# EFFECT OF KNOWLEDGE ACQUISITION ON ACADEMIC PERFORMANCE OF POSTGRADUATE STUDENTS OF PRIVATE UNIVERSITIES IN KENYA

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## Abstract

The concept of Knowledge Management (KM) has been used in measuring and gauging institutional performance. However, the effect of Knowledge Acquisition (KA) practices on academic performance of higher learning institutions is yet to be contextualized. This study attempted to bridge the aforementioned academic gap by assessing the effect of KA practices on academic performance on postgraduate students of private universities in Kenya, based on the theory of Resource Based View (RBV). Descriptive cross-sectional survey design was employed. A sample of 370 respondents was drawn from a population of 12,919 postgraduate students and faculty/department heads. Stratified random sampling technique was adopted in obtaining this sample. The findings established 27.8% variation in postgraduate academic performance; KA practice had very weak positive and insignificant correlation (r=0.044) and insignificant partial factor effect (β = 0.040, p=0.526) on postgraduate academic performance in private universities. The study concluded that KA did not have significant effect on postgraduate academic performance in private universities in emerging economies. Therefore, factors other than KM contributed to the academic performance, and they are worth exploring in future studies. The study recommends further research in methodologies and measures of knowledge acquisition as ways of improving application of knowledge management practices on students' academic performance

***Key Words**: Knowledge Acquisition Practice, Academic performance, Postgraduate Students*

*IJPP 10(2); 70-80*

## 1.0 Introduction

Knowledge generated within universities has been utilized resourcefully in gaining and sustaining competitive advantage across the globe. Knowledge Acquisition (KA) has become an institutional strategy which universities use for enhancing learning quality, innovation, improved decision making and productivity among scholars and learners (Amayah, 2020; Wanjiku, 2017; Wanderage et al., 2021). Gakuo and Rotich (2017) describes knowledge acquisition as the process involving identification, generation, and creation of knowledge. They noted that KA enables education institutions to effectively impart ideas that ecourage schorlarly discourses.

Diverse learning approaches and models have been adopted by universities to enhance

students' academic experiences (Shahzad, 2020). For instance, learning methods such as teams, work group presentations, in-class and online discussions; as well as collective problem solving have been well-established and are serving as the most popular and effective collaborative knowledge acquisition practices for improved and effective learning processes (Rono, 2017). Despite the above learning processes, the success of academic performance, as pointed out by Zhou and Li (2012), is dependent largely on attitude and behavior of individual learners, and the scientific and technological innovations used to capitalize on emerging acquisition strategies and practices beneficial to learning activities.

Within academic contexts, both public and private universities are viewed as sources of both academic and non-academic knowledge acquired through human efforts, research materials and activities created for consumption by faculty members, students, and the general public. According to Ramakrishnan and Yasin (2018), to ensure universities succeed in their academic endeavors, knowledge acquired should lead to effectiveness of the entire learning system. Application of knowledge acquisition should therefore be considered as an urgent strategy required by all institutions so as to remain competitive and attractive in the market. Further, these practices will make universities more sustainable in pursuit of desired goals. However, AK practices are yet to be explored, especially among private universities which have or have attract little or limited financial support from government. Poonkothai (2016) noted that universities' success pursuits for global excellence have largely focused on test as the only means to assess performance, and the endeavors have had little regard to KA. Webster et al. (2014) reported that from a systemic perspective, KA ought to focus more on market orientation as opposed to the current phenomenon of test and other measures of academic performance that are pursued by many public and private universities.

On the global scene, scholarly discussions on the subject of knowledge management strategies and innovations as performance tool was reported to have been ongoing. According to a study by Al-Hakim & Hassan (2013) which was conducted among Iraqi universities, inadequacy of favorable learning policies to facilitate knowledge acquisition was reported in both public and private universities. Al-Hakim and Hassan observed that knowledge acquisition happening through social interaction was unsystematic for application and use in academic contexts, and had minimal impact on expected efficiency of the overall learning performance. Regional discussion and review of past literature on knowledge acquisition indicates that tacit knowledge is primarily codified into documents as oppose to complete scholarly learning materials (Bosua & Venkitachalam, 2018; Metcalfe, 2016). In addition, there was minimal levels in the utilization of ICT tools by lecturers and students for optimal learning outcomes (Majewski, 2021). While these gaps have hampered academic performance, they have defined Kenyan higher learning education system, especially private universities' effectiveness in the application of knowledge acquisition practices, and its implementation

towards the realization of desired academics goals and successes.

In emerging economies such as Kenya, KA trends have consistently widened the gap in the use and applicability of academic materials for university education successes. Existing academic discussions too have failed to adequately clarify how KA practices and related initiatives have influenced the overall academic performance, specifically among private universities. This has been compounded by inadequacy in the information on how KA can be applied for competitive advantage. Lack of clear indicator(s) on how much KA practices have been implemented for better learning performance tracking, measurements and reporting (Kinyua et al., 2015).

### *Statement of the Problem*

Knowledge management is an emerging phenomenon in academic fraternity, and scholars across the globe have studied the effect of KA practices on academic performance. The focus of these studies has ranged from public to private, as well as commercial and non-commercial institutions. Mixed findings have been realized. However, reports on learners' and teachers' ignorance in the significance of having KA practices effectively operationalized in their organizations (Jenkins, 2020). Emphasis has also been made on how systems and individuals enhance KA, and the ultimate effect of KA on learning performance. Interestingly, private universities in Kenya lack consensus on the effect of KA practices on academic performance. Leedy and Ormrod (2020) reported that failure to deliver learning benefits in universities has been due to inadequacy of KA integration in the learning processes. Moreover, KA in higher learning institutions was related to academic discipline, and lacked regard for integration of instructional learning designs. As observed by Wanjiku (2017), universities required policy guidelines on the nature of interactions and the levels of engagements required towards productive scholarly work. This was a clear indication that majority of higher learning institutions had not utilized KA to the fullest. Therefore, this study seeks to investigate the effect of KA practice on academic performance in private higher learning institutions within the context of an emerging economy.

### *Study Objective*

The aim of the study was to establish the effect of knowledge acquisition on academic performance of postgraduate students of private universities in Kenya.

### *Research Hypothesis*

The following hypothesis was tested:

**$H_{01}$:** Knowledge acquisition has no significant influence on postgraduate academic performance of private universities in Kenya.

### *Theoretical Review*

This study was based on Resource-Based View (RBV) Theory of Knowledge Acquisition as advanced by Pensrose in 1960 to explain physical and human resources that provide services to an organization with added value (Grant, 1991). RBV theory aided in explaining the profit value an organization gained from acquiring new

knowledge. The theory conceived the university as an organization of productive academic documents existing in various forms (Barney et al, 2011). This theory postulates that the differences in organization performance happen when they possess valuable resources absent in other firms, thus allowing them to retain their quasi-monopolist form. According to Penros and Pitelis (2009), RBV was a contemporary approach to the analysis of knowledge acquired for sustained advantage in the learning space. Thus, the theory was instrumental in explaining universities' internal resources, emphasizing on capabilities to formulate strategies for achievements of academic performance in a sustainable manner.

***Empirical Literature Review***

Paulin and Suneson (2012) investigated the application of knowledge acquisition on academic performance among Canadian universities. Their study sought to find out if knowledge acquisition process could influence university operational performance. The study was based on the application and use of experience gained on a particular problem. The correlation result revealed significant and positive relationship between knowledge acquisition and operational performance. However, the study acknowledged that acquired knowledge must be specific to the problem domain, whether from archived academic repositories such as books, and human experts among others. Therefore, the study concluded that in managing knowledge, it is imperative that the knowledge be acquired in most useable formats for its proper application. In a similar study, Maqsood et al., (2017) reported that knowledge acquisition involves bringing external knowledge into the organization, either through generation of new knowledge or re-use of knowledge already in existence. Such knowledge enables learners and faculty staff to obtain knowledge that could aid and support learning. In a contrary observation, Anan et al. (2011) reported that mere existence of knowledge acquisition as a management practice in the university did not automatically translate into learning success, nor did it guarantee improved student's academic performance. Bayu (2018) was of the view that competitive advantage was totally dependent on knowledge acquisition and exploitation. Ghaffari et al. (2020), argued that this was the only source of sustainability among organizations, and the most important thing was to avail the right knowledge at the right time and place, and the ability to protect it and make it difficult to imitate (Bustinza et al., 2021). This argument is supported by AL-Hakim et al. (2013) who opine that the creation and acquisition of knowledge for use was important in every organization. Therefore, the attractiveness of a higher learning institution was largely dependent, not only on the mere existence of knowledge in the system, but also on the effectiveness of the relevance of knowledge acquired to the market demands. Therefore, knowledge acquisition should be prioritized among teaching institutions who are the supply chain managers of knowledge required by the learners (Memon, Rizvi & Syed, 2017).

## 2.0 Materials and Methods

Descriptive cross-sectional survey design was adopted for this study. According to Commission for University Education (CUE) statistical report of 2018/2019, there were 18 private chartered universities in Kenya, with 2,653 doctoral students and 9,966 master's students. From this report a target population of 12,919 graduate students under masters and doctoral programs was obtained. A sample of 370 respondents was drawn from the target population. The study sample had 95% confidence level according to Krejcie and Morgan (1970) sample size determination table. Stratified sampling method was used for creating strata, and this was based on the universities and levels of student performance. Students were then stratified according to the university they were enrolled with the aim to guarantee fair distribution of the sample. Weighted Proportionate Method (WPM) was then used to draw sample representative based on the weight of each stratum. Respondents were selected from each stratum using simple random sampling technique, and the responses on academic performance were obtained from the selected universities faculty/departmental heads using questionnaire.

The questionnaire was designed using goggle survey form and a link to the same created and shared for data collection from the respondent through respective universities across Kenya. The use was upon researchers' request to the Academic Registrars of participating universities for respondent contact sharing, linkages and support in facilitating online submission of dully filled forms. The choice of the data collection method was informed by the prevailing covid-19 pandemic and Ministry of Health protocols on Covid-19 containment measures. In addition, most universities at the time were conducting online classes and thus accessing student respondents physically would have been a great challenge for data collection activities

The validity and reliability of the instrument was conducted during the pilot study test undertaken at the University of Nairobi, Main Campus, which subscribed to the same standard as the study target population. The pilot study was conducted two weeks prior to actual data collection using a sample size of 9 respondents. The purpose was to allow error identification and effect modifications of the tool for enhanced accuracy, clarity and consistency of the research instruments (Mugenda & Mugenda, 2003). Cronbach alpha reliability result was 0.769, which was above 0.7 threshold. Collected data was cleaned, ordered and encoded, and analysed using descriptive and inferential analysis. The analysis was done with the aid of IBM-SPSS version 27 program. Simple linear regression analysis model below was adopted for this study:

$$Y=\beta_0+\beta_1 X_1 + \varepsilon$$

Where Y- Academic Performance

$X_1$ - Knowledge Acquisition

$\beta_0$ – Constant

$\beta_1$ – Beta coefficient

$\varepsilon$ - Error Term

Throughout the study, the researcher upheld the applicable ethical standard regarding

research studies, including but not limited to keeping anonymity, confidentiality, informed consent, and the respondent's right to withdraw.

## 3.0 Results and Discussion

***Descriptive Results of Knowledge Acquisition and academic performance in private universities***

The study developed six (6) item question elements to assess the effect of KA on postgraduate academic performance, as rated on a five-point Likert scale. Results of descriptive analysis are shown Table 1.

**Table 1**

*Respondents' agreement with knowledge acquisition questions*

| Statement | Majority response | | Mean | Mode | Std. Dev |
|---|---|---|---|---|---|
| | Category | % | | | |
| In my university, we look for research materials from similar earlier projects prior to beginning a new project | Strongly agree | 42.4 | 4.15 | 5 | 0.972 |
| In my university, looking for research materials from similar earlier projects is a required part of student projects | Strongly agree | 53.3 | 4.37 | 5 | 0.865 |
| In my university, new knowledge and other learning areas are acquired through academic lectures and instructions. | Agree | 46.7 | 3.58 | 4 | 1.142 |
| In my university, knowledge and other learning areas are acquired through students assignment and case studies | Strongly agree | 55.3 | 4.77 | 5 | 1.238 |
| In my university, we infer knowledge from varied academic source for both existing and new research topics. | Agree | 37.0 | 3.82 | 4 | 1.154 |
| In my university, we have repository for academic references which are relevant and updated for learning and research purposes | Agree | 38.6 | 3.43 | 4 | 1.304 |

Findings shows that private universities in Kenya, as part of knowledge acquisition, encouraged students to review past research materials from similar studies prior to beginning a new project as part of academic requirement. In addition, new knowledge and other learning areas were acquired through academic lectures and instructions, student's assignment and case studies. Students were further encouraged to infer knowledge from varied academic sources, including universities' repositories - which were perceived as relevant and updated - for learning and research purposes. The findings were in agreement with Agarwal and Islam (2014) study which reported that knowledge acquisition sources constitute expert's views, books, documents, sensors or computer files and personal experiences. Similarly, Bustinza et al., (2021) study supports this finding by observing that knowledge acquisition was achieved either through the generation of new knowledge or re-use of the existing knowledge.

***Inferential Results***

Table 2 presents inferential results of both Pearson correlation and regression alongside levels of significance.

**Table 2**

*Inferential results*

| Parsons Correlation | | Academic Performance | Knowledge Acquisition |
|---|---|---|---|
| Academic Performance | Correlation | 1 | |
| | Sig. (2-tailed) | | |
| Knowledge Acquisition | Correlation | .044 | 1 |
| | Sig. (2-tailed) | .553 | |
| R – square ($R^2$) | | | 0.278 |
| F-stat, (p-val) | | | 17.205, (0.001) |
| Beta Coefficient (β) | | | 0.040 |
| T-stats, (p-val) | | | 0.636, (0.526) |

Findings showed that knowledge acquisition exhibited very weak and insignificant positive correlation of r=0.044, p=0.553 with postgraduate academic performance, an implication that KA had insignificant effect on postgraduate academic performance. Results of coefficient of determination ($R^2$) was 0.278, implying that 27.8% variation in postgraduate academic performance in private universities was attributed to KA; while other factors not addressed by the study accounted for 72.2%. The higher F-value calculated ($F_{cul}$ = 17.205 > $F_{crit}$ = 2.46; p<0.001) implied that the model was fit for the study, and that KA elements studied explained postgraduate academic performance. The regression coefficient (β) result showed that KA had a standardized beta value of β = 0.040 (p=0.526); suggesting insignificant partial effect of KA on academic performance in postgraduate students in private universities. These results contradict a study by Agarwal and Islam (2014) that reported significantly strong relationship between knowledge acquisition and university student's academic performance.

Summary of test of the hypothesis is shown in Table 3.

**Table 3**

*Summary of Test of Hypothesis*

| S/No. | Null Hypothesis | Test Result | Verdict |
|---|---|---|---|
| 1 | **$H0_1$:** Knowledge acquisition has no influence on academic performance of university students in Kenya | t=0.636, P=0.526 | Since the t-cal is < t-crit, and p-value > 0.05, **Accept null hypothesis**. |

The study failed to accept the null hypothesis. This was because results showed KA had no significant effect on academic performance of postgraduate students in private universities in Kenya. The insignificant effect could be supported and evidenced by low variation of Knowledge acquisition (27.8%) on academic performance. Further, the results could imply that elements used in constructing the study model; namely, lecture notes and books, may have been inadequate in assessing and explaining KA variation on academic performance. In addition, other factors such as academic research which might have had significant effect on knowledge acquisition were not considered for the study. This finding contradicted results by Paulin and Suneson (2012) and Bustinza et al. (2021) who reported a significant and positive relationship between knowledge acquisition and university student's performance in the context of developed nations. Again, this contradiction could be attributed to the differences in study locality, since the study was conducted in Kenya, a developing nation.

## 4.0 Conclusion

The study purposed to establish the effect of knowledge acquisition on academic performance of postgraduate students in private university in Kenya. Summary of findings showed that knowledge acquisition is enhanced in private universities through encouraging students to explore research materials from similar studies prior to beginning a new project; urging them to acquire new knowledge and other learning materials through academic lectures and instructions, students' assignments and case studies; and encouraging students to infer knowledge from varied academic sources, including university repositories which are relevant and updated for learning and research purposes. In addition, knowledge acquisition had very weak positive and insignificant correlation with postgraduate academic performance. Similarly, the test of null hypothesis showed that KA has no significant effect on academic performance of postgraduate students in private universities in Kenya. The study therefore, concludes that in an emerging economy, KA has no significant effect on academic performance of postgraduate students in private universities.

## 5.0 Recommendations

Based on the results of the hypothesis test, KA had no significant effect on academic performance of postgraduate students in private universities in Kenya. Further, there were high values on factors not addressed by the study. This study therefore recommends that further research efforts be undertaken, examining the variables not covered within this study, and adopting methodologies and measures required for sound and practical knowledge acquisition practices. This will be the best way to improving knowledge management practices and application in higher education academic institutions for better academic performances.

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