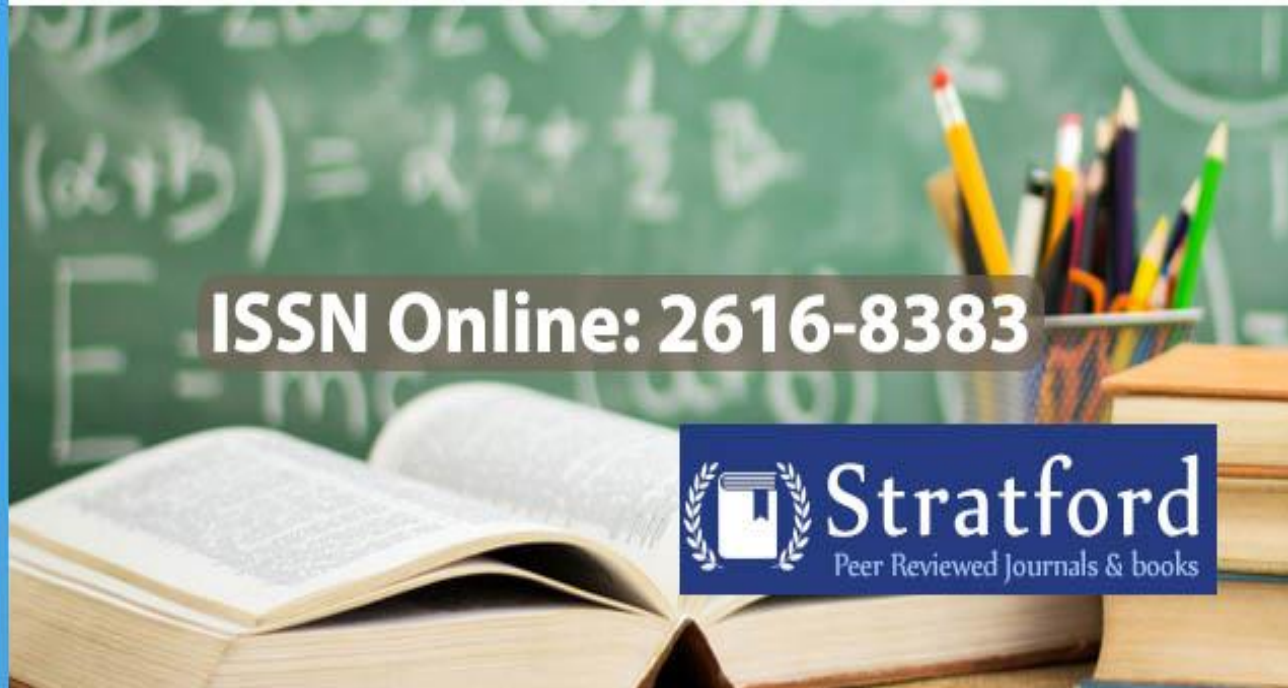


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Effect of Credit Transfer on Performance of Selected Technical Vocational and Training Education Institutions in Nairobi County, Kenya

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Abstract

Technical Vocational and Training Education Institutions (TVETs) are partnering with universities to enhance performance, remain sustainable and enhance competitiveness. 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. Despite the new development in the partnership, only a few local scholars have focused their research on partnership practices between TVET institutions and universities. The study investigated the effect of credit transfers on the performance of TVET institutions in Nairobi County. 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 respondents. The study used self-administered questionnaires. Data analysis was through descriptive and inferential statistics. The findings were that there exists significant positive relationship between credit transfer and performance of TVET institutions. The study concluded that there exists significance effect of credit transfer on performance of TVET institutions in Nairobi County. 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.

Keywords: *Credit Transfer, Performance of TVET Graduates.*

1.1 Introduction

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). 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 (Ghosh, Satyawadi, Prasad Joshi, Ranjan & Singh, 2012). 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.

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) observed that lack of industrial attachment, to a great extent, compromises quality of education in TVET institutions especially when resources are lacking.

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.

There are many determinants for establishing partnerships of TVET institutions and universities. 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 Zhang, Jia and Wan (2012) forging of partnership between TVET institutions and universities can creating a platform for enhancing credit transfer of learners, 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. Daft (2010) 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.

Other scholars like Kuo, Chang, Hung and Lin (2009) had posited that that the aspect of performance in TVET institutions may be gauged from the angle of financial and operationalized form of performance. 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).

In Kenya, three clusters of basic education are offered. They 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 (Mariana & Vera, 2012). 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. Despite the growth in the TVET sector in Kenya, both in enrolment and funding, the sector faces a number of performance related challenges including, challenge of credit transfer, 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).

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 credit transfer to boost performance both at individual and organizational levels. A number of TVET institutions operate in Nairobi County. One of the main challenges for these institutions is lack of active strategic partnerships with universities and unresolved credit transfer policies. 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 partnerships practices and performance levels of these institutions.

1.2 Statement of the Problem

To achieve Vision 2030, the Government is promoting Technical Vocational and Training Education Institutions (TVET) institutions due realization that competitive and productive workforce is vital for the development agenda of Kenya. This is through regulating, inspecting accrediting and licensing institutions, trainers and programmes. The effort is aimed at presenting opportunities to millions of Kenyans to uplift themselves from poverty (Kincheloe, 2018). 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. Similarly, 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. The partnership is geared towards promotion of credible dimensions like credit transfer on TVET graduates by universities. Despite the new development in the partnership, only a few local scholars have focused their research on partnership practices between TVET institutions and universities. Obwoye *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, the challenge of credit transfer has not been smoothly addressed and learners from

TVET have issues in accessing university learning. This is an issue that has stalled improvement in the performance of TVET institutions in Kenya.

1.3 Objective of the Study

The purpose of the study is to assess the effect of credit transfers on the performance of TVET institutions in Nairobi County.

1.4 Research Hypotheses

H₀: Credit transfer has no significant effect on performance of TVET institutions in Nairobi County.

2.0 Literature Review

2.1 Theoretical Framework

2.1.1 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 (World Bank, 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 relevant and 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 Empirical Review

Nyerere (2009) study was on sector mapping on the TVET sector in Kenya. The findings were that the perception in Kenya is that learners who enroll in TVET institutions are usually those that have failed to succeed in academic performance. The study further established 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. Majumdar (2011) studied on the global trends in response of TVET institutions. Cross-sectional design was employed with a sample size of 345 respondents. The findings noted 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.

Ministry of Education (2009) conducted a study on the development of education in Kenya. An exploratory design was employed. The findings were that 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. Further it was established that 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. 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) studied on the strategies influencing production of middle level workforce in public TVET institutions in Kenya. Descriptive research design was used with a sample size of 244 participants. Data was collected through questionnaires. The study established that in developed and developing countries, majority of the youth enroll in technical and vocational education soon after secondary school education. Findings revealed that programmes offered in technical and vocational institutions are often streamlined to fit the modalities expected in workplaces, including formalized apprenticeship. Further, the findings showed that 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.

OECD (2008) conducted a study on reviews of vocational education and training in Norway. The study used longitudinal research design. The findings established 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) conducted a study on strategy on technical and vocational education in Netherlands. The results established 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. The findings also revealed 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.

Atchoarena and Esquieu (2012) study was aimed at revisiting the challenges in TVET in human resource development in sub-Saharan Africa. The findings were that public TVET institutions are criticized by potential stakeholders for their inability to attract learners with good grades at secondary school education. Additionally, 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.

Finally, Sultana (2012) study was on the push and pull in TVET institutions in Saudi Arabia. The study comprised of a desktop research. 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 non TVET institutions. Findings further noted that career guidance have a role to play in promoting knowledge of the courses offered in TVET institutions. 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.

2.3 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 independent variable of the study is influence credit transfer with performance of TVETs as the dependent variable.

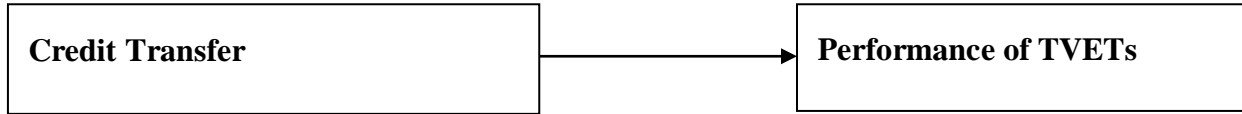


Figure 1: Conceptual Framework

3.0 Research Methodology

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 respondents. The study used self-administered questionnaires as the main tool for collecting the data. Data analysis was through descriptive and inferential statistical forms. The study employed a dynamic panel data regression model as shown below:

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

Where:

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

β_0 = Constant

β_1 β_3 =Regression coefficients.

X_1 = infrastructure sharing

X_2 = Brand status

X_3 =credit transfers

ϵ = Represents the error term

4.0 Results and Discussion

4.1 Correlation Analysis

The study conducted correlation analysis for credit transfer and performance of TVET institutions in order to examine the nature of the statistical relationships between each pair of variables. Table 1 shows the correlation matrix of the variable under financial firms.

Table 1: Correlation Matrix for Credit Transfer

		Performance of TVETS	Credit transfer
Performance of TVETS	Pearson Correlation	1.000	.661**
	Sig. (2-tailed)		.000
Credit transfer	Pearson Correlation	.661**	1.000
	Sig. (2-tailed)	.000	

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. As shown in Table 1, 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.

4.2 Diagnostic Tests

4.2.1 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. 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.

Table 2: KMO and Bartlett's test

Statistic		Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.920
	Approx. Chi-Square	2654.753
Bartlett's Test of Sphericity	Df	325
	Sig.	.000

4.2.2 Pattern Matrix

The pattern matrix was important in indicating the distribution of the components of the three variables. The findings in Table 3 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 0.712 to 0.960.

Table 3: Pattern Matrix

	Credit Transfer	Performance of TVETS
P3		.823
P5		.741
P6		.794
P7		.751
P8		.803
P9		.765
P10		.712
CT1	.828	
CT2	.862	
CT3	.865	
CT4	.918	
CT5	.960	
CT6	.855	
CT7	.940	
CT8	.867	
CT9	.917	
CT10	.903	

4.2.3 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 presents VIF values ranged at 1.173 implying that multicollinearity is not a problem in the data.

Table 4: Test for multicollinearity

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Credit transfer	.852	1.173

4.2.4 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 5 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 5: Breusch-Pagan and Koenkertest

	LM	Sig
BP	3.670	.055
Koenker	3.912	.058

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

4.2.5 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 6. Normality of the variable is assumed if its skewness and kurtosis have values between the range of -1.0 and + 1.0. The items measured had values of skewness and kurtosis between 1 and -1. This implies that the assumption of normality was satisfied.

Table 6: Test for Normality

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Credit transfer	112	-.174	.228	-.630	.453
Performance of TVETS	112	-.483	.228	.149	.453

4.3. Regression Analysis

Through multiple linear regression analysis, the evaluation of any possible existence of outliers is conducted. It is from this that fundamental assumptions must be made and examined before continuing with regression analysis. The R square value in this case is 0.527 which clearly suggests that there is a strong relationship between credit transfer and performance of TVETS as indicated in Table 7. This indicates that credit transfer share a variation of 52.7% of performance of TVET institutions. The implication is that credit transfer explains 52.7% of performance of TVET institutions.

Table 7: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.726 ^a	.527	.513	.63852804

a. Predictors: (Constant), Credit transfer

b. Dependent Variable: Performance of TVETS

4.3.1. 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. 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 8 indicates that the overall model was a good fit since (F-value=40.049 and p-value=0.000<0.05).

Table 8: Analysis of variance (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	48.986	3	16.329	40.049	.000 ^b
	Residual	44.034	108	.408		
	Total	93.020	111			

a. Dependent Variable: Performance of TVETS

b. Predictors: (Constant), Credit transfer

4.3.2. Model Summary

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

Table 9: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.
		B	Std. Error			
1	(Constant)	.120	.061		1.952	.054
	Credit transfer	.408	.075	.446	5.452	.000

a. Dependent Variable: Performance of TVETS

The results in the model summary becomes as indicated in Table 9. The model showed that:

$$\text{Performance} = 0.120 + 0.408 \text{CT} + e$$

This shows that performance is equated to 0.408 of credit transfer when all conditions are constant at 0.

4.4 Hypotheses Testing

Hypotheses were tested using simple linear regression analysis as represented in Table 7, 8 and 9.

H₀: There is no significant relationship between credit transfers and performance of TVET institutions in Nairobi County.

The regression weight for credit transfers was positive and significant ($\beta = 0.408$, $t = 5.452$, $p < .05$). 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 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 County. 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.

5.0 Conclusions

Based on the findings, study concluded that there exists significance effect of credit transfer on performance of TVET institutions in Nairobi County. The findings indicated that the respondent's believed strategic partnership in credit transfer has enhanced the competitiveness of the institution's programmes. This implies that strategic partnership may be a solution for the

TVET institutions on the barrier of credit transfer. Further, most respondents stated that institutions have an effective policy of credit transfer for the qualified students. 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. 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.

6.0 Recommendations

The study found that there is significant effect of credit transfer on performance of TVET institutions in Nairobi 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. The recommendation is that to enhance performance, TVET institutions should get into partnerships with other institutions of higher learning with clear roadmaps on credit transfer policies.

7.0 References

- Abu Raihan, M., Hasan, M., Rashedul Huq Shamim, M., & Professor, A. (2013). Facebook, The New Edutainment Avenue in TVET for Affective Learning. *IOSR Journal of Engineering*, 3(12), 2250–3021.
- Atchoerena, D. Delluc, A. (2012) *Revisiting Technical and Vocational Education in Sub Saharan Africa: an update on trends innovations and challenges*. Paris.
- Fatma, A.M. (2017). *Factors Influencing Life skills Training in Technical and Vocational Education and Training (TVET) Institutions in Kenya. The Case of National Youth Service: Institute of Business Studies, Nairobi, Kenya*. PhD Thesis, University of Nairobi.
- Ghosh, P., Satyawadi, R., Prasad Joshi, J., Ranjan, R., & Singh, P. (2012). Towards more effective training programmes: a study of trainer attributes. *Industrial and Commercial Training*, 44(4), 194–202. <https://doi.org/10.1108/00197851211231469>
- Moneva, J. M., Archel, P., & Correa, C. (2006). GRI and the camouflaging of corporate unsustainability. *In Accounting forum*, 30 (2), 121-137). Elsevier.
- Montiel, I., & Delgado-Ceballos, J. (2014). Defining and Measuring Corporate Sustainability Are We There Yet? Organization & Environment.
- Hasanefendic, S., Heitor, M., & Horta, H. (2016). Training students for new jobs: The role of technical and vocational higher education and implications for science policy in Portugal. *Technological Forecasting and Social Change*, 113, 328–340.
- Jerome, N. (2013). Impact of sustainable human resource management and organizational performance. *International Journal of Asian Social Sciences*, 3(6),
- Kigwilu, P.C. (2014). *Determinants of effective implementation of artisan and craft curriculum in Catholic sponsored community colleges in Nairobi Region, Kenya*. Doctorate Thesis: The Catholic University of Eastern Africa

- Majumdar, S. (2011). *TVET Response to Global Trends in the Colombo Plan Region*. UNESCO-UNEVOC.
- Miguel, A. (2011). *Technical vocational education and training: The master key. The Review of the Functions of FIT, TPAF and other TVET Providers*. Fiji: Ministry of Education, Youth and Sports, Arts, Culture & National Heritage.
- Ministry of Education (2009). *The Development of Education*. National Report of Kenya. Nairobi: Ministry of Education.
- Nduhiu, M.N. (2014). *Strategies Influencing Production of Middle Level Workforce in Public Technical, Vocational Education and Training Institutions in Nairobi Region, Kenya*. A Master of Education in Educational Planning Thesis, University of Nairobi.
- NICHE, (2010), *Strategy on Technical and Vocational Education and training*. Netherlands Initiative for Capacity development in Higher Education, NUFFIC
- Nyerere, J. (2009). *Technical & Vocational Education and Training (TVET) Sector Mapping in Kenya*. Amersfort; Edukans Foundation
- OECD (2008). *Reviews of Vocational Education and Training, Learning for Jobs Review of Norway*.
- Orodho, J. A. (2008). *Social Science Research Methods*. Nairobi: Kanezja Publishers.
- Sekaran, U. & Bougie, R., (2009). *Research methods for business: a skill building approach*. New York: John Wiley & Sons.
- Schultz, W (1961). *Investment in Human Capital, The American Economic Review*, Volume II No.1.
- Sultana, G. (2012). The push and pull of TVET: can Career Guidance make a difference? UNESCO, Online publication.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. (6th ed.). Boston: Pearson.
- Schultz, F., & Wehmeier, S. (2010). Institutionalization of corporate social responsibility within corporate communications: Combining institutional, sense making and communication perspectives. *Corporate Communications: an international journal*, 15(1), 9-29.
- Tong, S. (2013). *Factors impacting on enrolment levels and performance of TVET institutions in Malaysia*. New Delhi: Prentice Hall of India.
- Wollenburg, J., Mowatt, R.A., Ross, C.M., & Renneisen, M. (2013). Components of partnership agreements in municipal parks and recreation. *Journal of Managing Leisure*, 18 (2), 135-51
- World Bank, (1993). *Economic Growth and Public Policy*, New York: Oxford University Press.
- Zhang, Z., Jia, M., & Wan, D. (2012). When does a partner's reputation impact cooperation effects in partnerships? *Asia Pacific Journal of Management*, 29 (3), 547-71.