Performance Enhancement Through Occupational Risk Control Practices. Empirical Findings from Commercial Banks in Kenya

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Abstract: *The aim of the study was to elucidate the contributive power of Occupational Risk Control (OcRC) practices on the performance of commercial banks in Kenya. Occupational risks are risks associated with employee activities within an organization. The control of such risks is essential in ensuring good performance given that such risks are highly unpredictable, yet they are inherent in the day to day organizational operations. The specific practices were mandatory leave, process flows, employee supervision, and internal audits. A positivist philosophy was adopted in this study. The study involved a census survey taking into account all the 38 banks that were operating in Kenya at the time of the study. Data were collected using closed-ended questionnaires and analyzed by the Statistical Package for Social Sciences (SPSS) tool. Both descriptive and inferential analyses were used to draw the conclusions. From the results, there was a statistically significant positive relationship between OcRC practices and the performance of commercial banks in Kenya. The study findings led to the recommendation that there is the need to ensure that the effectiveness of all the applicable OcRC practices within banks and other organizations are evaluated. In addition, it is essential to have interdepartmental cohesiveness in implementing workable OcRC practices.*

1. Introduction

1.1. Background of the Study

The recent years have witnessed significant dynamics in the performance of commercial banks around the globe, with both improvements and challenges in equal measure. At the base of it are potential and manifest occupational risks that banks have to grapple with to sustain their performance. Myles (2018) observes that as much as the American commercial banks have shown robustness in their recovery from the 2008 financial crisis, the European markets are still struggling. For instance, many European-based commercial banks are becoming smaller in size with significant exits from major market that were initially gainful (Myles, 2018). Chinese commercial banks, on the other hand, were expansive in their performance. For instance, by 2018, the largest four banks in the world were from China (Myles, 2018). Such performance asynchrony is highly associated with the risks that the banking system is exposed to. Some of the risks can be narrowed down to employee-related activities. The fall of Barings in the USA in 1995 was associated with rogue trading, traceable to a senior employee (Beattie, 2020). Recently, the collapse of Enloe State Bank (ESB) in the USA was attributed to origination and concealment of large value fraudulent loans by the senior level management (Federal Deposit Insurance Corporation, 2020). In the same vein, the collapse of the City National Bank of New Jersey was linked to an unsafe operational environment associated with employee related activities (Pedersen, 2019). Such losses are a huge threat to the realization of the Sustainable Development Goals (SDGs) which highly rely on financing from commercial banks. The first SDG which advocates for "No Poverty" caannot be realized in an environment that is characterized by massive job losses such as those experienced when banking institutions close due to occupational risks.

Within the African region, there still lies growth potential for commercial banks given the vastness of unexplored markets (McKinsey and Company, 2018). In 2017, there was an expansion of the total assets in the banking industry by 11.55%, with a slightly higher growth in 2018, by 0.1% (African Business, 2019). Good performing markets between 2017 and 2018 included Nigeria, Mauritius, Morocco, Kenya, and South Africa. Country-wise, South African commercial banks saw a strong asset growth of 16% in 2017 and 15% in 2018 (African Business, 2019). Nigeria, on the other hand, had an 11.47% growth in assets with a 2.59% return on assets (African Business, 2019). The results are a testimony that the region's banking industry is growing steadily, although there are still numerous opportunities that have not yet been explored. Among the major reasons attributed to bank failure in Africa is poor governance, which fall under employee related risks (Dzomira, 2014).

In Kenya, commercial banks are considered as among the key drivers of the economy despite numerous challenges that are seen through turbulent performance patterns. According to Ndung'u and Onsando (2014), the contribution of the financial sector towards the country's growth domestic product (GDP) at the end of 2013 was at 3.7%. Since then, there has been an upward trend over the years that followed. Between 2017 and 2019, the contribution of the financial institutions to the GDP was at an everage of five percent (CBK, 2020). Despite such an important contribution, some of the challenges that the banking sector is facing are far-reaching. In 2017, for instance, there was a performance decline, felt through a reduction of pre-tax profit by 9.6%. This amounted to Ksh. 133.2 billion from

Ksh.147.4 billion the previous year (CBK, 2018). Gross lending also saw a decline from Ksh 2.29 trillion to Ksh 2.16 trillion between 2016 and 2017, reflecting a 5% decrease (CBK, 2018). The banking sector is also threatened by numerous occupational risks that put its performance at stake. A testimony to this is the closure of three banks, namely Dubai Bank, Imperial Bank and Chase Bank, all of which were attributed to a risky operational environment that was instigated by malpractices by senior banking management (CBK, 2017). Further, the take-over of the National Bank of Kenya (NBK) by the Kenya Commercial Bank (KCB), following a streak of poor performance exemplifies the risky ground on which commercial banks stand, hence the need to effectively control risks (such as occupational risks) to enhance the safety of the operational environment.

1.2 Statement of the Problem

Good performance is a key agenda for all organizations, hence the need to have a robust risk mitigation framework in place. Given the risky nature of the banking industry, there is the need for enhanced mitigation of occupational risks. The importance of banks to the Kenyan economy cannot be over-emphasized. For instance, the entire financial sector contributed to more than 5% of the GDP in 2018 (CBK, 2019).However, such a contribution still remains minimal when compared to the high potential that exists for banks.

Signs of unsatisfactory performance are evidenced through the comparison of the 2019 profits of the entire Kenyan banking system with that of a single American bank (JP Morgan). Kenya made a total of USD. 1.591 billion while JPMorgan realized $36.43 (Norrestand, 2020).Further, 2019saw seven commercial banks run into heavy losses (CBK, 2020). Such a state of performance is a threat to the realization of the Big Four Agenda, which aims at Food Security, Affordable Housing, Manufacturing, and Affordable Healthcare for the Kenyan population as envisioned by the President Uhuru Kenyatta in 2017. This is as a result of the dismal contribution of commercial banks to the GDP, when indeed they have a greater potential to boost the agenda. Huge losses have been notable in the National Bank of Kenya (NBK), amounting to Kes 821 million in 2019 when compared to the profits of Kes 587 in 2018 (CBK, 202O). Out of lapses in mitigation of employee-related risks, commercial banks have suffered severe consequences. The closure of Imperial Bank in 2016, for example, was connected with failure to follow stipulated procedures while carrying out operations (Gathaiya, 2016). Similarly, part of the reasons that led to the collapse of Chase Bank was the concealment of insider lending activities (Stevis, 2016). Additionally, the customer satisfaction level of commercial banks is below the satisfactory standards. A 2018 survey by the Kenya Bankers Association (KBA) indicates that more than 30% of the banking customers were dissatisfied by the banking services. Such dissatisfaction can be hinged on occupational risks such as poor employee fatigue, inadequacy in product knowledge, ineffective supervision (KBA, 2018). The scenario places commercial banks on a shaky ground, hence the need to continuously evaluate the effectiveness of OcRC practices that are being employed.

Notably, available literature lacks the scholarly attention on the influence of OcRC on the performance of commercial banks. Abdrahamane et al (2017) did a study on bank risk management and how it affects banks performance in Mali. The study however ignores employee-related risks; and further it is difficult to apply it Kenya due to contextual variations between the two countries. In the same vein, although Mengich and Njiru (2015) established a significant impact of risk management on financial performance within SACCOS in Nakuru County, the study did not focus on employee risk mitigation, despite the high gravity of such risks on bank performance. This study therefore aimed at narrowing such gaps by elucidating the effectiveness of various OcRC practices together with their influence on the performance of Kenyan commercial banks.

1.3 Research Objective

The objective of this study was to evaluate the relationship between OcRC practices and the performance of commercial banks in Kenya.

2. Literature Review

A number of theoretical and empirical theories exist on OcRC practices and how they influence performance.

2.1 The Contingency Theory

The Contingency Theory (CT) is part of the wider Organizational Theory. The Organizational Theory consists of different approaches towards effective organizational management, grounded by the assumption that an organization consists of social units of people, structured in a way that helps in meeting specified needs or objectives (Thornton, 2001). Other theories under organizational theory include Rational System Perspective, Bureaucratic Theory, and Division of Labour (Thornton, 2001). For this study, the CT is explored given its relevance in OcRC.

According to the CT, the best way to manage an organization is through contingency (Woods, 2007). Woods (2007) noted that despite there being various risk control structures within the Birmingham City Council, they are more effective when applied in a contingent manner to the three variables that she identified as key to risk management. These variables were information and communication technology, the size of an organization, and the prevailing government policies.

In their working paper on the link between CT and Enterprise Risk Management, Mikes and Kaplan (2014) observed that there is a general misunderstanding that there being an abundance of principles and frameworks of enterprise risk management, the practice has reached its maturity level in most organizations. The scholars, however, argue that risk management is an ever-evolving practice as evidenced through the existing literature and empirical field research. The backup of the CT ideals should therefore be embraced to be certain that the risk management approaches are fit for the ever-changing and unpredictable business environment (Mikes & Kaplan, 2014). The theory is relevant to this study as it engenders the contingency nature of the

selected OcRC practices for study. Among the weaknesses of the theory is the fact that it is open-ended when being applied in OcRC. This can create a lot of debate on which approach is the most appropriate. The theory may therefore not be applied wholesomely while disregarding other related theories.

2.2 Performance Measurement Models

Performance is enshrined in a number of theories and concepts. According to Edgar (n.d), performing refers to a series of actions which are complex in nature that brings together both knowledge and skills to come up with desirable results. The author proposes measurement of performance through the use of parameters such as the level of increment in quality, capacity, knowledge, and innovation while at the same time reducing the costs involved. Edgar's proposition has found discipleship in scholars such as Nyanza, Mukulu, and Iravo (2015) through their study on performance management systems in procurement. This approach to performance measurement has commonalities with Kaplan and Norton's (1996) Balanced Score Card (BSC) model which has been widely used in the measurement of organizational performance. The BSC model categorizes performance in four aspects, namely financial perspective, customer perspective, internal processes, and learning and growth (Kaplan & Norton, 1996). This model was adopted by Washika et al (2021) during their study on financial risk management practices and how they affect sustainability of private hispitals in Nairobi. The authors established a high correlation between the two variables, while advocating for the adoption of the BSC model in measuring sustainability on account of its inclusivity of both the financial and non-financial perspectives. Apart from the BSC model, most central banks use Capital Adequacy, Assets Quality, Management Capability, Earnings, Liquidity, and Sensitivity to Market risk (CAMELS) in the measurement of bank performance. Mohiuddin (2014) is among the disciples of the model while studying different factors that are influential to bank performance. The current study utilized the BSC model, guided by its elaborate parameters in performance measurement when compared to Edgar's model. Additionally, the BSC model incorporates both the financial and non-financial parameters as opposed to the CAMELS model that is financially biased.

2.3 Empirical Research

OcRC practices are usually applied when the identified risk has the possibility of happening, mainly during the execution of duties (Noe et al, 2017). The existing literature encompasses practices such as leave, process flows, internal audit, and supervision. Colligan et al (2010) did research to establish whether process mapping, as a risk control strategy, led to an improvement in service delivery in healthcare. In their findings, the kind of process flow in place has a significant influence on decision making. Likewise, Figl and Strembeck (2011) advocate for the adoption of process flows as a way of learning new processes.

Apart from process flows, different scholars and policies laud mandatory leave as an effective way of managing employee risks within an organization (Apătăchioae, 2015). As envisaged in section 28 of the Employment Act of Kenya (2007), every employee who has worked for 2 months is entitled to at least 21 days of paid leave. According to Giles (2012), organizations leverage block leave to identify any possible risk associated with the employee in question. The rationale behind a compulsory block leave is that employees may interfere with any checks that are being done on their work. Awa, Plaumann, and Walter (2011) observed that continuous leave was an effective measure in managing employee burnout, which has an impact on productivity.

Apart from mandatory leave, supervision is one of the traditionally applied ways of managing employees to ensure that they are doing the right thing while at work. Samnani and Singh (2014), identify supervision as a practice that may create employee bullying. Among the gaps notable in this research is the selective nature of the sample used. The research involved only performance-pay-based jobs whereas there are other jobs with a different compensation model such as the fixed pay which may still be affected by supervision. Bonet and Salvador (2017) indicated a relationship between the locational distance between supervisors and the employees under supervision. In their findings, about 46% of the sampled managers indicated that supervising people remotely is a major challenge to employee performance. In a different set of studies across a variety of industries, the researchers established that 80% of the respondents indicated that remote supervision hindered their performance, hence the general performance of their organizations. Among the challenges, they observed in remote supervision are the inability to identify risks in good time and avoidance of misunderstanding of instructions which may lead to errors. Unlike Samnani and Singh (2014) who view supervision as a possible cause of workplace bullying, Bonet and Salvador (2017) view it as an effective control tool of employee-related risks but only when used effectively. Elrahman and Ali (2015) did a research to establish the role of risk-based regulatory and supervisory roles in the performance of microfinance institutions in Kenya. Part of their findings is a strong correlation between supervisory undertakings and the financial robustness of the involved microfinance institutions. An explanation for this is that microfinance institutions operate in a high-risk environment which necessitates effective ways of risk mitigation such as through the use of supervision. The authors, however, fail to articulate how the related regulatory and supervisory roles affect employee performance, specifically through their involvement in mitigating risks.

Further, the use of internal audits has been considered as one of the most effective ways of controlling employee-related risks. Internal audits are independent reviews carried out in organizations to determine the effectiveness of the management process and systems in enhancing risk management for the business (Chartered Institute of Internal Auditors-CIIA, 2018; Karina, 2012). Omolaye and Jacob (2017), on the other hand, established that internal audits played a significant role in enhancing good corporate governance. In related research, Abdullah (2014) established

a high correlation between internal auditing and organizational corporate governance in Malaysia. One of the weaknesses exhibited through this research is the fact that the Institute of Internal Auditors of Malaysia (IIAM) was restricted to partake in external surveys hence the data was only limited to 68 respondents (Abdullah, 2014). The author suggests that this sample size can be improved on in future researches for more accurate results, which creates an opportunity for this research. On the contrary, a study by Muchiri and Jagongo (2017) reveal contradictory results when compared to the above two studies. The scholars aimed at determining whether internal audits influenced the performance of the Kenya Meat Commission (KMC). In their findings, there was no correlation between the performance of the organization and the availability of an internal audit function. The weaknesses portrayed through this research is that it was a case study, majoring in only one organization, the KMC whose operational dynamics may be different from those in the banking industry. A wider scope, as taken through this research, is vital in sealing such a gap.

2.4 Conceptual Framework

The conceptual framework that the study adopted is as shown in the Figure 1 below. OcRC practices were the independent variables while performance was the dependent variable. The practices under OcRC were mandatory leave, process flows, internal audits, and employee supervision. The BSC model was adopted in performance measurement
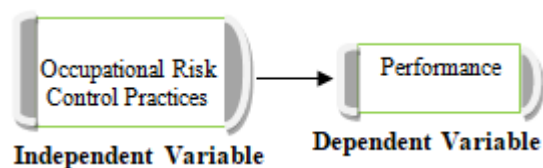

Figure 1: Conceptual Framework for Occupational Risk Control practices and Performance of Commercial Banks in Kenya

3. Research Methodology

The methodology that the study adopted is as outlined below. Particularly, this section is concerned with the research philosophy, the research design, population of the study, the data collection methods, and the respective tests for regression assumptions.

3.1 Research Philosophy

In business research, the philosophical foundations that can be adopted are pragmatism, realism, positivism, and interpretivism (Fulford & Hodgson, 2016).). Pragmatism has it that different ways are used in interpreting the world and no single point of view is sufficient to create a true picture (Saunders, Lewis, & Thornhill, 2015). Realism looks at how far reality is moved from the human mind, based on differences in interpretation from one individual to another (Tsang, 2016). Positivism, on the other hand, relies only on measurable or quantifiable observations that are statistically analyzable. Finally, interpretivism is cognizant of the need to incorporate human interests while carrying out a study (Fulford & Hodgson, 2016)). This study adopted a positivism philosophy. With the positivism philosophy, what

is acceptable as factual is only that which is scientifically observable and verifiable (Fulford & Hodgson, 2016). This study took a positivist approach given that it was purely statistical. The perceptions of individuals on the effectiveness of various Occupational Risk Mitigation practices and how they affect the performance of commercial banks were collected and analyzed statistically.

3.2 Research Design

The study employed a descriptive survey design ditto. The aim was to demonstrate the relationship between OcRC practices and the Performance of commercial banks in Kenya, hence a descriptive approach.

3.3 Population of the Study

The study was a census with an accessible population of 38 banks. Two banks (Chase Bank and Imperial Bank) were under receivership whereas one (Charterhouse) was under statutory management, hence excluded from the initially 41 (CBK, 2020). Out of the 38 banks, four were involved in a pilot study while 34 in the main study. The respondents were six employees from each bank, specifically; human resource managers, risk managers, branch operations managers, tellers, customer service staff, and sales staff.

3.4 Data Collection Instruments and Procedure

Closed-ended questionnaires were used in the collection of data. A Likert scale was used to measure the responses, all of which were perceptual, as advocated for by Cleff (2019). The measurements involved scale rankings of 1 to 5, where 5 meant "very much" while 1 meant "not at all". A drop and pick later approach was used to give respondents adequate time to respond to the questions.

3.5 Test for Reliability of the Instruments

A Cronbach's Alpha Coefficient was used to determine the Reliability of the instruments used in data collection. This was through a determination of internal consistency. When there is internal consistency the data collection items are likely to produce closely similar results applied on a large scale (Durakbasa & Gencyilmaz, 2018). A higher internal reliability is assumed when the Cronbach's Alpha Coefficient above 0.7 (Bolarinwa, 2015). The test yielded a Cronbach's Alpha of 0.713, hence the assumption that the instruments had internal consistency.

3.6 Data Analysis and Presentation

The collected data was backed up using the SPSS tool after coding and cleaning. The main analytical processes included descriptive statistics, factor analysis, test for regression assumptions, and regression analysis. Construct validity was tested using a Principle Component Analysis (PCA) through the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy. On the other hand, Total Variance Explained and the Rotated Component Matrix were used to determine the constitutive parameters to the variable hence their retention for further analysis. A simple regression analysis was used to evaluate the relationship between OcRC practices and

performance. Before the regression analysis, the data were tested for outliers, normality, linearity, and homoscedasticity. The tests were necessary in determining whether the data was fit for regression analysis.

4. Findings and Discussions

The findings of the analysis were as discussed in the below section. They include the response rate, descriptive results, factor analysis results, regression assumption test results, and the inferential results.

4.1 Response Rate

The response rate is shown in Table 1 below:

Table 1: Response Rate

Category	Rate	Percentage
Returned Questionnaires	156	76.47%
Unreturned Questionnaires	48	23.53%
Total	204	100%

A total of 204 questionnaires were distributed in the 34 banks during the main study with a target of six employees from each bank. From this total, 156 (76.47%) were collected after being filled correctly and to completion. As Fincham (2008) posits, a return rate of 60% or more for questionnaiers is suitable for Social Sciences research.

4.2 Descriptive Results for Occupational Risk Avoidance Practices

The respondent's feedback on the perceived effectiveness of Occupational Risk Control practices gave the results as shown in Table.2:

Table 2: Descriptive Results for Occupational Risk Control Practices

Statement	Very Much (%)	Much (%)	Somehow (%)	Neutral (%)	Not at all (%)	Mean Per Item	Standard Deviation
Documented Process Flows are effective tools for controlling employee risks.	50.60	39.10	7.70	2.60	0.00	4.38	0.74
Mandatory Leave is an effective way of controlling risks associated with employees	32.10	30.80	28.20	5.80	3.20	3.83	1.055
Employee Supervision works effectively in controlling employee-related risks within my organization.	33.30	55.80	6.40	1.30	3.20	4.15	0.85
Internal Audits are effective in controlling employee-related risks.	56.40	29.50	8.30	5.80	0.00	4.37	0.87
Mean per item Rating	**43.10**	**38.80**	**12.65**	**3.88**	**1.60**	**4.18**	
Overall Standard Deviation							**0.78**

The majority of the respondents (43.10% and 38.80%) believed that the OcRC practices were highly effective in mitigating employee-related risks. On the other hand, 12.65% of the respondents indicated that they were somehow of the opinion that the practices were effective while 3.88% had a neutral opinion about the effectiveness of OcRC practices in mitigating occupational risks. However, 1.60% opined that the practices were not effective at all in mitigating employee-related risks. There was a small standard deviation of the responses (0.78) meaning that most responses did not deviate so much from the mean. The majority of the respondents support the practices in curbing employee-related risks, which is in tandem with earlier research establishments. The findings resonate with prior studies. For instance, Figl and Strembeck (2011) observed that process flows were effective in mitigating employee-related risks while Giles (2012) found leave as an effective risk control strategy when dealing with employee-related risks.

4.3 Drivers of Occupational Risk Control

A factor analysis was carried out on the statements under OcRC practices. The results were as discussed below.

4.3.1 Test of Sampling Adequacy for Occupational Risk Control Practices

A test for sampling adequacy was carried out to determine whether all the four items under Occupational Risk Control practices were factorable and related. Table 3 shows the results:

Table 3: Results for Sampling Adequacy for Occupational Risk Control Practices

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.749
Bartlett's Test of Sphericity	Approx. Chi-Square	110.328
	Df	6
	Sig.	.000

The findings indicate a significantly high KMO statistic of 0.749 (more than 0.50). There was also a high and significant Bartlett's Test of Sphericity and a Chi-Square value of 110.328 and 6 degrees of freedom and a p-value was 0.00 which is lesser than 0.05, indicating a high level of significance. The results imply that there was a relationship between the items under this variable and could thus be factored into a single constitutive components.

4.3.2 Total Variance Explained for Occupational Risk Control Practices

To determine the strength of the statements under OcRC practices, an analysis of the Total Variance Explained was carried out. Table 4 shows the results:

Table 4: Total Variance Explained for Occupational Risk Control Practices

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.168	54.206	54.206	2.168	54.206	54.206
2	.698	17.462	71.668			
3	.583	14.583	86.252			
4	.550	13.748	100.000			

From the results, the total variance explained was 54.206%. The eigen values ranged from 0.550 for component 4 to 2.168 for component 1. Given these values, all the statements were confirmed to be suitable measurements or explainers of the Occupational Risk Control given that they constitutively accounted for more than 50.00% of the total variance, as they could be considered as a single component as supported by McDonald (2012).

4.3.3 Rotated Component Matrix for Occupational Risk Control Practices

To determine whether the items under the Occupational Risk Control variable could be reduced into fewer items a Rotated Component Factor analysis was carried. The results were as show in Table .5:

Table 5: Rotated Component Factor Matrix for Occupational Risk Control Practices

Statement	Component 1 (OcRC practices)
Mandatory Leave is an effective way of controlling risks associated with employees.	.762
Internal Audits are effective in controlling employee-related risks.	.755
Documented Process Flows are effective tools for controlling employee risks.	.727
Employee Supervision works effectively in controlling employee-related risks within my organization.	.699

From the above results, all the four items were considered to be related and belonging to a single component. The items had factor loadings between 0.699 and 0.762. Given that all the loadings were above 0.40, they were considered for retention in the analysis, as supported by Kotz and Johnson (2012). As such, mandatory leave, internal audits, documented process flows, and employee supervision were considered as strong drivers of Occupational Risk Control practices under this study.

4.4 Test for Regression Assumptions

To determine whether the data involved in the study were fit for regression analysis, a test for regression assumptions was carried out and the results were as discussed below.

4.4.1 Test for Normality

The test for normality was necessitated by the fact that data which is not normal is prone to errors and possible biasness. To test for normality, a Shapiro-Wilk test was carried out. This test is used when the data cases are less than 2000 as supported by Gelman, Hill, and Vehtari (2020). The results were as shown in Table 6:

Table 6: Normality Test Results for Performance

	Shapiro-Wilk		
	Statistic	Df	Sig.
Performance	.990	156	.304

From the results, the p-value was 0.304, which led to the conclusion that the data was normally distributed, given that this was more than the benchmark of 0.05 (Gelman, Hill, & Vehtari, 2020).Berut (2020) used the Shapiro-Wilki test while researching on the influence of collaboration in supply chain on performance of dairy processing firms in Kenya.

4.4.2 Test for Outliers

An outliers is an extremely high or low value in a data set which may be an indication of a wrong, biased or exaggerated answer to a study question (Larson-Hall, 2015). As such, analyzing data with outliers could lead to inaccurate or biased results. A Grubb test, which utilizes Z-scores, was used to carry out this test. The results were as shown in Table 7:

Table 7: Results for Identified Outliers

Variable	No. of Outliers	Corresponding Z-score
Occupational Risk Control practices	1	-3.36951

Given the number of cases was 156 (more than 80), a standard score of ±3.0 and above was set as an outlier, as guided by Larson-Hall (2015). From the results, one item with a corresponding Z-score of -3.36951 was detected and deleted from the data set. Chubb and Simpson (2017) used Z-scores in testing for outliers in a study on cardiovascular imaging hence practically supporting its adoption in such a study.

4.4.3 Test for Linearity

The test for linearity was necessitated by the fact that the relationship between OcRC practices and performance had to be linear as an otherwise non-linear relationship would not be analyzed through a regression analysis (Kumar 2010). Linearity was tested using a Pearson's Correlation Coefficient and the results were as shown in Table 8:

Table 8: Linearity Test Results

		OcRC Practices	Performance
OcRC Practices	Pearson Correlation	1	.457[**]
	Sig. (2-tailed)		.000
Performance	Pearson Correlation	.457[**]	1
	Sig. (2-tailed)	.000	

From the results above, it was concluded that there was a positive linear correlation between OcRC and performance with a coefficient of 0.457 (which is positive) and a p-value of 0.000<0.05. The presence of linearity thus meant that the relationship between the variables could be tested using a linear regression model.

4.3.1 Test for Homoscedasticity

Homoscedasticity refers to the uniformity of the error term between the independent and dependent variables (Rousseeuw & Leroy, 2005). Where homoscedasticity is violated, the data is bound to have heteroscedasticity which refers to an increase in the variance of the error term as a result of the increase of the independent variables. Heteroscedasticity is a result of a lack of normality in the distribution of one or more of the variables under investigation (Kumar, 2010). The test for homoscedasticity was carried out using the Levene Statistic Test and the results were as shown in Table 9:

Table 9: Levene's Test for Homogeneity

Variable	Levene's Statistic	Significance
Occupational Risk Control Practices	0.596	0.780

The null hypothesis of the test was that there was no homoscedasticity in the data, which was to be accepted at a p-value of 0.05 and above. However, the results show that all the variables had a significance value of >0.05 thus the data considered to be homoscedastic. The test criteria conform that of Kamoni (2020) in his study on contemporary supply chain management practices and their impact on mega projects within the energy sector in Kenya.

4.5 Inferential Analysis

The study aimed at evaluating the relationship between OcRC practices and the performance of commercial banks in Kenya. The results of the analysis were as follows: Table 10 gives a summary of the model:

Table 10: Model Summary for Occupational Risk Control Practices and Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.457[a]	.209	.204	.41598

a. Predictors: (Constant), Occupational Risk Control Practices

The regression model adopted was $Y = b_0 + bX + \varepsilon$. The analysis results proved that the model was fit in establishing the relationship between OcRC practices and the performance of commercial banks. The R and R square were 0.457 and 0.209 respectively. The R-value indicated that there was a weak ($R < 0.5$) but positive relationship between OcRC practices and performance whereas the R-square meant that 20.90% of the variance in performance was explained by OcRC practices. The results are in tandem with those of Persons (2012) and Schwandt (2014), who established a positive predictive power of risk avoidance practices on organizational performance.

Further to the above, analysis of variance (ANOVA) was carried out and the results were as shown in Table 11:

Table 11: Analysis of Variance (ANOVA) for Occupational Risk Control Practices and Performance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.040	1	7.040	40.688	.000[a]
	Residual	26.648	154	.173		
	Total	33.688	155			

a. Predictors: (Constant), Control
b. Dependent Variable: Performance

The analysis aimed at establishing the significance of the relationship between OcRC and performance. The F-statistic of 40.688 indicated that the model was significant given that it was more than the critical value of 3.903, with a 1 and 154 degrees of freedom at a p-value of 0.05. The significance level of 0.00<0.05, led to the conclusion that the relationship between the two variables was highly significant.

This study also purposed to determine the contributory power of OcRC practices on performance through an analysis of the coefficients of the relationship. Table 12 summarizes the results:

Table 12: Regression Coefficients for Occupational Risk Control Practices and Performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.763	.174		15.877	.000
	Occupational Risk Control Practices	.263	.041	.457	6.379	.000

a. Dependent Variable: Performance

A 2.801 constant value indicated that when OcRC practices were applied at zero, then Performance would be at 2.763. Besides, an improvement in the OcRC practices by one unit would result in an improvement in performance by 0.263 times. The model's coefficients were at a high level of significance of 0.00<0.05. The resultant model was Y=2.763+0.263X Where,
Y = Performance
X=Occupational Risk Control practices.

To conclude, the null hypothesis (H_0) was to be accepted at p>0.05. The hypothesis was as stated below:
H_{02}: There is no Statistically Significant Relationship between Occupational Risk Control Practices and the Performance of Commercial Banks in Kenya.

Since the p-value was 0.00< 0.05, the null hypothesis was rejected, leading to the acceptance of the alternative hypothesis that there was a statistically significant relationship between OcRC practices and the Performance of commercial banks in Kenya. Such findings are supported by Figl and Strembeck (2011), and Lerman et al (2012) whose research conclusions favor the enhancement of OcRC practices as a way of enhancing organizational performance.

5. Conclusions and Recommendations

5.1 Conclusions

The objective of this study was to evaluate the relationship between OcRC practices and the performance of commercial banks in Kenya. The results show that there was a significant relationship (p=0.000) between OcRC practices and the performance of commercial banks. The specific practices of interest were mandatory leave, process flows, internal audits, and employee supervision while performance was, measured using the BSC model. From the findings, an improvement in OcRC practices had a significant improvement in the performance of commercial banks. With such findings, OcRC practices are not only considered in light of risk management but also as drivers of bank performance, which should therefore be strategically embraced.

5.2 Recommendations

Firstly, there is the need to ensure that the effectiveness of all the applicable OcRC practices within banks and other organizations are evaluated, through a similar or related approaches, to determine how effective they are in supporting organizational performance. A thorough evaluation might help to eliminate wasteful practices and at the same time enhance those that are gainful as far as enhancing the organizational performance and safety is concerned. Secondly, it is essential to have interdepartmental cohesiveness in implementing workable OcRC practices. This is based on the understanding that some of the OcRC practices may only work well in enhancing performance if well-coordinated in all departments within the organization. For instance, the auditing role should not be left with the audit department alone, but rather self-check structures and mechanisms can be ingrained in departments to help in controlling occupational risks.

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