some of these factors range from motivation of teachers, inadequate training modalities, inadequacy of teachers and demotivation of teaching force. Others include challenges related to indiscipline of tutors and learners among many others. The findings further indicated that inability of the institutions to equip the tutors with the requisite resources led to ineffectiveness in achievement of desired levels of performance. The implication is that TVET institutions need to address the various challenges facing them to enhance performance. Strategic partnership is one major solution to overcoming the challenges in order to boost performance.

Further, 49% stated that to a moderate extent, strategic partnership has availed enough resources to accomplish the institutional objectives. The finding support Karemu and Gongera (2014) who revealed that for many years, the government has awarded more status to the primary, secondary and university education and neglected TVET education. This has resulted in dwindling performance of TVET education with facilities that were initially established as TVET centres converted into universities. This means that for management of TVET institutions to overcome
the challenge of neglect and underfunding, they have to proactively forge partnerships with institutions of higher learning that have advanced and superior facilities in order to boost performance.

Additionally, 46% to a moderate extent stated that partnership has led to an increase in the number of experienced staffs from other institutions. The finding support Karemu and Gongera (2014) suggestion that partnership among TVET and higher education institutions should lead to the quality of the improvement of programmes being offered and advancement in knowledge of the personnel offering them. This will result from the fact that collaboration should take advantage of the strengths existing in individual partner’s strong areas that create room for the enhancement of the weaker partner’s ability. Collaboration should also assist the partners in diversifying the programmes existing by incorporating the courses offered by the stronger partner. This implies that for TVET institutions, strategic partnership will improve performance since it will lead to the partner’s acquisition of more skillful and experienced teachers, increased retention of learners and increased partnerships. Finally, 40% stated that in a moderate extent, strategic partnership has enhanced effectiveness in the internal working of the institution. The finding support Karemu and Gongera (2014) statement that partnership among TVET and higher education institutions should lead to the enhancement of the quality of the programmes being offered as well as the overall image of the institution. This will result from the fact that collaboration should take advantage of the strengths existing in individual partner’s strong areas that create room for the enhancement of the weaker partner’s ability. Collaboration should also assist the partners in diversifying the programmes existing by incorporating the courses offered by the stronger partner. This will lead to the improvement of the overall image and branding of the TVET institutions thus enhancing the working environment and performance.
4.6. **Inferential Statistical Analysis**

Under inferential statistics, correlation and regression analysis were performed on the data. The results are presented in this section.

4.7. **Diagnostic Tests**

Various diagnostic tests were undertaken to test the credibility of the data before correlation and regression analysis. They included factor analysis, pattern matrix, multicollinearity test, heteroscedasticity test and normality tests.

4.7.1. **Confirmatory Factor Analysis**

Shushil and Verma (2010) stated that factor analysis is the process of analyzing the variations and eliminating data that does not add value among variables in a research study. The importance of undertaking factor analysis before analysis of the results was to describe variability among the observed variables and check for correlation. It was also intended to reduce data that was redundant. Exploratory factor analysis was used to refine the constructs. The results showed that Kaiser Meyer-Olin Measure of Sampling Adequacy) KMO Measures of Sampling Adequacy of manifest variables was 0.920 which was above the threshold of 0.6 and p-values for Bartlett’s test of Sphericity ($\chi^2 = 2654.753$, $p = 0.00$) was significant (below 0.05). This implies that data was adequate to run factor analysis and correlation patterns were close thus factor analysis would yield reliable and stable results as indicated in Table 4.7.

<table>
<thead>
<tr>
<th>Table 4. 7 KMO and Bartletts's test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
<td>.920</td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>2654.753</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td>325</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>
4.7.2. Total Variance Explained

Based on these Kaiser’s criterion, four factors, out of a total 26 factors, were imputed. Amongst themselves, they were able to explain 71.709% of the total variance in the data. Table 4.8 indicated that the four factors in the initial solution had eigenvalues greater than 1.3, with the threshold being eigenvalue greater or equal to 1.0

Table 4. 8 Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Loadings</th>
<th>Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% Variance</td>
<td>of Cumulative</td>
</tr>
<tr>
<td>1</td>
<td>11.980</td>
<td>46.077</td>
<td>46.077</td>
</tr>
<tr>
<td>2</td>
<td>3.251</td>
<td>12.505</td>
<td>58.582</td>
</tr>
<tr>
<td>3</td>
<td>2.014</td>
<td>7.747</td>
<td>66.328</td>
</tr>
<tr>
<td>4</td>
<td>1.399</td>
<td>5.381</td>
<td>71.709</td>
</tr>
<tr>
<td>5</td>
<td>.888</td>
<td>3.414</td>
<td>75.123</td>
</tr>
<tr>
<td>6</td>
<td>.757</td>
<td>2.912</td>
<td>78.035</td>
</tr>
<tr>
<td>7</td>
<td>.695</td>
<td>2.674</td>
<td>80.709</td>
</tr>
<tr>
<td>8</td>
<td>.607</td>
<td>2.334</td>
<td>83.043</td>
</tr>
<tr>
<td>9</td>
<td>.589</td>
<td>2.264</td>
<td>85.307</td>
</tr>
<tr>
<td>10</td>
<td>.517</td>
<td>1.988</td>
<td>87.295</td>
</tr>
<tr>
<td>11</td>
<td>.420</td>
<td>1.615</td>
<td>88.910</td>
</tr>
<tr>
<td>12</td>
<td>.403</td>
<td>1.550</td>
<td>90.460</td>
</tr>
<tr>
<td>13</td>
<td>.345</td>
<td>1.326</td>
<td>91.786</td>
</tr>
<tr>
<td>14</td>
<td>.310</td>
<td>1.193</td>
<td>92.978</td>
</tr>
<tr>
<td>15</td>
<td>.299</td>
<td>1.149</td>
<td>94.127</td>
</tr>
<tr>
<td>16</td>
<td>.282</td>
<td>1.084</td>
<td>95.211</td>
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<tr>
<td>17</td>
<td>.245</td>
<td>.941</td>
<td>96.152</td>
</tr>
<tr>
<td>18</td>
<td>.186</td>
<td>.716</td>
<td>96.868</td>
</tr>
<tr>
<td>19</td>
<td>.171</td>
<td>.657</td>
<td>97.525</td>
</tr>
<tr>
<td>20</td>
<td>.143</td>
<td>.550</td>
<td>98.075</td>
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<td>21</td>
<td>.118</td>
<td>.453</td>
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</tr>
<tr>
<td>22</td>
<td>.102</td>
<td>.391</td>
<td>98.919</td>
</tr>
<tr>
<td>24</td>
<td>.076</td>
<td>.291</td>
<td>99.549</td>
</tr>
<tr>
<td>25</td>
<td>.063</td>
<td>.243</td>
<td>99.792</td>
</tr>
<tr>
<td>26</td>
<td>.054</td>
<td>.208</td>
<td>100.000</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.
4.7.3. Pattern Matrix

The pattern matrix was important in indicating the distribution of the components of the three variables. The findings in Table 4.9 show the first component was credit transfer that had ten items. The second component was performance of TVETs that had seven items. The third component was brand status that loaded five items and the last component was infrastructure sharing that had four items load. The factor loadings ranged from 0.621 to 0.960.

Table 4. 9 Pattern Matrix

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependend Variable of TVETS</th>
<th>Performance of TVETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Transfer</td>
<td>Brand status</td>
<td>Infrastructure sharing</td>
</tr>
<tr>
<td>P3</td>
<td></td>
<td>.823</td>
</tr>
<tr>
<td>P5</td>
<td></td>
<td>.741</td>
</tr>
<tr>
<td>P6</td>
<td></td>
<td>.794</td>
</tr>
<tr>
<td>P7</td>
<td></td>
<td>.751</td>
</tr>
<tr>
<td>P8</td>
<td></td>
<td>.803</td>
</tr>
<tr>
<td>P9</td>
<td></td>
<td>.765</td>
</tr>
<tr>
<td>P10</td>
<td></td>
<td>.712</td>
</tr>
<tr>
<td>CT1</td>
<td></td>
<td>.828</td>
</tr>
<tr>
<td>CT2</td>
<td></td>
<td>.862</td>
</tr>
<tr>
<td>CT3</td>
<td></td>
<td>.865</td>
</tr>
<tr>
<td>CT4</td>
<td></td>
<td>.918</td>
</tr>
<tr>
<td>CT5</td>
<td></td>
<td>.960</td>
</tr>
<tr>
<td>CT6</td>
<td></td>
<td>.855</td>
</tr>
<tr>
<td>CT7</td>
<td></td>
<td>.940</td>
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<tr>
<td>CT8</td>
<td></td>
<td>.867</td>
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<tr>
<td>CT9</td>
<td></td>
<td>.917</td>
</tr>
<tr>
<td>CT10</td>
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<td>.903</td>
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<td></td>
<td>.645</td>
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<tr>
<td>IS2</td>
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<td>.784</td>
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<tr>
<td>IS3</td>
<td></td>
<td>.858</td>
</tr>
<tr>
<td>IS7</td>
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<td>.717</td>
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<tr>
<td>BS1</td>
<td></td>
<td>.742</td>
</tr>
<tr>
<td>BS4</td>
<td></td>
<td>.646</td>
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<td>BS5</td>
<td></td>
<td>.807</td>
</tr>
<tr>
<td>BS9</td>
<td></td>
<td>.656</td>
</tr>
<tr>
<td>BS10</td>
<td></td>
<td>.621</td>
</tr>
</tbody>
</table>
4.7.4. Multicollinearity

Multicollinearity refers to the phenomenon where one independent variable in the situation of a multiple regression model is linearly predicted from the analysis of the others with a certain degree of accuracy (Sekaran & Bougie, 2010). Multicollinearity was performed on the data by examining VIF (variance inflation factor) and assessing the tolerance (1/VIF). Independent variables are considered collinear if the value of VIF exceeds 3. Table 4.10 Presents VIF values ranged from 1.173 to 1.319 implying that multicollinearity is not a problem in the data.

Table 4.10 Test for multicollinearity

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
</tr>
<tr>
<td></td>
<td>Infrastructure Sharing</td>
</tr>
<tr>
<td></td>
<td>Brand status</td>
</tr>
</tbody>
</table>

4.7.5. Heteroscedasticity

Heteroscedasticity is the situation in which the variability of a variable in a study is not equal across the range of values of a second variable predicting it (Tabachnik & Fidell, 2013). It occurs when the variance of the error terms differ across observations. The study used Breusch-Pagan and Koenker test to estimate heteroscedasticity. Table 4.11 displays the results of Breusch-Pagan and Koenker test. The results show significant values more than 0.05 indicating that heteroscedasticity was not a problem.

Table 4.11 Breusch-Pagan and Koenker test

<table>
<thead>
<tr>
<th></th>
<th>LM</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP</td>
<td>3.670</td>
<td>.055</td>
</tr>
<tr>
<td>Koenker</td>
<td>3.912</td>
<td>.058</td>
</tr>
</tbody>
</table>

Null hypothesis: heteroskedasticity not present (homoskedasticity) if sig-value less than 0.05, reject the null hypothesis
4.7.6. Normality

Normality tests are used in the assessment of how well a data set is modelled by a normal distribution (Shushil & Verma, 2010). The normality of data distribution was assessed by examining its skewness and kurtosis as presented in Table 4.12. Normality of the variable is assumed if its skewness and kurtosis have values between the range of -1.0 and +1.0. All the items in the study measured values of skewness and kurtosis between 1 and -1. This implies that the assumption of normality was satisfied.

Table 4.12 Test for Normality

<table>
<thead>
<tr>
<th></th>
<th>N Statistic</th>
<th>Skewness Statistic</th>
<th>Std. Error</th>
<th>Kurtosis Statistic</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit transfer</td>
<td>112</td>
<td>-.174</td>
<td>.228</td>
<td>-.630</td>
<td>.453</td>
</tr>
<tr>
<td>Performance of TVETS</td>
<td>112</td>
<td>-.483</td>
<td>.228</td>
<td>.149</td>
<td>.453</td>
</tr>
<tr>
<td>Brand status</td>
<td>112</td>
<td>.222</td>
<td>.228</td>
<td>-.553</td>
<td>.453</td>
</tr>
<tr>
<td>Infrastructure Sharing</td>
<td>112</td>
<td>-.314</td>
<td>.228</td>
<td>.417</td>
<td>.453</td>
</tr>
</tbody>
</table>

4.8. Correlation among Study Variables

Correlation refers to a quantitative estimation of the oscillation of two variables with each other. The increase or decrease of two variables in parallel leads to a positive correlation. However, in case one variable increases and the other decreases, then the correlation is negative. In this study, correlation analysis was undertaken to measure the strength of the linear association between the independent and dependent variables. Usually, the Pearson Correlation Coefficient, r values range from +1 to -1, that is coefficient r may portray either a positive or negative relationship. Infrastructure sharing was found to be positive and significantly related to performance of TVETs (r = 0.558, p-value=0.000<0.05). Thus infrastructure sharing explained 55.8% variation of performance of TVET institutions. Brand status was found to be positive and significantly related to performance of TVETs (r = 0.495, p-value=0.000<0.05). This implied that brand status explained 49.5% variation of performance of TVET institutions. Credit transfer was found to be
positive and significantly related to performance of TVETs \( (r = 0.661, \ p\text{-value}=0.000<0.05) \).

Thus credit transfer explained 66.1% variation of performance of TVET institutions. As indicted in Table 4.13. Correlation was highest in credit transfer, followed by infrastructure sharing and finally brands status.

**Table 4. 13 Correlation of variables**

<table>
<thead>
<tr>
<th></th>
<th>Performance of TVETS</th>
<th>Infrastructure Sharing</th>
<th>Brand status</th>
<th>Credit transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Performance of TVETS</strong></td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.558**</td>
<td>.495**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>112</td>
<td>112</td>
<td>112</td>
<td>112</td>
</tr>
<tr>
<td><strong>Infrastructure Sharing</strong></td>
<td>Pearson Correlation</td>
<td>.558**</td>
<td>1</td>
<td>.410**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td><strong>Brand status</strong></td>
<td>Pearson Correlation</td>
<td>.495**</td>
<td>.410**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td><strong>Credit transfer</strong></td>
<td>Pearson Correlation</td>
<td>.661**</td>
<td>.538**</td>
<td>.436**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>112</td>
<td>112</td>
<td>112</td>
<td>112</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).**

**4.9. Regression Analysis**

Through multiple linear regression analysis, the evaluation of any possible existence of outliers is conducted. In this case, the tests conducted included: linearity test, autocorrelation test, multicollinearity test, homoscedasticity test and normality test.

**Table 4. 14 Model summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.726*</td>
<td>.527</td>
<td>.513</td>
<td>.63852804</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Credit transfer, Brand status, Infrastructure Sharing
b. Dependent Variable: Performance of TVETS
The results indicated that R square value in this case was 0.513 which clearly suggests that there is a strong relationship between credit transfers, brand status, infrastructure sharing and performance of TVETS as indicated in Table 4.14. This indicates that credit transfer, brand status, infrastructure sharing share a variation of 51.3% of performance of TVET institutions. The implication is that credit transfer, brand status; infrastructure sharing explains 51.3% of performance of TVET institutions. There is need therefore for a study to be conducted to establish the other factors that contribute 48.7% of performance of TVET institutions.

4.8.2. The ANOVA Test

Regression ANOVA is employed as a statistical measure for assisting in understanding the level and extent of variability of the regression model. Its findings are usually a basis for testing significance. It is a statistical measure that creates a level of understanding on the extent of variability resulting in a regression model. A regression ANOVA test was performed to attest if the overall regression model was a good fit for the data. The findings of the ANOVA test in Table 4.15 indicates that the overall model was a good fit since (F-value=40.049 and p-value=0.000<0.05).

Table 4.15 Analysis of variance (ANOVA)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>48.986</td>
<td>3</td>
<td>16.329</td>
<td>40.049</td>
<td>.000b</td>
</tr>
<tr>
<td>1 Residual</td>
<td>44.034</td>
<td>108</td>
<td>.408</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>93.020</td>
<td>111</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.9. Model Summary

After inferential statistics was performed on the data, a final model summary was realized. The model is shown below.
### Table 4.16 Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B Std. Error Beta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.120 0.061 0.235 1.952 0.054</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Infrastructure sharing 0.216 0.074 0.235 2.907 0.004</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brand status 0.177 0.066 0.204 2.697 0.008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Credit transfer 0.408 0.075 0.446 5.452 0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Performance of TVETS

The results in the model summary becomes as indicated in Table 4.16. The model showed that:

\[ \text{Performance} = 0.120 + 0.216_{\text{IS}} + 0.177_{\text{BS}} + 0.408_{\text{CT}} \]

This shows that performance is equated to 0.216 of infrastructure sharing, 0.177 of brand status and 0.408 of credit transfer when all conditions are constant at 0.120.

### 4.9.1. Infrastructure Sharing and Performance of TVET Institutions

The first objective of the study was to establish the effect of infrastructure on the performance of TVET institutions in Nairobi City County. The null hypothesis was stated as:

\[ H_0: \text{There is no significant relationship between infrastructure and performance of TVET institutions in Nairobi City County.} \]

Table 4.16 indicates that the regression weight for infrastructure sharing was positive and significant ($\beta = 0.216, t = 2.907, p < .05$). Therefore, the null hypothesis was rejected at $p < 0.05$ level of significance implying that infrastructure sharing has a significant relationship with performance of TVET institutions in Nairobi City County. The regression estimate for infrastructure sharing was 0.216; this indicates that a unit increase in infrastructure sharing would result in 21.6% increase in performance of TVET institutions in Nairobi City County. The facilities and equipment held by an organization are relevant and fundamental in the endeavour of to impart quality and relevant TVET education to the potential learners. Infrastructure sharing...
had the second best prediction of performance of TVET institutions among the three variables in the study. This support the sentiment by Miguel (2011) that adequacy of the quality of infrastructure in use in an organization and the academic performance has significant relationship. Niche (2010) added that availability of adequate resources enhances the performance of organizations and specifically the learning institutions. This implies that where an organization has a challenge in terms of adequacy of instructional equipment, a hindrance to achievement of learning outcomes is realized that affect performance.

4.9.2. Brand Status and Performance of TVET Institutions

The second objective of the study was to determine the effect of brand status on the performance of TVET institutions in Nairobi City County. The null hypothesis was stated as:

\[ H_{02} \]: There is no significant relationship between brand status and performance of TVET institutions in Nairobi City County.

Table 4.16 indicates that the regression weight for brand status was positive and significant (\( \beta = 0.177, t = 2.697, p < .05 \)). Therefore, the null hypothesis was rejected at \( p < 0.05 \) level of significance implying that brand status has a significant relationship with performance of TVET institutions in Nairobi City County. The regression estimate for brand status was 0.177; this indicates that a unit increase in brand status would result in 17.7% increase in performance of TVET institutions in Nairobi City County. Branding had the least prediction of performance of TVET institutions among the three variables in the study. This agrees with Moustafa (un-dated) who posited that TVET institutions should endeavour at advertising and investing in strategic marketing tactics to address the various challenges facing the sector. This will create the impetus for development of sound brand status that will be significant in developing the TVET sector especially in developing countries (Moustafa, un-dated). This means that branding of TVET
institution through strategic partnership programmes with higher education institutions will enhance the brand image and improve performance of these institutions.

4.9.3. Credit Transfer and Performance of TVET Institutions

The third objective of the study was to assess the effect of credit transfers on the performance of TVET institutions in Nairobi City County. The null hypothesis was stated as:

H₀₃: There is no significant relationship between credit transfers and performance of TVET institutions in Nairobi City County.

Table 4.16 indicates that the regression weight for credit transfers was positive and significant (β = 0.408, t = 5.452, p < .05). Therefore, the null hypothesis was rejected at p < 0.05 level of significance implying that credit transfers has a significant relationship with performance of TVET institutions in Nairobi City County. The regression estimate for credit transfers was 0.408; this indicates that a unit increase in credit transfers would result in 40.8% increase in performance of TVET institutions in Nairobi City County. Credit transfer had the highest prediction of performance of TVET institutions among the three variables in the study. The findings support Nduhiu (2014) observation that while transiting to institutions of higher learning, graduates of TVET institutions have challenges of getting credit transfers equivalent to the skills obtained at TVET institutions. In addition, NICHE (2010) suggested that there is need for changing the existing organization culture that creates obstacles that hinder credit transfers from one organization to another. The leadership of TVET institutions should therefore ensure that binding agreements are put in place when partnership modalities are being negotiated to streamline credit transfers of the learners. This means that for TVET institutions, solving the challenge of credit transfer will have the highest significance in solving the issues related to performance.
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction
The chapter makes a presentation of the summary, discussion, conclusions and recommendations of the findings of the study. The discussion and conclusions made are based on the specific objectives of the study. Recommendations are based on the areas that require further improvements in terms of need for further research.

5.2. Summary of the Study
The objective of this study was to investigate the determinants of partnership practices and performance of selected Technical Vocational and Training Education institutions in Nairobi City County, Kenya. The study was premised on the following specific objectives: to establish the effect of infrastructure on the performance of TVET institutions in Nairobi City County; to determine the effect of brand status on the performance of TVET institutions in Nairobi City County and finally to assess the effect of credit transfers on the performance of TVET institutions in Nairobi City County.

The study was anchored by four theories; Institutional theory, Human Capital theory, Resource Based theory and Dynamic Capabilities theory. The study design was descriptive research design. The target population comprised of eight TVET institutions that have active strategic partnerships with universities: Highlands College, Institute of Advanced Training (IAT), Regional College, EASA, Kenya Institute of Professional Studies (KIPS), Kenya School of Monetary Studies (KEMS), Kenya College of Insurance, and Kenya School of Revenue Administration (KESRA) (TVETA). The sample size consisted of a list of 145 academic and administrative staff of the eight TVET institutions. The study used self-administered
questionnaires as the main tool for collecting the data. Data analysis was through descriptive and inferential statistical forms.

5.3. Conclusions

The study sought to investigate the determinants of partnership practices and performance of selected Technical Vocational and Training Education institutions in Nairobi City County, Kenya. This section provides conclusion based on the discussion on the effect of infrastructure sharing, branding and credit transfer on the performance of selected TVET institutions.

5.3.1. Effect of Infrastructure Sharing on Performance of TVETs

The study investigated and measured the effect of infrastructure sharing on the performance of TVET institutions in Nairobi City County. Infrastructure sharing had the second best prediction of performance of TVET institutions among the three variables in the study. Through regression ANOVA, the study established that a significant positive relationship existed between infrastructure sharing and performance of TVET institutions. From the regression analysis, the regression weight for infrastructure sharing was positive and significant. Therefore, the null hypothesis was rejected. The study concludes that there exists significance effect of infrastructure sharing on performance of TVET institutions in Nairobi City County.

5.3.2. Effect of Brand Status on Performance of TVETs

The study investigated and measured the effect of brand status on the performance of TVET institutions in Nairobi City County. Brand status had the least prediction of performance of TVET institutions among the three variables in the study. Through regression ANOVA, the study established that a significant positive relationship existed between brand status and performance of TVET institutions. From the regression analysis, the regression weight for brand status was positive and significant. Therefore, the null hypothesis was rejected. The study
concludes that there exists significance effect of brand status on performance of TVET institutions in Nairobi City County.

5.3.3. Effect of Credit Transfer on Performance of TVETs

The study investigated and measured the effect of credit transfer on the performance of TVET institutions in Nairobi City County. Credit transfer had the best prediction of performance of TVET institutions among the three variables in the study. Through regression ANOVA, the study established that a significant positive relationship existed between credit transfer and performance of TVET institutions. From the regression analysis, the regression weight for credit transfer was positive and significant. Therefore, the null hypothesis was rejected. The study concludes that there exists significance effect of credit transfer on performance of TVET institutions in Nairobi City County.

5.4. Recommendations of the Study

In this section, the recommendations of the study are presented. These recommendations are based on the findings.

5.4.1. Effect of Infrastructure Sharing on Performance of TVET Institutions

The study established that there exists significant effect of infrastructure sharing on performance of TVET institutions in Nairobi City County. This is an indicator that for performance of TVET institutions to be enhanced, investing in infrastructure sharing is paramount. The study recommends that the management of TVET institutions should be proactive in creating strategic partnership with institutions of higher learning to benefit from shared infrastructure. This will improve the overall performance of these institutions.
5.4.2. Effect of Brand Status on Performance of TVET Institutions

The study established that there is significant effect of brand status on performance of TVET institutions in Nairobi City County. This implies that through strategic partnership TVET institutions should aim at developing a positive brand that is crucial in order to enhance the earlier image and reputation that have continued to stall the performance of these institutions. The study recommends that to improve performance, the management of TVET institutions should continuously engage in strategic partnership to reinvigorate their programmes, image and overall brand.

5.4.3. Effect of Credit Transfer on Performance of TVET Institutions

The study found that there is significant effect of credit transfer on performance of TVET institutions in Nairobi City County. Credit transfer as an issue affecting performance was mentioned more than any of the three variables. This shows that credit transfer is at the heart of the challenge in performance of TVET institutions. TVET institutions should get into partnerships with other institutions of higher learning with clear roadmaps on credit transfer policies.

5.5. Suggestions for Further Research

An area for further research is a comparative study on determinants of partnership practices on performance of TVET institutions in other counties in Kenya. Since credit transfer was the best predictor of performance of TVET institutions, a study on the relationship between credit transfer and performance of TVET institutions should be conducted. Since the three variables in the study explained 52.7% of performance of TVET institutions, there is need therefore for a study to be conducted to establish the other factors that contribute 47.3% of performance of TVET institutions.
REFERENCES


Musobo, I. C. & Gaga, J. (2013). Restructuring TVET as part of the Educational Reforms in Rwanda, A case on Public Private Partnership in Rwandan TVET. *Association for the Development of Education in Africa (ADEA)*.


Dear Respondent,

I am a student of Kenyatta University currently undertaking a degree of Executive Master of Business Administration. I intend to collect information to inform the writing and compilation of the final thesis from you. The purpose of this study is to establish the determinants of partnership practices and performance of Technical Vocational and Training Education institutions in Nairobi City County, Kenya. Information collected in this study will purely be used for academic purposes with ultimate care and confidentiality observed.

Please direct any enquiries to: JAMES MUTHAKA MUTHEE
APPENDIX 2: QUESTIONNARE

This questionnaire aims at collecting information on an assessment of establishment of determinants of partnership practices and performance of Technical Vocational and Training Education institutions in Nairobi City County, Kenya. You have been selected to form part of this study. Please answer the following questions. Information collected will be treated with due confidentiality and will be used for academic purposes only.

SECTION A: DEMOGRAPHIC INFORMATION

1. Gender: Male ( ) Female ( )
2. Age (please tick which bracket you fall)
   a) Below 20 years ( )
   b) 20 – 29 years ( )
   c) 30 – 39 years ( )
   d) 40 – 50 years ( )
   e) 51 years and above ( )
3. Please tick your highest education level
   a) Secondary ( )
   b) Tertiary ( )
   c) Undergraduate ( )
   d) Master Degree ( )
   e) Doctorate ( )
4. Indicate the enrolment in your organization for the last five years
   a) 2017 ( )
   b) 2016 ( )
   c) 2015 ( )
   d) 2014 ( )
   e) 2013 ( )
5. Name the organization of higher learning are you in strategic partnership with?

............................................................................................................
6. Indicate the number of years in strategic partnership
   a) 0-1 years (   )
   b) 1-2 years (   )
   c) 2-3 years (   )
   d) 3-4 years (   )
   e) 4-5 years (   )
   f) Above 5 years (   )

PART B: INFRASTRUCTURE SHARING

7. Please indicate the extent to which Infrastructure Sharing has affected performance of TVETs by ticking (√) the extent of agreement with the use the scale: 1. Not at All (NA) 2. Little Extent (LE) 3. Moderate Extent (ME) 4. Large Extent (LE) 5. Very Large Extent (VLE)

<table>
<thead>
<tr>
<th>Aspects of infrastructure</th>
<th>NA</th>
<th>LE</th>
<th>ME</th>
<th>LE</th>
<th>VLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The institution has adequate physical facilities like lecture halls, hostels and offices.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The institution has modern physical facilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The physical facilities are well maintained.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The institution has adequate human capital like lecturers and administrative staff.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The human capital is well trained to cater for the needs of the institution.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The learners have access to teaching and learning facilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The institution owns a well-stocked library.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The institution gets new programmes from our partners.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The institution relies on our partner’s lecturers to acquire quality programmes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Our partners assist in ensuring quality learning is conducted in the institution.

8. Which aspects of infrastructure sharing does the institution benefit from the collaborative partnership?

PART C: BRAND STATUS

1. Please indicate the extent to which Brand Status has affected performance of TVETs by ticking (√) the extent of agreement with the use the scale: 1. Not at All (NA) 2. Little Extent (LE) 3. Moderate Extent (ME) 4. Large Extent (LE) 5. Very Large Extent (VLE)

<table>
<thead>
<tr>
<th>Aspects of brand status</th>
<th>NA</th>
<th>LE</th>
<th>ME</th>
<th>LE</th>
<th>VLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The institution has attracted new partners due to the new image.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The reputation of the institution’s programmes has been enhanced by the partnership.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The students have more appeal in the institution after partnership.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The institution is admitting students from other institutions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The stakeholders have confidence with the programmes offered in the institution.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More learners are willing to complete their programmes in the institution.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The institution is currently experiencing an increase in student’s population.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The institution is attracting students with high grades at</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Form 4 level.

The institution graduates are currently competing favorably in the job market.

The students are easily getting attachments from potential employers due to the track record.

The institution has a record progressive vision and mission statements.

2. Which aspects of branding does the institution benefit from the collaborative partnership?

PART D: CREDIT TRANSFER

3. Please indicate the extent to which Credit Transfer has affected performance of TVETs by ticking (√) the extent of agreement with the use the scale: 1. Not at All (NA) 2. Little Extent (LE) 3. Moderate Extent (ME) 4. Large Extent (LE) 5. Very Large Extent (VLE)

<table>
<thead>
<tr>
<th>Aspects of credit transfer</th>
<th>NA</th>
<th>LE</th>
<th>ME</th>
<th>LE</th>
<th>VLE</th>
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<tr>
<td>Strategic partnership in credit transfer has enhanced the competitiveness of the institution’s programmes.</td>
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<tr>
<td>Strategic partnership in credit transfer has led to an increase in student’s population.</td>
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<tr>
<td>The institution has an effective policy of credit transfer for the qualified students.</td>
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<td>The institution’s credit transfer policy meets the requirements of the Ministry of Education.</td>
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<td>There is an existing consensus on credit transfer among the partners in the institution.</td>
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<td>The institution and the partners have qualified personnel to</td>
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</table>
efficiently harmonize the credit transfer policy.

The efficiency of the credit transfer policy has led to an increase in the uptake of our programmes.

The credit transfer policy has enhanced the achievement of the institutions short and long-term goals.

The credit transfer policy has boosted the image of the institution among the stakeholders.

Our partners have confidence in the credit transfer policy.

4. How has credit transfer enhanced the performance of students?

PART G: PERFORMANCE OF TVETS

5. Please indicate the level of agreement on Performance of TVET institutions. By ticking in the spaces provided (✓) the extent of agreement with the use the scale: 1. Not at All (NA) 2. Little Extent (LE) 3. Moderate Extent (ME) 4. Large Extent (LE) 5. Very Large Extent (VLE)

<table>
<thead>
<tr>
<th>Performance of TVET institutions</th>
<th>NA</th>
<th>LE</th>
<th>ME</th>
<th>LE</th>
<th>VLE</th>
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<tbody>
<tr>
<td>Strategic partnership has led to an increase in the number of programmes offered by the institution.</td>
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<tr>
<td>The strategic partnership has increased the student’s enrolment.</td>
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<td>The strategic partnership has enhanced the sharing of new and innovative ideas with partners and stakeholders.</td>
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<td>The strategic partnership has availed enough resources to accomplish the institutional objectives.</td>
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<td>Employees work goals are clearly defined.</td>
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</table>
The strategic partnership has enhanced the institution’s expertise and skills through acquisition of experienced human capital.

The strategic partnership has enhanced efficiency in the external working of the institution.

The strategic partnership has enhanced effectiveness in the internal working of the institution.

The partnership has led to an increase in the number of experienced staffs from other institutions.

The partnership has led to increase of the institution with opening of new campuses.

6. In which ways has the strategic partnership enhanced performance of the institution?

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APPENDIX 3: UNIVERSITY RESEARCH APPROVAL

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@kun.ac.ke
Website: www.ku.ac.ke

FROM: Dean, Graduate School
TO: James Muthaka Muthee
C/o Business Administration Dept.

SUBJECT: APPROVAL OF RESEARCH MASTERS PROPOSAL

We acknowledge receipt of your revised Proposal as per our recommendations raised by the Graduate School Board at its meeting of 11th October, 2019, entitled, "Partnership Practices and Performance of Selected Technical Vocational and Training Education Institutions in Nairobi County, Kenya".

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University’s Website under Graduate School webpage downloads.

Thank you.

[Signature]

Chairman, Department of Business Administration

Supervisors:

1. Dr. Samuel Maina
   C/o Department of Business Administration
   Kenyatta University

https://mail.google.com/mail/u/0/?tab=mim&ininbox/FMlfCgwx6iVqV0XzGpsqw2bvdqlh0X59vKr?projector=1&messagePartId=0.2
APPENDIX 4: RESEARCH AUTHORIZATION FROM NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Ref: No. NACOSTI/P/19/12275/28724
Date: 13th March, 2019

James Muthaka Muthee
Kenyatta University
P.O Box 43844-00100
NAIROBI

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Partnership practices and performance of selected technical vocational and Training Education Institutions in Nairobi County, Kenya” I am pleased to inform you that you have been authorized to undertake research in Nairobi County for the period ending 12th March, 2020.

You are advised to report to the County Commissioner and the County Director of Education, Nairobi County before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a copy of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.
APPENDIX 5: CERTIFICATE OF PUBLICATION