# The Influence Of Competition On Market Performance Of Privately Owned TVET Colleges In Kenya

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**ABSTRACT**
In the last one hundred years, the higher education sector at a global stage has been rapidly expanding, a phenomenon that education specialists call "massification" of education. From a net enrolment of 500000 students in higher education institutions globally, at the turn of the last century, the numbers had grown to 178 million by the year 2010. In Kenya, over 300,000 students are enrolled in universities and other higher education institutions in the country in the current cohort. Approximately 20% or 60,000 of these students are enrolled in the private higher education sector. In this context, the competition for students has become intense creating a need for creation of competitive strategies in order to attract students faced with too many options. In the process, private TVET colleges have become casualties as prospective students either join universities or other government owned tertiary institutions. This has led to a dearth in establishment of private mid-level colleges in the country and even those available are still contending with several challenges among them student retention. However, despite the efforts by private TVET Colleges in investing enormous resources to attract students, the level of enrolment and retention of students remains unsustainable. However, the factors behind this state of market performance of the privately owned TVET colleges remain relatively unknown. This, therefore, motivated the need to determine effect of competition on market performance of privately owned TVET colleges in Kenya. Guided by the Porter's Five Forces theory, the study employed descriptive survey design targeting privately owned TVET colleges drawn from 25 counties across the country. Kathuri and Pals formula was to select a sample size of 267 colleges for the study from which members of the management provided the data for the study through questionnaires and interview schedules. Data was be analyzed using descriptive statisticsand inferential statistics, mainly Pearson product moment correlation and multiple linear regression analysis. The findings revealed that there was a significant relationship between competition and market performance of privately owned TVET colleges in Kenya. The study recommends that the privately owned TVET colleges should adopt the competitive strategies proposed by Porter in order to withstand the competition and thrive in the higher education sector.

Keywords: Competition, Market Performance, private TVET Colleges

## Introduction

### 1.1 Background of the study

In the last one hundred years, the higher education sector at a global stage has been rapidly expanding, a phenomenon that education specialists call "massification" of education. In this context, the higher education has ceased being the preserve of the elites, accessed by largely the privileged groups such as the rich, to a global industry annually enrolling millions of students (Muthimi, 2013). In 1900, there were roughly 500,000 students enrolled in higher education institutions around the world that represented 1% of the university age population by then (Choy *et al.,* 2010). This figure had grown into 68 million by the year 1991, 100 million by year 2000, 132 million by the year 2004, and 178 million by the year 2010 (Kitum, 2010). In Kenya, over 300,000 students are enrolled in universities and other higher education institutions in the country in the current cohort. Approximately 20% or 60,000 of these students are enrolled in the private higher education sector (CHE, 2016). Even then, over 30,000 students still have to go abroad for higher education.

The competition for students is intense in the developed world creating a need for creation of competitive strategies in order to attract students faced with too many options (Agumbi, 2013). For instance, the American higher education sector has grown from a collection of small, local markets to regional and national markets (Choy *et al.,* 2010). The higher education environment has become competitive and institutions increasingly have to compete for students in the recruitment market (James et al., 2009). In a different context, the United Kingdom (UK) had 162 universities serving 2.3 million university students in the 2012/2013 academic year. The intense competition for students is due to the increasing number of universities in close proximity to each other in major towns such as London, Oxford, Leeds and Sheffield cities amongst others. In London alone, there are over 40 universities within the M25 and more new ones set to be opened. The intense competition has seen the universities adopt strategies to remain profitable and competitive in attracting students. Some of the activities done to this end include research, conference organization, offering career advice, financing startup companies, maintaining historic buildings and promoting sport (Katamei, 2015).

In Malaysia Higher education has experienced an increasing competition among universities and higher education institutes to attract students both locally and internationally (Mazzarol, 2008). Competitive pressure has forced the higher educational institutions to look for more competitive marketing strategies in order to compete for students in their respective markets. In Ghana the earlier higher educational institutions were established by the government and for that matter are largely Not-for-Profit Organizations aiming at providing access to education for all Ghanaians. As a result, marketing has not found its feet in educational sector. However, the introduction of private universities has brought some changes in the Ghanaian higher education sector. There have been massive changes in educational policies. Governance and structure of higher education have also emerged all over the world (Nicolescu, 2009). Again, the democratization campaign of education in Africa has also contributed to the restructuring of higher education in Ghana. Some of the changes include accrediting private universities, tax exemptions on imported books, decline in the funding of higher education by the government and decreased in enrolment by public universities in order to pave way for the private ones (Manuh, *et al.,* 2007). Higher education in Ghana has therefore been characterized with privatization and competition.

### *1.1.1 Marketing Performance for Higher Education*

Market performance refers to the performance of the colleges in terms of student's enrolment, retention of students, attraction of students and subscription to courses. Trullas and Enache (2011) define marketing for higher education as a process of investigation devoted to identifying social needs, developing and implementing programmes that fulfill them by means of commercial or noncommercial interchanges for the ultimate purpose of enhancing the wellbeing of the individuals and community involved. Adding that the application of marketing to higher education will create awareness that the demand is externally generated; programmes will be considered relevant when they satisfy an external need. This implies a need for a systematic investigation of the demand and the generation of new products and services designed to satisfy it. For Higher Education Institutions (HIEs) in Kenya struggling to supplant an out-moded supply-side mentality with an effective demand-side philosophy, relationship marketing may provide a way of getting to know the needs and aspirations of their potential customers better, enhancing the quality and relevance of the educational programmes they offer, and raising the profile of their institutions in a surging tide of competition.

### *1.1.2 College Marketing in Kenya*

There have been various challenges facing the higher education management. These challenges have adversely affected the attainment of higher education by many Kenyans (Yego, 2016). Further, universities have been accused of rigid administration criteria that do not allow credit transfer between universities and other post-secondary institutions (Ndilo, 2016). This has further made education in the higher levels seem like is locked within its boundaries. Moreover, there are some discrepancies in public universities based on gender and regions of origin. To a greater extent, higher education has been criticized as being biased to females and sometimes to people of particular backgrounds. The curriculum taught in the universities is sometimes not open to accommodate all those who wish to pursue higher education (Agumbi, 2013). These challenges have far much affected the access and realization of higher education to most Kenyans who have been trying to work hard in the lower levels with motivation that they will transit to the higher level (Katamei, 2015). Therefore, it is important to establish how private mid-level colleges which are entrepreneurial in nature capitalize on the opportunities presented to them by these challenges to increase their enrolment given the demand for higher education in the country and beyond.

## 1.2 Statement of the Problem

The competition for students is intense in the developed world. In Kenya, the higher education sector has been rapidly expanding in terms of student enrolments. Available statistics shows rapidly expanding higher education sector student enrolments levels from 67,558 (2003/2004 academic year), 198,260 (2011/2012 academic year), 340,550 (2014/2015 academic year), to 769,550 (2015/2016 academic year). The expansion in the higher education sector is also experienced across the gender lines and across private institutions. For example, the female student enrollment rose by 30.5% from 80,560 in 2011/2012 to 186,115 in 2012/2013 academic years. The enrollment in private universities rose by 11.6% from 40,344 in 2011/2012 academic year to 95,023 in the 2013/2014 academic year (Oduor *et al.*, 2015). This rise in higher education enrolment has been fueled by many factors among them; demand from employers for undergraduate qualifications as a minimum requirement, increased access to student loans and bursaries, students' individual characteristics and the opening of campuses and their marketing strategies. In the process, however, private TVET colleges have become casualties as prospective students either join universities or other government owned tertiary institutions (Katamei, 2015). This has led to a decline in establishment of private mid-level colleges in the country and even those available are still contending with several challenges among them student retention.With a critical mass of potential students in the country in need of college education to equip them with skills for the job market, tapping this market will be important to investors in the TVET sector as in a bid to bridge the skill gap in the economy. Failure to do this will result in the economy struggling. In the same way, the millions of worth of investments in the TVET colleges could be lost or fail to yield the desired returns on investment. Private TVET colleges which have been under intense pressure to compete in the dynamic higher education sector in the country have, however, been largely overlooked in research. As such, their market performance determinants are largely unknown. Therefore, the present study examines how factors such as competition, college branding, program differentiation and program pricing affect the market performance of these colleges.

### 1.3 Objective of the Study

The objective of the paper was to determine the effect of competition on market performance of privately owned TVET colleges in Kenya

### 1.4 Research Hypotheses

**$H_{01}$**: Competition does not significantly affect market performance of privately owned TVET colleges in Kenya

## 2.0 Literature Review

### *2.2 Porter's Five Forces Model*

The five-force perspective is associated with its originator, Porter (1979) of Harvard University. This framework was first published in *Harvard Business Review*. Porter's Five Forces Framework is a tool for analyzing competition of a business. It draws from industrial organization (IO) economics to derive five forces that determine the competitive intensity and, therefore, the attractiveness (or lack of it) of an industry in terms of its profitability. An "unattractive" industry is one in which the effect of these five forces reduces overall profitability. The most unattractive industry would be one approaching "pure competition", in which available profits for all firms are driven to normal profit levels. Porter developed his five forces framework in reaction to the then-popular SWOT analysis, which he found both lacking in rigor and *ad hoc* (Porter, Argyres&McGahan, 2005). Porter's five-forces framework is based on the structure–conduct–performance paradigm in industrial organizational economics.

In any business, there are factors which determine the level of competitiveness that the business must be aware of or possess in order to secure its place in the marketplace. Porter (1979) identified five forces that make up the competitive environment. According to Porter (1982), the competitive situation of a specific industrial sector depends on five fundamental competitive forces, namely: the threat of new entry by potential competitors; the threat of substitute products or services; clients' bargaining power; suppliers' bargaining power, and; rivalry among the current competitors. Porter, further, oriented the five forces to depict three forces from 'horizontal' competition--the threat of substitute products or services, the threat of established rivals, and the threat of new entrants--and two others from 'vertical' competition--the bargaining power of suppliers and the bargaining power of customers. A change in any of the forces normally requires a business unit to re-assess the marketplace given the overall change in industry information. The overall industry attractiveness does not imply that every firm in the industry will return the same profitability. Firms are able to apply their core competencies, business model or network to achieve a profit above the industry average.

Porter's framework has been challenged by other academics and strategists. For instance, Coyne and Subramaniam (1996) claim that three dubious assumptions underlie the five forces: That buyers, competitors, and suppliers are unrelated and do not interact and collude; that the source of value is structural advantage (creating barriers to entry), and; that uncertainty is low, allowing participants in a market to plan for and respond to changes in competitive behaviour. Porter indirectly rebutted the assertions of other forces, by referring to innovation, government, and complementary products and services as "factors" that affect the five forces (Porter, 2008). It is also perhaps not feasible to evaluate the attractiveness of an industry independently of the resources that a firm brings to that industry.

This theory is instrumental to the study especially in regard with the first objective which seeks to map the competitive forces the privately owned TVET colleges in Kenya the face and the effect of the competition on their market performance.

**2.2 Empirical literature**

Marketing is increasingly becoming extremely competitive worldwide in general and in the field of education particularly. That is why the competition in this field is increasing day by day, and describes situations or activities in which firms compete with each other. Understanding competitive advantage is an ongoing challenge for decision makers. Historically, competitive advantage was thought of as a matter of position, where firms occupied a competitive space and built and defended market share. Competitive advantage depended on where the business was located and where it chose to provide services. Stable environments allowed this strategy to be successful, particularly for large and dominant organizations in mature industries (Duncan *et al.,* 2008). Competitiveness is, therefore, defined as the effort and achievement of long term profitability, above the average of the particular industry within which they operate as well as above alternative investment opportunities in other industries. This definition includes, therefore, the concept of opportunity cost and illustrates that successful organizations should not only compete within their particular industry but also against other investment opportunities.

Sustained competitive advantage has become more of a matter of movement and ability to change than of location or position (Stalk *et al.,* 2012). When referring to educational services, competitiveness should also include the sustainability of local resources for ensuring the maintenance of long term success as well as the achievement of equitable returns-on-resources utilized to satisfy all stakeholders (Buhalis, 2008). Therefore, understanding the factors that influence enrolment can help universities succeed in an increasingly competitive marketplace for education. Higher education is now facing increasing competition from for-profit universities and reduced funding from typical sources (McCoy, 2011). While institutions can control their marketing mix factors including product, price, promotion, and place, other environmental forces are beyond their control. These environmental forces include social, economic, competitive, and technological forces. By identifying trends related to each of these forces, institutions can develop and maintain successful marketing plans (Kerin, Hartley, &Rudelius, 2011).

Ismail (2009) sought to determine the competitive advantage impact on marketing Jordanian universities based on the different dimensions of the study (Gender, level of the student, specialization, methods of payment of university fees, and nationality). Using a population of 200 students ofZarqa University, the study revealed that there are strong significant statistical evidences between the impacts of competitive advantage on marketing Jordanian universities. These differences were due to the following factors: gender of the student, level of the student, specialty of the student, nationality of the student and methods of payment. Kusumawati*et al.,* (2010) in their study found that marketing (especially the marketing mix), had a significant influence on how students choose universities to study at. Ariffin*et al.,* (2008) and also Keling et al (2007) found that marketing strategies were influential.According to Zain *et al.,* (2013), students of Private Institutions of Higher Education (PIHE) in Malaysia are those who were previously enrolled in the O- and A-levels of education. These students usually avoid choosing private institutions to further their studies. Their first choice is the Public Institutions of Higher Education, and their last resort is the PIHE. Alternatively, some students would rather discontinue their education and begin looking for jobs. Thus, some of the PIHE have low student enrolments. Moreover, the Ministry of Higher Education constantly reports the suspension of licences to operate by certain institutions because of low performance and other related reasons. Because the objectives of Private Institutions of Higher Education (PIHE) are largely focused on profit, they are certainly different from the objectives of the PIHE. Therefore, the public is constantly comparing the quality of education between both sectors of higher education providers.

According to Rudhumbu*et al.,* (2017), the higher education environment in Botswana is currently seized with the twin challenges of fewer students who are now able to be sponsored by the Botswana government and high competition for these students among universities (Harden, Davis &Mengersen, 2014). As of year 2009 there were around 276 tertiary institutions (Botswana Training Authority, 2009) in Botswana, and increasing, competing for the same market of students in a country with a population around 2 million people (Central Statistics Office, 2016).Binsardi and Ekwulugo (2003) point out that students in HEI were 'buying' the benefits that a degree can provide in terms of employment, status and lifestyle. In other words, career prospect is an important factor (Eder *et al*., 2010). The availability of in-demand courses and programs and the presence of a wide range of choices is the most important factor that can influence international students' decision-making process. However, this may be balanced by cost factors, especially when the student and his parents cannot afford very expensive tuition fees. Maringe (2006) research suggests that when choosing programs or courses, including which schools or universities to attend, students put much stress on value for money. Part of their decision-making process includes career prospects, better return on investment, and a brighter future. In a similar study by Yusof*et al.,*(2008) also found that availability of the required programmes and financial assistance such as scholarships were some of the influential factors in the way students decide to choose a particular college.

Mbawuni and Nimako (2015) examined critical factors underlying students' choice of institution for graduate programmes in Ghana. The study found that geography imposes constraints on college choices, that most students attend public, in-state institutions implies that college options are circumscribed by state of residence. The implication of this finding to management is that the attractiveness of school's location can be a strong competitive advantage for attracting qualified applicants. Further, failure to gain alternative admissions was found to be a factor that made the higher education institutes lose out on competition. The fact that prospective students who do not gain admission elsewhere as a first priority tend to seek for alternative admission. One probable reason for this situation is that, as the education industry becomes more and more competitive, it demands varied admission criteria across similar colleges and programmes of study. Consequently, prospective applicants also tend to apply for admission in more than one college and make judgment about which programme of study to consider as first, second and third choices. Theoretically this finding supported some existing work (Sidin*et al*., 2003) conducted in developed countries. It implies that management need to pay close attention to this factor as it serves as an important source of competitive advantage to the institution in question for attracting potential master's students within the competition of HEIs in Ghana.

Yego (2016) examined challenges facing higher education in management of privately sponsored student programmes (PSSP) in Kenya. The study identified unclear university policy for PSSP administration, poor management shrouded by corruption and, inadequate and unqualified teaching staff among others as some of the challenges affecting the marketing of the PSSP.Alando (2016) investigated coping strategies adopted by private universities in response to increased demand for higher education focusing on four private universities in the country. The study concluded that there has been increased enrolment over the last few years. The adopted strategies have been effective and have aided in increasing enrolment levels. Strategies like e-learning are in their initial stages but there are plans in place for future advancement into the distance learning and e-learning mode of teaching. Private institutions are willing to enrol state funded students provided it is as per available capacity (Oduor*et al.*, 2015). Looking at other branches this has been scaled down and in some instances some branches have been closed. For the takeover and upgrading of colleges this strategy has not been adopted at all by the private institutions.

However, with all these being said, the market performance of private middle level colleges such as TVETs in Kenya has been generally overlooked. As proprietary schools, they are subject to high competitive pressures. The competitive environment with respect to these institutions has, however, not been mapped out in existing research.

## 3.0 Methodology

### *3.1 Research Design*

The study was grounded on a positivist philosophy. The purpose of research in this paradigm is to prove or disprove a hypothesis.This study adopted the descriptive survey design. Descriptive designs result in a description of the data, either in words, pictures, charts, or tables, and indicate whether the data analysis shows statistical relationships or is merely descriptive (Upagade & Shende, 2012). The descriptive survey research design was used for this study so as to examine a diverse range of mid-level colleges in the country.

### *3.2 Target Population*

There are approximately 355 privately owned TVET registered private colleges in Kenya (MoE, 2017). Majority of these are located in the urban areas of the country. The study targeted TVET colleges in eight regions to make the sample inclusive. From these, the accessible population was one member of the management of each of the colleges bringing the entire target population to 355 persons.

*3.3 Sampling and Sampling Techniques*

The total population under consideration in this study was 355 persons, the sample size was computed using the formula proposed by Kathuri and Pals (1993). Therefore, the sample size used in the study was 223 respondents.

The study used cluster sampling to select the colleges according to the regions in the country. This is intended to make the sampling representative enough of the entire population under study.

*3.4 Research Instruments*

The study used primary data which collected by use of questionnaires, data collection sheet and interview schedules. The Likert scale was used in the structured questionnaires.

*3.5 Pilot Test, Validity and Reliability of the Research Instruments*

*3.5.1 Pilot Testing*

The pilot study was undertaken using 20 respondents drawn from various public TVET colleges in Nairobi County. The respondents in the pilot study were not among those who participated in the actual study.

*3.5.2 Reliability of the Research Instrument*

The researcher endeavored to enhance the reliability of the data collected by ensuring that the questionnaires tested and retested by having them administered to the same pilot group twice at an interval of two weeks under the same conditions.

This test minimized instrument and researcher's error and enable the restructuring of some items in the questionnaires.

*3.5.3 Validity of the Instrument*

The validity of the instruments used in this study was established through the following steps: piloting tools of data collection, doing member checks with the interviewed sample, care was taken during data analysis and by ensuring that the researcher adheres to ethical issues during conduct of research. The returned instruments from the pilot study were subjected to review and analysis from experts in the university to ensure that the contents of the questionnaires are suitable for the purpose for which they were set and are also highly consistent. Content validity was used for the purposes of determining whether the instrument really measures what it is designed to measure (Kathuri & Pals, 1993).

*3.5.5 Data analysis model*

Data was analyzed using descriptive and inferential statistics. Descriptive statistics included frequencies, percentages and chi-squares. Inferential statistics were in form of both Pearson's correlation coefficient and bivariate regressions. The linear regression model assumed to hold under the equation;

$$y_{ij} = b_0 + b_1 x_1 + e$$

Where;

$y$ = Market Performance of privately owned TIVET colleges in Kenya

$b_0$ = Model Constant

$x_1$ = Competition
$b_1$, the coefficients of the variable to be determined by the model
$e$ = the estimated error with zero mean and a constant variance

## 4.0 Results and findings

### *4.1 Introduction*

This chapter presents the results of the data analysis and attendant discussions. Table 1 shows the response rates.

### *4.2 Instrument Response Rate*

The researcher administered 223 questionnaires all of which were returned indicating a response rate of 100%. A summary of the instrument response is given in Table 1.

**Table 1: Response Rate**

| Sample size | Returned Questionnaires | Response Rate |
|---|---|---|
| **223** | **223** | **100%** |

The response rate was high and was, therefore, acceptable for the purposes of the study. According to Mugenda and Mugenda, (2013), a response rate of 50% is acceptable for studies of this kind while Babbie (2004) rates instrument response rates above 80% as very good. In this study, the response rate was above the two thresholds and, therefore, fit for use in the study.

### *4.3 Competition*

The objective of the study was to to determine the effect of competition on market performance of privately owned TVET colleges in Kenya. This objective was measured on the basis of three constructs; Rivalry, New Entrants and immitability. A 5 point Likert scale was used to rate responses of this variable and it ranged from; 1 = strongly disagree to 5 = strongly agree. The findings are presented in Table 4.3.

**Table 2**

***Competition on market performance of privately owned TVET colleges***

| Statement | SA Freq(%) | A Freq(%) | N Freq(%) | D Freq(%) | SD Freq(%) | $\chi 2$ | p-Value |
|---|---|---|---|---|---|---|---|
| We face stiff competition from universities in this area | 25(11.3) | 126(56.8) | 30(13.5) | 28(12.6) | 13(5.9) | 93.39 | 0.001 |
| We face stiff competition from government colleges in this area | 57(25.6) | 100(44.8) | 23(10.3) | 34(15.2) | 9(4.0) | 110.15 | 0.001 |
| We face stiff competition from other private colleges in this area | 42(19) | 119(53.8) | 31(14) | 22(10) | 7(3.2) | 123.88 | 0.001 |
| Other colleges in the area offer | 56(25.2) | 130(58.6) | 21(9.5) | 13(5.8) | 2(0.9) | 74.82 | 0.001 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| similar programs like ours | | | | | | | |
| Our competitors often develop programs similar to ours | 57(25.8) | 121(54.8) | 27(12.2) | 12(5.4) | 4(1.8) | 144.1 | 0.001 |
| New colleges offering the same courses have sprung up in our area | 45(20.4) | 112(50.7) | 31(14) | 24(10.9) | 9(4.1) | 102.35 | 0.001 |
| The expansion of universities most of which offer courses similar to ours is affecting our enrolment of students | 63(38.4) | 107(48.2) | 18(8.1) | 25(11.3) | 9(4.1) | 105.03 | 0.001 |
| We offer our programs flexibly to encourage subscription | 85(38.8) | 113(51.6) | 13(5.9) | 5(2.3) | 3(1.4) | 235.17 | 0.001 |

The results in Table 2 suggest that all the $\chi 2$ values for the reactions to the statements were significant ($p \leq 0.05$), therefore, implying that the results could be statistically inferred as representative of the entire population. The results also indicate that most of the TVET colleges in the country were facing stiff competition from universities located in their areas as indicated by majority (68.1%) of the respondents. They also faced stiff competition from government colleges in their areas of operation as agreed by 70.4% of the respondents. Majority (72.8%) of the respondents also agreed that their colleges were facing stiff competition from other private colleges where they were established. Also according to the findings, other colleges operating in their areas offered programs similar to theirs as suggested by 83.8% of the respondents. Their competitors often developed similar programs as agreed by 80.6% of the respondents. Most respondents agreed that new colleges offering the same courses had sprung up in the area (71.1%). Further, the expansion of universities most of which offer courses similar to the colleges was affecting their enrolment of students (86.6%). Most colleges also offered their programs flexibly to encourage subscription (90.4%).

From the findings in the interview schedules, it was evident that the colleges perceived competitiveness was based on their infrastructure in statements like, “training facilities; especially the well-equipped workshops,” “Available facilities,” “Buildings,” “Infrastructure”. Results from the interviews also pointed to the location especially proximity of the colleges to the students’ home areas as a factor of competition. This was evidenced by responses, such as, “Physical location” and “Nearness to their homes”. This means that most of the colleges were recruiting form their base areas and this was affecting their competitiveness as it meant that they were not visible over a large area and, hence, could not attract diverse students.These findings suggest that the TVET market was competitive and was attracting several industry players. The findings agree with Rudhumbu*et al.,* (2017) who found that the higher education environment is currently characterized with high competition between students sponsored by the government and those in privately sponsored colleges. The findings also support those of Mbawuni and Nimako (2015) who found that colleges were losing out to each other when they did not seriously consider certain factors that made them competitive.

*4.4Market Performance*

The study also sought to evaluate the status of market performance of privately owned TVET colleges in Kenya. This was the dependent variable and the constructs used to market performance included quantity, Retention, Course Subscription and Attraction of Students. The responses to this constructs were rated on a 5 point Likert scale ranging from; 1 = strongly disagree to 5 = strongly agree. The results are as shown by Table 3.

**Table 3:**
***Market performance of private TVET colleges***

| Statement | SA Freq(%) | A Freq(%) | N Freq(%) | D Freq(%) | SD Freq(%) | χ2 | p-value |
|---|---|---|---|---|---|---|---|
| My college is able to attract a diverse range of students at undergraduate level compared to peers | 54(24.8) | 113(51.8) | 34(15.6) | 15(6.9) | 2(0.9) | 329.58 | 0.001 |
| Of all applications we receive from prospective students, majority end up enrolling | 70(31.4) | 115(51.6) | 25(11.2) | 12(5.4) | 1(0.4) | 463.65 | 0.001 |
| Our college has developed strategic partnerships with other institutions including potential employers | 59(26.5) | 120(53.8) | 26(11.7) | 16(7.2) | 2(0.9) | 281.93 | 0.001 |
| Our college is able to recruit students across its different courses and programs | 73(33) | 122(55.2) | 17(7.7) | 9(4.1) | 0 | 209.48 | 0.001 |
| Majority of our courses get enough quorum throughout their cohort | 51(23.3) | 100(45.7) | 46(21) | 19(8.7) | 3(1.4) | 272.17 | 0.001 |
| Our college is a market leader in this locality | 75(34.1) | 91(41.4) | 38(17.3) | 14(6.4) | 2(0.9) | 422.83 | 0.001 |
| Finding industry placement for our graduates is not difficult due to our market position | 86(38.7) | 98(44.1) | 27(12.2) | 8(3.6) | 3(1.4) | 433.9 | 0.001 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| We have been able to expand our course portfolio in the last few years in order to satisfy market demand | 86(38.6) | 112(50.2) | 15(6.7) | 8(3.6) | 2(0.9) | 403.09 | 0.001 |

The results in Table 3 suggest that all the χ2 values for the reactions to the statements were significant ($p \leq 0.05$), therefore, implying that the results could be statistically inferred as representative of the entire population. Most of the respondents agreed that their college were able to attract a diverse range of students at undergraduate level compared to peers (76.6%). Majority (83%) of the respondents also agreed that of all applications their colleges received from prospective students, majority ended up enrolling. Most colleges had developed strategic partnerships with other institutions including potential employers (80.3%). The results also indicate that majority of the colleges were able to recruit students across their different courses and programs (88.2%). The respondents also show that most of the respondents agreed that majority of their courses get enough quorum throughout their cohort (69%).

The results also indicate that most respondents agreed that their colleges were the market leaders in their area (75.5%). Most respondents also agreed that finding industry placements for their graduates was not difficult due to their market position (82.8%). Most had been able to expand their course portfolio in the last few years in order to satisfy market demand (88.8%). These results agree with Mazzarol (2008) who found that the higher education has experienced an increasing competition among universities and higher education institutes to attract students both locally and internationally. James et al., (2009) also found that the higher education environment has become competitive and institutions increasingly have to compete for students in the recruitment market.

### *4.5 Regression Analysis*

Bivariate regression analysis was caried out to evaluate the relationships between the dependent and independent variable. The results were then used to test the corresponding hypothesis stated for the study. The decision rule was to accept the hypotheses if the corresponding p-values was greater than $p > 0.05$ and reject otherwise. The findings are summarized in Table 3.

**Table 3: Regression Analysis**

***Model Summary***

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|
| .216a | 0.047 | 0.042 | 4.805 |

***Model ANOVA***

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 228.947 | 1 | 228.947 | 9.915 | .002b |

| | | | | | |
|---|---|---|---|---|---|
| Residual | 4687.443 | 203 | 23.091 | | |
| Total | 4916.39 | 204 | | | |

***Model Coefficients Summary***

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| (Constant) | 25.234 | 2.274 | | 11.095 | 0.000 |
| Competition | -0.23 | 0.073 | - 0.216 | - 3.149 | 0.002 |

Table 3 shows that the overall model adjusted $R^2$ is 0.047 which suggests that the model could explain up to 4.2 % (Adjusted R-Square) of the variations in the dependent variable the rest of the variation being explained by the variables not fitted in the model. The F-statistic in the ANOVA is 9.915 with a P value of $0.002 \leq 0.05$ which implies that the explanatory variable is significant in explaining variations in the dependent variable. The negative sign of competition denotes an inverse relationship between the two variables meaning an increase in one necessarily results in a decrease in the other. Further, the beta value -0.178 suggests that taking all other independent variables (college branding, program differentiation and program pricing) constant at zero, an increase in one unit of competition would result in a decrease of -0.178 standard deviations of market performance of the privately owned TVET colleges in the country. This finding agrees withManuh, *et al.,* (2007) who found that stiff competition in the HEI sector negatively affected the enrolment and other performance characteristics of private colleges.The results, further, concur with those of Agumbi, (2013), the competition for students was intense in the developed world creating a need for creation of competitive strategies in order to attract students faced with too many options.

### *4.6 Hypothesis Testing*

The null hypothesis was tested under;

**$H_{01}$**: Competition does not significantly affect market performance of privately owned TVET colleges in Kenya

The null hypothesis **$H_{01}$**: Competition does not significantly affect market performance of privately owned TVET colleges in Kenya is rejected since its p-value 0.002 is less than the 0.05 confidence level. Hence, the study concludes that competition has a significant effect on market performance of privately owned TVET colleges in Kenya. This finding suggests that the private TVET colleges in the country were operating in a very competitive higher education environment and this affected their market performance. The negative sign of the beta coefficient of competition is important and implies that the intensification of competition was having an adverse effect on the market performance of the private TVET colleges making only the more capable institutions to survive. The findings agree with Akbar et al., (2017) who pointed out that due to intensification of competition a shake-out may take place in these markets leaving only the strongest. The intense competition was informed by the increased college options for students as pointed out by Mbawuni and Nimako (2015). Failure to gain alternative admissions made the higher education institutes lose out on competition. The fact that prospective students who do not gain admission elsewhere as a first priority tend to seek for alternative admission. Prospective applicants also tend to apply for admission in more than one college and make judgment about which programme of study to consider as first, second and third choices.

## 5.0 Conclusions and recommendations

### 5.1Conclusions

The results revealed that there was a significant relationship between competitions on market performance of privately owned TVET colleges in Kenya. As a result, the study concludes that private TVET colleges in the country were operating in a very competitive higher education environment and this affected their market performance and, therefore, competition was a factor of market performance.

### 5.2 Recommendations

The privately sponsored middle level TVET colleges need to adopt competitive strategies that best fit their purpose and their environment. Imitating other industry players would in most cases turn out to be counterproductive. A much more viable option would be opting for strategy mix such as suggested by the Bowman's strategy clock in order for them to optimize gains.

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