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# ORGANIZATIONAL LEARNING AND PERFORMANCE OF MISSION HOSPITALS IN KENYA

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**ABSTRACT**

*This study investigated the effect of organizational learning on the performance of Mission hospitals in Kenya. The theories guiding the study were actor-network, learning curve, intellectual capital, and Resource-based theories. This study employed a cross-sectional survey research design. The unit of analysis was Hospital Administrators, Human Resource Managers, and the Donor representative of the hospital. The target population was 58 Mission hospitals in Kenya. The multiple sampling techniques were adopted in the study comprising of purposive sampling and simple random sampling techniques. A sample of 120 respondents was proportioned using the Yamane statistical formula. Primary data was collected using structured questionnaires while Secondary data was collected from performance reports and relevant documents. A pilot test was carried out using (17) questionnaires conducted at PCEA Kikuyu Mission Hospital. Data was analyzed using SPSS version 25 and descriptive (mean, standard deviation) and inferential statistics (correlation, multiple regression, ANOVA, and model summary) were generated. Correlation results showed that knowledge creation (r=.429, p=.395) knowledge retention (r=.412, p=.332) knowledge transfer (r=.480, p=.468), and knowledge transformation) r=.521, p=.507), all positively and significantly affect the performance of Mission Hospitals in Kenya. Multiple regression results show that knowledge creation (β=0.395, p<0.05), knowledge retention (β=0.332, p<0.05), knowledge transfer (β=0.468, p<0.05), and knowledge transformation (β=0.508, p<0.05) all positively and significantly affect performance of Mission hospitals in Kenya. The study results showed that knowledge creation, knowledge retention, knowledge transfer, and knowledge transformation significantly affect the performance of Mission hospitals in Kenya. The study recommended that Mission hospitals should establish a Research & Development function responsible for continuous research of new knowledge and develop a policy to assist in retaining acquired knowledge and undertake training programs on its staff to ensure knowledge retention. The mission hospitals should develop a mechanism to ensure organizational memory stability and promote knowledge-sharing behavior amongst the hospital staff by rewarding the behavior.*

**Key Words:** *Knowledge Creation, Knowledge Retention, Knowledge Transfer, Knowledge Transformation*

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## INTRODUCTION

The hospital is close essentially related to the knowledge-intensive property; it is shown by the professionals at the hospital as a key for providing quality care to patients. The healthcare industry is changing around the world, characterized by new disease patterns; advanced technologies; unpredictable patients' needs; physical infrastructure and diverse workforce requirements (Karlsberg & Pierce, 2017). Managing knowledge is becoming the Centre of everything that happens in the healthcare environment today. There is, therefore, need to have speedy access to an extensive range of materials for accurate information to help deliver the best possible services for patients by healthcare practitioners (Watkins & Kim, 2018). The healthcare sector is knowledge-intensive in the sense that it has a great amount of intangible assets and intellectual capital (Hoe, 2017). The health system is characterized by complexity, riskiness, uncertainty, and intense competitiveness which necessitates the utilization of employees' full capabilities. Thus, continuous learning and knowledge transfer are used to enable healthcare providers to cope with the complexities associated with the healthcare system and devise ways to adapt to such changes (Atatsi, Stoffers, & Kil, 2021).

In Africa, many companies for various reasons struggle to remain learning organizations due to reasons such as inadequate facilities and finances, fear of failure, having a fixed mindset that refuses to unlearn to learn, overreliance on past performance, and the attribution bias where success is attributed to one's hard work or skills, but blaming failures on bad fortune (Gino & Staats, 2017). Grigoli and Kapsoli (2018), asserted that inefficiencies undermine national efforts to strengthen the health systems.

In South Africa, due to this high turnover of employees, health institutions are currently faced with a shortage of healthcare practitioners, which impedes the ability of the sector to carry out its core mandate of patient care (Beath, 2016). According to Phillips (2020), Community-based Health Planning and Services (CHPS) combines implementation research with actions that aim to enable Ghana to achieve universal access to primary healthcare. Rather than relying solely on research, dissemination, and individualized training, a process of knowledge generation, systems learning, and action has emerged that has informed CHPS scale-up processes and enhanced prospects for achieving universal coverage of primary health care shortly.

Locally, Kenya has a distinct non-governmental health sector that mission hospitals belong to (Muga, Kizito, Mbayah, & Gakuruh, 2016). Traditionally, old mission hospitals were part of a large church and school complex. Their purpose was to facilitate and build capacity to enable them to deliver accessible, comprehensive, and quality health services to all (Christian Health Association of Kenya (CHAK), 2016a). Mission hospitals contribute 43% of healthcare service delivery in Kenya, mainly to the medium and low-income groups of the population that reside in the rural areas. Despite their importance, policymakers have not focused on their organizational performance, and knowledge of their efficiency and effectiveness is limited and often inadequate (Centre for Global Development (CGD), 2016).

To improve accountability and control mechanisms in hospitals, the government established the Health Sector Services Fund, which supports mission hospitals through the Management Committees (Christian Health Association of Kenya (CHAK), 2016a). Muhindi (2016) suggests that Mission hospitals adopt strategic planning practices to improve their organizational performance. Mutie and Irungu (2016) however found that only 25% of strategic plans have been realized. The standard and efficiency of healthcare service provision has stagnated, caused by the absence of high-level strategic focus, governance, and strategic control as well as inadequate funding (CGD, 2015).

In the past, mission hospitals received donations from sponsoring churches abroad and grants from

the government in form of drugs, specialized doctors, and vaccines (Mwangi & Ombui, 2016). In the 1980s, the environment changed, and many missionary doctors and nurses went back without replacement. The donations stopped, and grants from the government significantly declined and mission hospitals were threatened with extinction. Mburu (2016) suggests that Mission hospitals hugely contribute to healthcare service delivery owing to their big sizes and physical distribution in the country. A superior organization performance by mission hospitals would foster a healthy population by offering access to specialized treatment and setting standards for the national healthcare sector.

**Statement of the Problem**

Mission hospitals contribute 43% of healthcare service delivery (IFC, n.d.), and CHAK member mission hospitals are committed to providing comprehensive and sustainable quality healthcare service to all (CHAK, 2016). Hospitals operated by missionaries largely depend on donor funding and government subsidies for their operation. However, in recent years, donor funding, in general, has significantly reduced while regulations by the donor countries have been heightened to facilitate the efficient utilization of donations (Karlstedt, 2018).

In the past, the government posted consultant doctors and nurses to mission hospitals and gave essential drugs and vaccines (Mwangi & Ombui, 2016). There are also changes in the funding of hospitals, advanced technology, and demand for healthcare services. Faced with these challenges, and considering the changes taking place, mission hospitals need to examine how their performance is influenced by organizational learning. Modern healthcare is characterized by changes in unpredictable patient demands, advanced technology, diverse workforce requirements, and physical infrastructure. Public concern on healthcare issues has increased. Contextually, according to the Consumer Federation of Kenya (2017, September 5), Kijabe AIC Hospital was in the fraud spotlight following huge, patient exploitation. The report indicated that a patient had been admitted to the facility for two days but upon death on the theater table, the operation bill was Ksh. 313,000 which raised an alarm as it was a case of fraud in hospital billing.

Various studies have been done on organizational learning and performance. Gaturu and Oigo (2018) researched on influence of hospital capabilities on the performance of mission hospitals in Kenya and the findings revealed that there is a strong positive correlation between hospital capabilities and the organizational performance of mission hospitals in Kenya. However, the study presents conceptual gaps as it focused on hospital capabilities and not organizational learning. Muriithi and Kiiru (2021) conceptualized organizational learning into dialogue, and team learning, while Makabila (2018) measured organizational learning using learning Culture, learning processes, leadership practices, and systems thus presenting conceptual gaps. Wael (2019) researched on identifying organizational learning dimensions that promote patient safety culture in hospital pharmacies in Kuwait and found a significant effect. Further, Maina, and Mak'Anyengo, (2019) investigated organizational learning on hotel performance and established a significant effect. A study by Kanyi and Ndiege (2019) focused on knowledge management in the context of county governments and revealed sporadic nascent knowledge management practices in the counties. Based on the revealed gaps, the current study sought to fill the gaps by investigating organizational learning and performance in the context of missionary hospitals in Kenya.

**Objectives of the Study**

The general objective was to investigate the effect of organizational learning and the performance of mission hospitals in Kenya. The specific objectives were;

- To establish the effect of knowledge creation and the performance of mission hospitals in Kenya.


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- To determine the effect of knowledge retention and the performance of mission hospitals in Kenya.
- To investigate the effect of knowledge, transfer and the performance of mission hospitals in Kenya.
- To find out the effect of knowledge transformation and the performance of mission hospitals in Kenya.

The hypotheses of the Study were;

- H01: There is no significant effect of knowledge creation on the performance of mission hospitals in Kenya.
- H02: There is no significant effect of knowledge retention on the performance of mission hospitals in Kenya.
- H03: There is no significant effect of knowledge transfer on the performance of mission hospitals in Kenya.
- H04: There is no significant effect of knowledge transformation on the performance of mission hospitals in Kenya.

## LITERATURE REVIEW

### Theoretical Review

#### Actor-Network Theory

Actor-network theory (ANT) was chosen as a suitable theory to underpin this study. Actor-network theory (ANT) also known as enrolment theory, was first introduced to the social sciences during the mid-1980s by Bruno Latour and Michel Callon (Walsham, 1997). The term actor is typically used to denote both human beings and non-humans such as technological artifacts that interact within networks of other actors (Walsham, 1997). An actor is either a human or non-human entity (e.g. pencil, automobile, computer, and others) that possesses the ability to act. This means that the data collection, analysis of the data, and interpretation of the results of the analysis will be channeled by this theory.

The reason for using ANT to underpin the study was that it provides a basis for the study: both as an understanding of the essence of what is investigated in the study, and how to obtain knowledge about the phenomena studied. ANT is useful for understanding processes of knowledge sharing within the organizational context. ANT's emphasis on empirical inquiry allows the researcher to see the relations among different actors in the network (Doolin & Lowe, 2016). Paying attention to the actors' actions throughout the different stages of establishing the network, ANT assists in interpreting the events and explaining the outcome. The theory supports knowledge sharing variable.

#### Learning Curve Theory

While the term learning curve came into use in the early 20th century, Dr. Hermann Ebbinghaus described this theory in 1885. Ebbinghaus tested his memory over various periods and developed a visual representation of how learned information fades over time. The Ebbinghaus Forgetting Curve demonstrates how information is lost over time when no effort is made to retain it (Gupta, 2022). The learning curve theory proposes that a learner's efficiency in a task improves over time the more the learner performs the task (Valamis, 2019).

Later, Arthur Bills described the learning curve in his work General Experimental Psychology as a graphical device for picturing the rate of improvement in terms of a given criterion of effectiveness, as a result of practice. In 1936, Wright developed the Cumulative Average Model after realizing that the cost of aircraft production decreased with the increase in production performance. The experience curve theory states that the effort to complete a task should take less time and effort the more the assignment is done over time (Valamis, 2019).

#### Intellectual Capital Theory

Intellectual capital theory proponents are Becker in 1962 and Rosen in 1976. The theory posits that employees possess skill sets that are continuously improved through training and education. The theory emphasizes the value of knowledge in organizations and distinguishes it from physical capital. Knowledge as an intangible asset is the

single most valuable asset in the public service sector far more than physical assets those entities possess and are more likely to offer a competitive advantage to the organizations (Roos & Von Krogh, 1996).

Intellectual capital theory approaches the organizational difference between the book value of the firm and the possible money to be fetched for the firm as the intellectual capital. The intellectual capital includes patents, personal networks, corporate culture, trademarks, customer loyalty and copyrights, information technology, and employee knowledge. For this study, the theory supports knowledge transformation variables in the study.

**Resource-Based Theory**

Resource-based theory (RBT) was first put forward by Penrose (2009), who proposed a model for the effective management of firms' resources, diversification strategy, and productive opportunities. RBT provides a framework to highlight and predict the fundamentals of organizational performance and competitive advantage.

The resource-based view (RBT) theory has widely been used in the studies of organizational performance (Innocent, 2015). The RBT talks about the organization's unique resources and capabilities which differentiate the one organization from other organizations in a similar industry. The RBT also tries to answer the question of how organizations can achieve a competitive advantage over other industry organizations and enhance their organizational performance.

**Conceptual Framework**

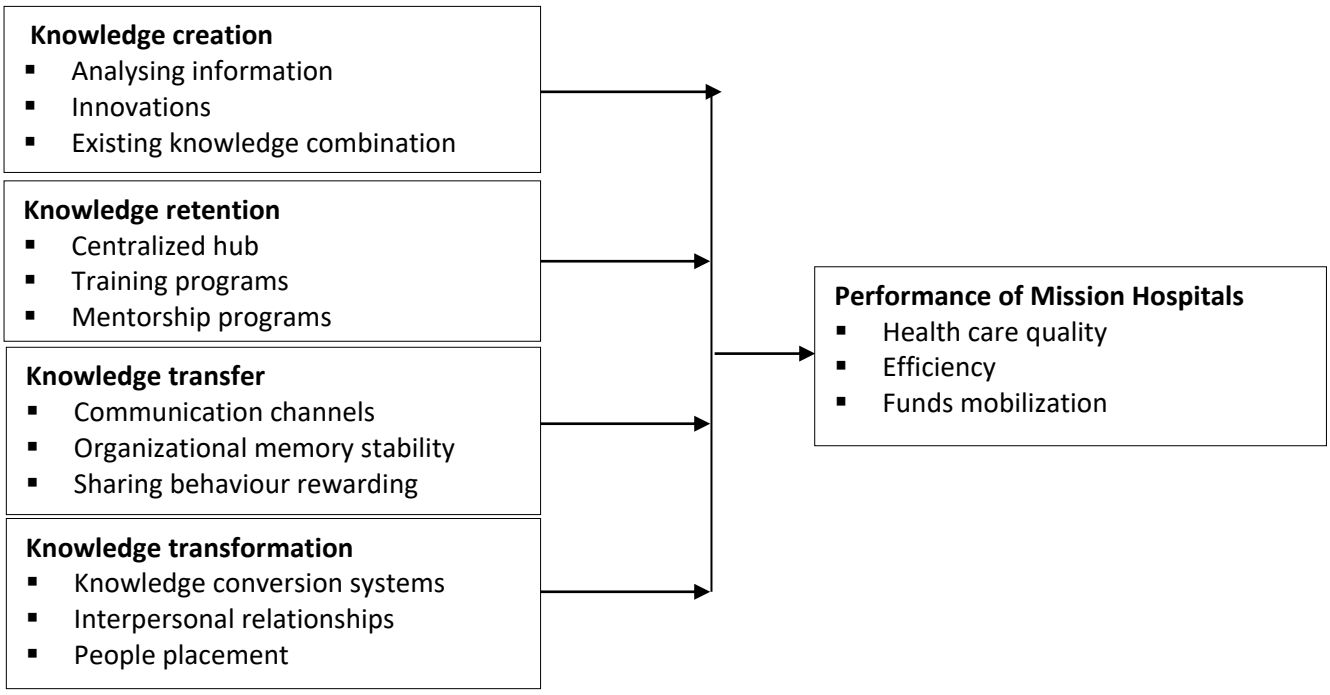


**Figure 1: Conceptual framework**

**Empirical Review**

Garcı´a-Moralesa, Llore´ns-Montesa, and Verdu´-Joverb (2017) studied the influence of personal mastery on organizational performance through organizational learning and innovation in large firms and SMEs. The paper was based on a sample of 401 Spanish firms. The results reveal that in both types of firms: personal mastery influences organizational

performance directly and indirectly through organizational learning and innovation; organizational learning influences organizational performance positively.

Wael (2019) explored the relationship between organizational learning and patient safety culture in hospital pharmacy settings through the LOS-27 and PSPOSC instruments. In addition, the relationship between the different dimensions of organizational learning and pharmacy patient safety culture is explored. The current study has adopted the positivism paradigm. The study also adopted a descriptive research design because it was based on a review of the relevant literature to find appropriate instruments for data collection. The data for the current study was accumulated by administering quantitative questionnaires. It was found that in the context of Kuwaiti pharmacies, organizational learning was positively related to the performance of the staff in creating a positive patient safety culture.

A study by Nawaz, Hassan, and Shaukat (2018) sought to investigate the impact of information acquisition, dissemination, and responsiveness on the innovation and performance of the firm. The study used a descriptive research design and data was collected from 407 manufacturing firms listed in the Karachi Stock Exchange. The data analysis tool used was SPSS. The validity and reliability of the scales of measurement were confirmed by factor analysis and Cronbach's alpha. Regression analysis and correlation analysis were adopted as data collection techniques. The study showed that all the adopted proxies of knowledge management had a positive and significant relationship with performance and innovation.

Mtawali (2018) did an investigation on knowledge management practices and the performance of micro-finance institutions in Kenya. The study adopted a descriptive research design where data was collected through questionnaires. The target population was 111 employees of Uwezo Micro-finance Bank. The sample size for the questionnaire was 87 respondents determined using Cooper and Schindler's formula for sample size selection. Quantitative data were analyzed using frequencies and percentages. Results were presented using frequency distribution tables. Qualitative data were analyzed using bivariate correlation analysis. From the discussion of the key findings, the study concluded that knowledge management practices positively impacted the organizational performance of Microfinance institutions in Kenya.

Ngahu (2017) sought to investigate trends in the dimensions of low, medium, and high knowledge management (KM) capability of business process outsourcing (BPO) firms and explore the trends in BPO performance with different levels of KM capabilities of BPO firms. A survey was carried out to collect data on managers from 605 firms. Kmeans cluster analysis was performed on the aggregate measures of the four KM capability dimensions and BPO performance to reveal trends. Subsequently, MANOVA was used to evaluate the effects of four firm characteristics on KM capability, and individual ANOVA tests were performed to examine the specific differences among the four dimensions. They found that each dimension of knowledge management capability has a positive effect on business process outsourcing performance. Knowledge application was found to be the most significant dimension correlated to business process outsourcing performance.

Wamitu (2016) carried out a study on the influence of tacit knowledge sharing in the public sector. The study employed a descriptive research design. The collected data was analyzed quantitatively by use of Statistical Package for Social Science. The results of the study established that functional boundaries have a significant influence on performance. Muhoya (2017) did a study on the influence of knowledge management practices on the performance of audit firms. The study applied a descriptive research design. Questionnaires were used to collect primary data. The study was quantitative. The results indicated that knowledge application significantly affected the performance of audit firms in Kenya.

Karani (2018) did a study on Knowledge management practices and performance of mobile telephone companies. The study targeted senior management staff of mobile telephone firms in Kenya. The study applied a descriptive research design. Questionnaires were used to collect primary data. The study was quantitative. The study results showed that knowledge sharing had the most significant effect on the performance of mobile telephone companies.

## METHODOLOGY

This study used a cross-sectional survey research design because of the research problem highlighted. According to Kenya Medical Directory (2023), there are 58 Mission hospitals in Kenya as of 31st December 2023. The study population comprised all 58 Mission hospitals in Kenya. In this study Yamane's (1967) mathematical formula was adopted to select an appropriate sample size from a finite population. The sample size of the study was 120 respondents. Multiple sampling technique was used in the study. A structured questionnaire was adopted in this study to collect primary data from the respondents. A structured self-completed research questionnaire was distributed to the target population and collected after one week. To achieve a higher level of reliability of research instruments, this study adopted a threshold of Cronbach alpha of 0.7. The data collected was coded and analyzed using descriptive statistics and inferential statistics as data analysis techniques.

## RESULTS

### Descriptive Results

### Knowledge Creation

The researcher asked respondents to rate their agreement or disagreement on the various aspects of knowledge creation. They were required to do this on a 5-point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 1:

**Table 1: Knowledge Creation**

| | Mean | Std. deviation |
|---|---|---|
| The hospital creates new knowledge by analyzing existing information | 4.17 | .231 |
| The hospital has research and development unit responsible for continuous research of new knowledge | 4.23 | .536 |
| The hospitals have a mechanism to combine existing knowledge to produce hybrid knowledge | 4.02 | .444 |
| The hospital staff are encouraged to share ideas freely | 4.26 | .703 |

The results in Table 1: have shown that respondents agreed that the hospital creates new knowledge by analyzing existing information and that the hospital has a research and development unit responsible for continuous research of new knowledge as indicated by a mean of 4.17 and mean of 4.23 respectively. Respondents also agreed that the hospitals have a mechanism to combine existing knowledge to produce hybrid knowledge (mean=4.02) and that the hospital staff are encouraged to share ideas freely (mean=4.26).

### Knowledge Retention

The study respondents were asked to rate their agreement or disagreement on the various aspects of knowledge retention. They were required to do this on a 5-point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 2:

**Table 2: Knowledge Retention**

| | Mean | Std. Deviation |
|---|---|---|
| The hospital has a centralized hub to store retrievable knowledge | 4.41 | .817 |
| The hospital has developed a policy to assist in retaining acquired knowledge | 2.15 | .634 |
| Hospital undertakes training programs on its staff to ensure knowledge retention | 4.26 | .509 |
| The hospital has mentorship programs for its employees | 3.01 | .822 |

The results in Table 2: have shown that respondents agreed that the hospital has a centralized hub to store retrievable knowledge and that the hospital has developed a policy to assist in retaining acquired knowledge as indicated by a mean of 4.41 and a mean of 4.26 respectively. Also, respondents agreed that the hospital undertakes training programs for its staff to ensure knowledge retention (mean=2.15). Respondents were indifferent to the statement that the hospital has mentorship programs for its employees (mean=3.01).

**Knowledge Transfer**

The study respondents were asked to rate their agreement or disagreement on the various aspects of knowledge transfer. They were required to do this on a 5-point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 3:

**Table 3: Knowledge Transfer**

| | Mean | Std. Deviation |
|---|---|---|
| The hospital uses combination of communication channels for ease of information sharing | 4.13 | .882 |
| The hospital has a mechanism to ensure organizational memory stability | 4.20 | .887 |
| The hospital promotes knowledge sharing behavior amongst the hospital staff by rewarding the behavior | 4.82 | .883 |
| The hospital encourages team learning | 4.89 | .881 |

The results in Table 3: have shown that respondents agreed that the hospital uses a combination of communication channels for ease of information sharing and that the hospital has a mechanism to ensure organizational memory stability as indicated by a mean of 4.13 and a mean of 4.20 respectively. Respondents also agreed that the hospital promotes knowledge-sharing behavior amongst the hospital staff by rewarding the behavior (Mean=4.82) and that the hospital encourages team learning (Mean=4.89).

**Knowledge Transformation**

The study respondents were asked to rate their agreement or disagreement on the various aspects of knowledge transformation. They were required to do this on a 5-point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 4:

**Table 4: Knowledge Transformation**

| | Mean | Std. Deviation |
|---|---|---|
| The hospital has knowledge conversion systems | 3.66 | .753 |
| The hospital promotes interpersonal relationships amongst its staff to ensure knowledge transformation | 4.66 | .748 |
| The hospital promotes risk-based thinking among its employees | 4.52 | .741 |
| The hospital performs people placement in various capacities to promote information transformation | 3.64 | .756 |

The results in Table 4: revealed that respondents agreed that the hospital has knowledge conversion systems and that the hospital promotes interpersonal relationships amongst its staff to ensure knowledge transformation as indicated by a mean of 3.66 and a mean of 4.66 respectively. Respondents also agreed that the hospital promotes risk-based thinking among its employees (Mean=4.52) and that the hospital performs people placement in various capacities to promote information transformation (Mean=3.64).

**Correlation Analysis**

Correlation analysis was done to determine the correlation between organizational learning and the performance of Mission hospitals using Pearson's product-moment correlation analysis. The results are shown in Table 5:

**Table 5: Correlation Results**

| | | Knowledge creation | Knowledge retention | Knowledge transfer | Knowledge transformation | Performance |
|---|---|---|---|---|---|---|
| Knowledge creation | Pearson Correlation | 1 | | | | |
| | Sig. (2-tailed) | | | | | |
| | N | 107 | | | | |
| Knowledge retention | Pearson Correlation | .324 | 1 | | | |
| | Sig. (2-tailed) | .061 | | | | |
| | N | 107 | 107 | | | |
| Knowledge transfer | Pearson Correlation | .025 | .151 | 1 | | |
| | Sig. (2-tailed) | .888 | .393 | | | |
| | N | 107 | 107 | 107 | | |
| Knowledge transformation | Pearson Correlation | .128 | .146 | .083 | 1 | |
| | Sig. (2-tailed) | .470 | .409 | .641 | | |
| | N | 107 | 107 | 107 | 107 | |
| Performance | Pearson Correlation | .429* | .412 | .480 | .521 | 1 |
| | Sig. (2-tailed) | .038 | .046 | .034 | .000 | |
| | N | 107 | 107 | 107 | 107 | 107 |

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

From the bivariate correlation results, it was established that knowledge creation and performance had a significant and positive correlation of r=0.429. Further, the bivariate correlation between knowledge retention and performance was revealed to be positive and significant (r=0.412). The correlation between knowledge transfer and the performance of mission hospitals stood at r=0.480 indicating a positive and significant correlation. Knowledge transformation and performance correlation were found to be significant and positive (r=0.521). The results imply that knowledge transformation had the highest correlation coefficient while knowledge retention had the least correlation with performance.

**Multiple Regression Analysis**

**Diagnostic Tests**

The data collected using the research questionnaire was subjected to three diagnostic tests, that is, normality, multicollinearity, and linearity test. The fact that the collected data were categorical (precisely, ordinal) informed the aforesaid diagnostic tests.

**Test of Normality**

The assumption was tested using the Shapiro-Wilk test. Findings are shown in Table 6:

**Table 6: Test of Normality**

| | Shapiro-Wilk | | |
|---|---|---|---|
| | Statistic | Df | Sig. |
| Performance | .931 | 16 | .119 |

The p-value was .119 which implies that residuals assumed a normal distribution.

**Test of Multicollinearity**

Multi-collinearity was measured using tolerance and Variance Inflation Factor (Kim, 2019). Tolerance of respective independent variables was calculated using formula 1 - $R^2$ while the reciprocal of tolerance is known as Variance Inflation Factor (VIF). Multi-collinearity is there when VIF is above 5 and the tolerance value is below 0.2. Results are presented in Table 7:

**Table 7: Test of Multicollinearity**

| | Collinearity Statistics | |
|---|---|---|
| **Study Constructs** | **Tolerance** | **VIF** |
| Knowledge creation | .769 | 1.308 |
| Knowledge retention | .821 | 1.235 |
| Knowledge transfer | .804 | 1.287 |
| Knowledge transformation | .889 | 1.190 |

a. Dependent Variable: Performance

According to the results shown in Table 7: all the four independent variables, that is, knowledge creation (VIF = 1.308), knowledge retention (VIF = 1.235), knowledge transfer (VIF = 1.287), and knowledge transformation (VIF = 1.190). This meant that there were no serious multi-collinearity problems detected in the study. According to Kimaku, et al. (2019b), mean centering of data eliminates possibilities of multi-collinearity in each data. This was achieved by subtracting the means of each variable from the overall mean.

**Hypothesis Testing**

Multiple regression analysis was applied to test whether the null hypothesis stipulated in this study is true.

**Table 8: Hypothesis Testing**

| Hypothesis Statement | Hypothesis Test | Decision Rule |
|---|---|---|
| **$H_{01}$:** There is no significant effect of knowledge creation on the performance of mission hospitals in Kenya. | H0: β1 = 0<br>HA: β1 ≠ 0<br>-To conduct F-test to assess overall model significance | Reject $H_0$1 IF P-value ≤ 0.05 otherwise fail to reject $H_0$1 if P-value is > 0.05 |
| **$H_{02}$:** There is no significant effect of knowledge retention on the performance of mission hospitals in Kenya | H0: β2 = 0<br>HA: β2 ≠ 0<br>-To conduct F-test to assess overall model significance | Reject $H_0$2 IF P-value ≤ 0.05 otherwise fail to reject $H_0$2 if P-value is > 0.05 |
| **$H_{03}$:** There is no significant effect of knowledge transfer on the performance of mission hospitals in Kenya. | H0: β3 = 0<br>HA: β3 ≠ 0<br>-To conduct F-test to assess overall model significance | Reject $H_0$3 IF P-value ≤ 0.05 otherwise fail to reject $H_0$3 if P-value is > 0.05 |
| **$H_{04}$:** There is no significant effect of knowledge transformation on the performance of mission hospitals in Kenya | H0: β4 = 0<br>HA: β4 ≠ 0<br>-To conduct F-test to assess overall model significance | Reject $H_0$4 IF P-value ≤ 0.05 otherwise fail to reject $H_0$4 if P-value is > 0.05 |

The regression coefficients were computed and adopted as the basis for testing research hypotheses. The study used the P-value method to reject the null or fail-to-reject null hypothesis. The first objective of the study was to investigate the effect of knowledge creation on the performance of mission hospitals in Kenya. The regression results for knowledge creation were $\beta1=0.395$ and $p<0.05$ showing that there is a positive and significant relationship between knowledge creation and performance. It is therefore concluded that a unit change in knowledge creation, on average, would lead to a 0.395-unit change in performance. Since the P-value calculated is less than the significance level, reject the null hypothesis that knowledge creation has no significant effect on performance.

The second objective was to establish the effect of knowledge retention on the performance of Mission hospitals in Kenya. Based on the regression results $\beta2$ was = 0.332, $p<0.05$, and knowledge retention significantly affected performance. According to the study, a unit change in knowledge retention, on average, would lead to a 0.332-unit change in performance. Since the P-value calculated is less than the significance level, reject the null hypothesis that knowledge retention has no significant effect on performance.

The third objective of the study was to find out the effect of knowledge transfer on performance. Regression results revealed that knowledge transfer had a significant and positive effect on performance as shown by $\beta3 = 0.468$, and $p<0.05$. According to the findings, a unit change in knowledge retention, on average, would lead to a 0.468-unit change in performance. Since the P-value calculated is less than the significance level, reject the null hypothesis that knowledge transfer has no significant effect on performance.

The fourth objective of the study was to determine the effect of knowledge transformation on performance. According to regression analysis results, knowledge transformation had a significant and positive effect on performance ($\beta4 = 0.507$, and $p<0.05$), which implied that a unit change in knowledge transformation, on average, would lead to 0.507-unit change in performance of Mission hospitals in Kenya. Since the P-value calculated is less than the significance level, reject the null hypothesis that knowledge transformation has no significant effect on performance.

**SUMMARY**

The general objective of the study was to determine the organizational learning and performance of Mission hospitals in Kenya. The results of the pilot study, the respondents' demographic data, the descriptive analysis of independent variables, and the inferential statistics are the four sub-sections that made up the study. The response rate was 89.2%, which was achieved due to a low number of respondents targeted and intense follow-up of the questionnaire.

Descriptive statistical findings revealed that respondents agreed that the hospital creates new knowledge by analyzing existing information and that the hospital has a research and development unit responsible for continuous research of new knowledge. Respondents also agreed that the hospitals have a mechanism to combine existing knowledge to produce hybrid knowledge and that the hospital staff are encouraged to share ideas freely.

According to a descriptive analysis, it was revealed that respondents agreed that the hospital has a centralized hub to store retrievable knowledge and that the hospital has developed a policy to assist in retaining acquired knowledge. Also, respondents agreed that the hospital undertakes training programs for its staff to ensure knowledge retention. Respondents were indifferent to the statement that the hospital has mentorship programs for its employees.

According to the descriptive findings, respondents agreed that the hospital uses a combination of communication channels for ease of information sharing and that the hospital has a mechanism to ensure organizational memory stability. Respondents also agreed that the hospital

promotes knowledge-sharing behavior amongst the hospital staff by rewarding the behavior and that the hospital encourages team learning.

According to a descriptive study, respondents agreed that the hospital has knowledge conversion systems and that the hospital promotes interpersonal relationships amongst its staff to ensure knowledge transformation. Respondents also agreed that the hospital promotes risk-based thinking among its employees and that the hospital performs people placement in various capacities to promote information transformation.

**CONCLUSIONS**

The study concludes that knowledge creation has a significant effect on the performance of Mission hospitals in Kenya. It is concluded that the existing information is utilized by the Mission hospitals to generate new knowledge. The mission hospitals have a research and development unit responsible for continuous research of new knowledge. The study concludes that hospitals have a mechanism to combine existing knowledge to produce hybrid knowledge. Also, the mission hospitals encourage employees to share ideas openly.

The study concludes that knowledge retention has a significant effect on the performance of Mission hospitals in Kenya. The hospital has a centralized hub to store retrievable knowledge. It is concluded that the hospital has developed a policy to assist in retaining acquired knowledge and the hospital undertakes training programs for its staff to ensure knowledge retention. The study concluded that the hospital has mentorship programs for its employees.

The study concludes that knowledge transfer has a significant effect on the performance of Mission hospitals in Kenya. The study concludes that the hospital uses a combination of communication channels for ease of information sharing. The mission hospital has a mechanism to ensure organizational memory stability and promotes knowledge-sharing behavior amongst the hospital staff by rewarding the behavior and the hospital encourages team learning.

The study concludes that knowledge transformation has a significant effect on the performance of Mission hospitals in Kenya. The study concluded that the hospital has knowledge conversion systems, and that the hospital promotes interpersonal relationships amongst its staff to ensure knowledge transformation. It is concluded that the hospital promotes risk-based thinking among its employees and that the hospital performs people placement in various capacities to promote information transformation.

**RECOMMENDATIONS**

The study recommended that the Mission hospitals should design programs to enable conversion of the existing information to generate new knowledge. In addition, the mission hospitals should establish a Research & Development function responsible for continuous research of new knowledge.

The study recommended that the mission hospitals should develop a policy to assist in retaining acquired knowledge and undertake training programs for its staff to ensure knowledge retention. The study recommends that mission hospitals should establish mentorship programs for their employees.

The study recommends that the management of mission hospitals should utilize a combination of communication channels for ease of information sharing thus ensuring knowledge transfer to all parts of the hospital.

The study recommends that mission hospitals should embark on building sustainable knowledge transformation systems to promote interpersonal relationships amongst their staff to ensure knowledge transformation.

**Areas for Further Research**

The scope of this study was limited to organizational learning and performance of Mission hospitals in Kenya. Other studies should be done to determine the other organizational learning

constructs not factored in the current study and ascertain their effect on the performance of not only mission hospitals but also other sectors of the economy.

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