THE IMPACT OF ORGANIZATIONAL CULTURE ON OCCUPATIONAL CRIME IN PHARMACEUTICAL MANUFACTURING COMPANIES IN NAIROBI COUNTY

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DECLARATION

I declare that this document and the research it describes are my original work and that it has not been presented at any other University for academic work.

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DEDICATION

I dedicate this study to my family. I am truly grateful for the love, care, and moral support they have portrayed during my schooling, which has contributed much to my success. God bless you all.

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I appreciate my supervisor, Dr. Kimani Gichuhi, and Mr. Osoro Eric for their guidance and advice throughout this thesis. I wish to thank my family, friends, and classmates for their support and encouragement during my time of study at the University. I thank the almighty God for giving me strength and endurance through this work.

ABSTRACT

The Association of Certified Fraud Examiners reports 2016 indicated that over 633.40 billion Kenya shillings are lost yearly due to occupational crimes. Similarly, the Global Business Ethics study indicated that senior and middle-level management commits 23% and 32% of the corruption cases. Whereas Price Waterhouse Coopers report indicated that about 36% of the firms faced economic crimes, with emerging and developed markets affected more in 2016, most companies are yet to adopt fraud detecting and deterrent strategies to mitigate such occupational crimes. This study aimed to establish the effect of organizational culture on occupational crime in pharmaceutical manufacturing companies in Nairobi County. The study's specific objectives comprise organizational ethics, financial, board oversight, and corporate size on occupational crime in pharmaceutical manufacturing companies in Kenya. This study was grounded on the Fraud Triangle Theory. The study adopted a descriptive research design. The study targeted all the 26 licensed Manufacturing firms for Pharmaceutical in Nairobi County registered under the Kenya Association of Pharmaceutical Industry in 2020. The study used both quantitative and qualitative data. Quantitative data were collected using self-administered questionnaires using the drop and pick method. While qualitative data were collected utilizing interview guide sheets. A pilot test study was carried out before the actual research. The study employed descriptive statistics to analyze the quantitative data using SPSS version 22. Qualitative data from the Key Informants were analyzed thematically using content analysis. Analysis results were presented using figures and tables. All statistical analyses were carried out at 95% significance level. Correlation results showed that organizational culture positively and significantly influences occupational fraud. Regression findings also indicated that financial controls, board oversight, organizational ethics, and corporate size positively and significantly influence occupational crimes in pharmaceutical companies in Nairobi County. The study established that poor financial controls and board oversight are associated with higher occupational malpractices in the company. Additionally, the study established that the presence and adherence to an organizational code of ethics are associated with decreased incidences of occupational fraud. The study established that poor financial controls and board oversight are associated with higher occupational crimes in the company. Additionally, the study established that the presence and adherence to an organizational code of ethics are associated with decreased incidences of occupational fraud. Further, the study established that corporate size is associated with the frequency of occurrence and seriousness of occupational fraud. The study also established that the level of employee monitoring determines occupational fraud incidences and corporate size. The study recommends the management of pharmaceutical companies establish effective financial control measures and realistic regulatory measures such as fraud risk evaluation and oversight to combat occupational crimes in the pharmaceutical companies.

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OPERATIONAL DEFINITION OF TERMS

Board Oversight	It can be described as monitoring undertaken by the members of the board/committee regarding the organization's business and risk policy, financial security, and compliance with the set regulatory framework.
Financial Controls	It denotes the internal checks that are put in place by organizations to monitor their financial activities
Occupational Crime	Implies to the unlawful and immoral practices committed by persons for monetary benefit or to circumvent financial cost in the event of a legitimate profession
Organization Ethics	It refers to the code of conduct of the individuals working in a particular organization
Pharmaceutical Occupational Crime	It refers to any practice of marketing, producing, or testing a drug or medical device that results in a government paying more for a drug.
Workplace Crime	It refers to conventional forms of crime committed in the workplace, such as embezzlement, bribes, or kickbacks because of referrals.

ABBREVIATIONS/ ACRONYMS

COMESA: Common Market for East and Southern Africa

FDA: Food and Drug Administration

KEMRI Kenya Medical Research Institute

KPMG: Klynveld Peat Marwick Goerdeler

MoH Ministry of Health

OECD: Organization for Economic Co-operation and Development Countries

WHO: World Health Organization

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CHAPTER ONE

INTRODUCTION AND BACKGROUND INFORMATION

1.1 Introduction

This chapter contains the background of the study, statement of the problem, research objectives, questions to be answered by the study, significance of the study, the scope of the study, limitations of the study, as well a theoretical and conceptual framework.

1.2 Background of the Study

Globally, yearly financial losses from occupational crimes range between $300 and $600 billion (Stewart, 2015). Approximately 36% of businesses in the insurance and health sector have experienced occupational crimes (Price water house Coopers, 2016). In the pharmaceutical sector alone, occupational crimes in the United States are attributed to costs up to $272 billion (The Economist, 2014). Occupational crime refers to the unlawful and immoral practices carried out by individuals for monetary gain or to circumvent financial failures in their workplace (Bashir, Shahzad, Abbass, Abbass & Saeed, 2011). Workplace crime refers to a predictable type of crime carried out in the place of work, such as embezzlement, bribes, or kickbacks because of referrals. The theoretical merger of vitally divergent actions hinders hypothetical, observed, and strategy-related advancement in the case of organizational crime studies (Simpson, 2013).

Universally, occupational crimes have been classified based on the offenses committed by persons serving alone or on an improvised basis, such as credit card fraud, aid fraud, and tax fraud (Vago, 2011). Secondly, those working inside businesses defying their obligation to the employer or customer computer fraud, employee theft, commercial bribery, and embezzlement can be labeled as offenses carried out during their occupations. Thirdly, crimes can be classified

as unintentional, and in the advancement of company activities, but not the essential principle of the company can include crimes like fraud against the state and code breaches. The last classification of occupational crimes refers to crimes committed in industry or as the medical activity of the business. This type of crime denotes vast fraudulent systems run in an industry.

The cause of occupational crimes within most organizations, as asserted by Romney, Steinbart, Mula, McNamara, and Tonkin (2012), is due to lack of actual physical security, accounting, and financial controls firms vulnerable to employee theft. Embezzlement becomes a budding problem without proper financial practices and accounting (Simpson, 2013). Thirdly, weak or ineffective board oversight can lead to unhindered decision-making at the managerial level, which Sutherland hypothesizes as the stage at which white-collar fraud happens (Soley, 2017). In conclusion, an amalgamation of organizational structure, professional characteristics, and an absence of culpability can debilitate a company. For instance, the huge size of the firm could lead to the decentralization of its organizational structure. According to Ozcan (2016), the decentralization of some of the units of a firm affects its organizational structure, thereby increasing the possibility of white-collar crime. Moreover, the absence of accountability or culpability when white-collar crime happens in the company justifies the offender to justify their action (Gottschalk & Gunnesdal, 2018).

In Malaysia, business-related offenses are reported annually, indicating that the occupational crime rate is rising. A fraud survey carried out by Klynveld Peat Marwick Goerdeler (KPMG) in Malaysia (KPMG, 2010) indicated that there had been an increase in organized crime. According to the report, losses attributed to occupational crime between 2003-2004 were estimated as 261010.1-2609840 billion shillings, with an estimated 6,000 yearly incidences. In Pakistan, the main contributing factors driving white-collar offenses in corporate organizations are

organizational culture, absence of answerability, and reporting mechanisms (Bashir, Shahzad, Abbass, Abbass & Saeed, 2011).

The Association of Certified Fraud Examiners (ACFE) report (2016) projected that over 633.40 billion Kenya shillings are lost to fraudulent activities yearly, with companies losing on average about 5% of their p revenue to occupational crimes. Relating the findings of this study to the initial review, the average loss in each case has risen from approximately $14 578 300 to $15081 000 Kenya shillings, and cases amounting to about $ 100 million Kenya shillings or higher have also risen from approximately 22-23.2 percent. Similarly, the Global Business Ethics investigation showed that 23% and 32% of the corruption cases implicate senior-level and middle-level management in that order (Ethics Research Center, 2016). Equally, Price Waterhouse Coopers (2016) indicated that about 36% of the firms in emerging and developed countries suffered more from occupation crimes.

According to Khan and Panarina (2017), society has a massive effect on the commercial ethos of an organization, including how people conduct themselves in the same culture; that is, individuals belonging to distinctive beliefs would follow their egocentricity, etcetera. Such social angles affect the extent to which occupational crimes predominantly occur. If the company's ethos is unhealthy, it might lead to abnormal behavior amongst the staff. The illicit behavior of the employees can be because of the effect of the organization's culture (Bouwman, 2013). The organizational culture chiefly enthuses the accomplishment of the firms. Hence, understanding the organizational culture is fundamental in instilling best business practices. This is good organizational culture inculcates positive behavior in the workforce (Sorensen, 2012).

Organizational culture plays a vital role in dealing with the effects of corporate crimes. Especially when the ethics are firmly entrenched in organizational culture and demonstrated by

the senior management, a firm is more likely to lessen internal fraud. Therefore, culture is a crucial tool that molds the behavior of the workforce in a firm, including the organizational environment. Likewise, most firms that remain successful in the end have managers whose ethical values are part of their organizations' prescribed rules and informal cultures (Daft, 2015). Companies with higher moral values have reported a 75% decrease in crimes (Ethics Research Centre 2016 survey). Ethical risks reduce when a firm embraces an industry-wide best practice or concept of business ethics. In support, Schwartz (2013) avers that ethical corporate culture not only aids in avoiding occupational wrongdoings and crimes but also results in appropriate ethical behavior at all the levels of the organization.

Moreover, high goals for performance set by the organization can predispose to occupation crime. According to Yeager (2010), the types of organizational objectives may champion borderline and lawless behavior because of the relevancy of the rational goal model. Growth in revenues is a critical component of a firm’s economic realization. Therefore, there is a powerful desire by rational offenders to either maintain or increase existing levels of cost-effectiveness (Omar, Johari & Hasnan, 2015). Corporate criminality is interrelated with the core objective of organizations in a free market economy of revenue maximization; pressure for gains is the most encouraging aspect of occupational crime (Bucy, Formby, Raspanti & Rooney, 2012). Nevertheless, the ways offenders try to attain these objectives remain unchanged irrespective of the objectives pursued, whether for status or revenue. Individuals who engage in corporate crime, especially in firms with robust business targets, feel pressured to flourish, even if winning means circumnavigating the rules.

In the United States, Gotzsche (2012) in his study indicated that corporate crime in the pharmaceutical industry is endemic, particularly in the form of unethical behavior such as

corruption, which often occurs in the process of drug sales. In the United Kingdom, Martinez, Kohler, and McAlister (2017) indicated that the most common form of occupation fraud in the pharmaceutical sector is corruption due to poor board oversight and lack of accountability. According to the study, occupation fraud is rife in the pharmaceutical companies' marketing, procurement, and distribution departments. In Ghana, Akomea-Frimpong and Andoh (2020), in a study to determine the nature and influence of financial fraud in the drug industry, found that occupational-related crimes such as stealing drugs, cash, and manipulation of financial books and documents are common, especially in the pharmaceutical industry. The study indicated that the endemic occupational crimes in the pharmaceutical industry in Ghana are due to poor governance, weak financial controls, peer pressure among staff, presence of opportunities, and rationalization.

In the pharmaceutical industry, occupational crime can have adverse effects, especially on the patients' health (Kennedy, Haberman & Wilson, 2018). According to a survey by WHO (2010), occupational fraud can lead to varying disease components due to the adverse effects of either poor quality medicines or adverse drug reactions. Such injurious drug reactions are common among patients using hypertension and cervical cancer drugs. In the pharmaceutical manufacturing companies in Kenya, the common forms of occupational crime include asset misappropriation, corruption, financial statement fraud, cash on hand and noncash billing, tinkering with the check and payment amounts, expense reimbursements, and register disbursements. To understand how organizational culture influences occupational crimes in pharmaceutical manufacturing companies, this study needed to be conducted in Nairobi County since most of these firms are situated.

1.3 Statement of the Problem

According to World Health Organization (2010), the pharmaceutical sector is one of the most affected areas with respect to bribery and stealing. Unnecessary expenditure on drugs, poor quality, and tampered drugs saturated the health system has inadvertently led to the plundering of funds, which should have led to improved health services across the country. Although cases of occupational crimes within the pharmaceutical sector in Kenya have not been widely reported, incidences related to repackaging drugs with expensive trademark drugs, poor quality, or generic medicine have been common. This has resulted in adverse drug reactions and side effects, especially among patients using hypertension and cervical cancer drugs (Kennedy, Haberman & Wilson, 2018).

The Kenya Medical Research Institute (KEMRI) indicates that occupational crimes in the pharmaceutical industries in Kenya have contributed significantly to the flooding of the private pharmacies, kiosks, and public health facilities with poor-quality drugs such as anti-epilepsy drugs (KEMRI, 2017). These fraudulent crimes in the pharmaceutical sector endanger patients' lives and compromise their health. Most notably, poor-quality drugs have been linked to higher death rates among cancer patients receiving chemotherapy. Patients ingesting poor-quality drugs can be very harmful or lead to toxicity because of reactions to other drugs. Whereas there are regulatory bodies such as the Pharmaceutical Society of Kenya, Pharmacy and Poisons Board, and Kenya Pharmaceutical Association, which advance the practice of pharmacy by creating and maintaining standards for professional conduct and a code of ethics, they are only concerned with quality control and distribution of medicines and other pharmaceutical products. Secondly, the occupational crimes in the pharmaceutical industry are company-specific and vary in scope and nature. Similarly, Degu, Njogu, Weru, and Karimi (2017), in their study to determine the

effect of drug-related problems amongst patients with cervical cancer at Kenyatta National Hospital, indicated that 50% of the patients receiving cancer therapy are due to drug-related problems such as high toxicity of most chemotherapeutic treatments.

Reviewed studies indicated that there exists literature on occupational crime in the pharmaceutical industry; however, much focus has been on corporate crimes. The study also found that no study has been conducted in Kenya to determine the influence of organizational culture on occupational crime in pharmaceutical manufacturing firms. Moreover, no study has been conducted in Kenya to determine the nature of occupational crimes in pharmaceutical manufacturing firms. These findings augment the need to assess how the organizational culture of the pharmaceutical manufacturing companies influences occupational crime. Thus, on the above background, this study desired to determine the impact of financial controls, board oversight, organizational ethics, and corporate size on occupational crime in pharmaceutical manufacturing companies in Nairobi County.

1.4 Purpose of the Study

The main purpose of this study was to determine the impact of organizational culture on occupational crime in pharmaceutical manufacturing companies in Nairobi County

1.5 Objectives of the Study

The following objectives guided the study;

i. To establish the effect of financial controls on occupational crime in pharmaceutical manufacturing companies in Nairobi County
ii. To evaluate the role of board oversight on occupational crime in pharmaceutical manufacturing companies in Nairobi County

iii. To determine how organizational ethics influences occupational crime in pharmaceutical manufacturing companies in Nairobi County

iv. To assess the relationship between corporate size and occupational crime in pharmaceutical manufacturing companies in Nairobi County

1.6 Research Questions

The following questions guided the study;

i. What is the effect of financial controls on occupational crime in pharmaceutical manufacturing companies in Nairobi County?

ii. How does board oversight affect occupational crime in pharmaceutical manufacturing companies in Nairobi County?

iii. How do organizational ethics influence occupational crime in pharmaceutical manufacturing companies in Nairobi County?

iv. What is the relationship between corporate size and occupational crime in pharmaceutical manufacturing companies in Nairobi County?

1.7 Significance of the Study

This refers to the possible significant scientific contributions that can be achieved by the study to the field of research (Maillard, 2013). The study's outcome may be significant to the Ministry of Health and the Kenya Association of Pharmaceutical Industry in formulating suitable policy measures to curb the malpractices of occupational crime. Curbing the pharmaceutical offenses will improve the pharmaceutical segment's efficiency and the health system. Both the pharmaceutical manufacturing companies and the healthcare sector have related strategies and structural concerns that predispose them to various kinds of occupational offenses. The study's

findings may be valuable to the management of the pharmaceutical manufacturing companies in putting the correct management measures to curb occupational crime. Moreover, the study may inform the companies on the need to have effective internal control measures to help reduce and detect fraud. The study's outcomes can indicate the significance of the oversight role of the board members in curbing occupational crime.

Additionally, this study may benefit society in developing and nurturing generations with the correct ethical values while abhorring crimes such as stealing and fraud. Furthermore, the study may highlight poor organizational culture's effects on the company's accomplishments. The findings of this study may supplement the existing knowledge regarding occupation fraud in corporate firms. The study's results may provide more insight into occupational crime in the health sector. This study's recommendations and knowledge gaps may be helpful to potential scholars and academicians in the health sector.

1.8 Scope of the Study

This refers to all the things covered in the research to come up with meaningful and logical conclusions (Mirza, Pourzolfaghar & Shahnazari, 2013). It also refers to the geographic area within which the research is carried out in Nairobi County. The study focused on organizational culture and occupational crime in pharmaceutical manufacturing companies. Specifically, the study sought to determine the influence of organizational ethics, financial controls, board oversight, reporting, and firm size on occupational crime in pharmaceutical manufacturing companies in Nairobi County. Nairobi County was chosen as a study area because most Pharmaceutical Manufacturing Companies are situated here.

1.9 Delimitations of the Study

Leedy and Ormrod (2010) refer to the study delimitations as features that bound the scope and describe the study's limits. The study focused only on large manufacturing and distribution pharmaceutical firms within Nairobi County. Since the operations within these firms are large, the information obtained from them was considered sufficient to perform the research. The study collected data from all levels of the company staff from the top-level management, middle-level management, and the support staff. This allowed the researcher to comprehensively and fully capture the information regarding occupational across all levels of staff.

1.10 Limitations of the Study

Limitations of the study refer to the challenges beyond the researcher's control and likely to be encountered during the study, such as participants' unwillingness (Simon, 2011). This study only focused on the pharmaceutical manufacturing firms within Nairobi, which are concerned with manufacturing, distribution, and off-label marketing. Some respondents may be unwilling to cooperate since they may not see the benefit they can accrue. In addition, some respondents were unwilling to respond due to the nature of the information sought by the researcher about the company. The researcher addressed this by reassuring the respondents that the study would be used specifically for educational purposes and that its findings would be treated with the utmost discretion. The researcher also excluded the name section in the questionnaire to enhance anonymity.

1.11 Assumptions of the Study

Assumptions of the study refer to the things or boundaries the researcher sets as a guide to achieve the study (Theofanidis & Fountouki, 2018). The study assumed that focusing on

pharmaceutical manufacturing firms could provide representative and informative findings on some occupational crimes in Nairobi County and other Counties in Kenya. This is because most of the leading pharmaceutical manufacturing firms are located in Nairobi County. The study also assumed that targeting the three tiers of management, that is, the top-level management, middle-level management, and the support staff, can help obtain more information regarding occupation crimes. This is because occupation crimes in a company are committed at different levels.

1.12 Theoretical Framework

This part entails an evaluation of the theoretical underpinning of the study. The study was anchored on Fraud Triangle Theory. The promoter of Fraud Triangle Theory was an American criminologist who was referred to as Donald Cressey between 1953 and 1973. The theory indicates that the prospect of fraudulent behaviors can be enhanced considerably when an individual has the necessary understanding, capability, and opportunity (Turvey, 2013). Fraud Triangle theory asserts that the causative factors of professional wrongdoing are *Opportunity*, *Motivation*, and *Rationalization*. Opportunity exists in almost any company; however, the extent of the chance varies through organizations. They may include a weak or ineffective board, poor or no internal controls, and a poor legal and policy framework.

Eaton and Korach (2016) aver that individuals partake in crime just because they do not fear any possibility of getting themselves jailed but due to the incentive attached to it. When committing a crime, the potential offender does not ponder the likely setbacks associated with the crime but rather what they stand to benefit from it. Even when the dangers associated with it prevail over the benefits, perpetrators choose to engage in the wrongdoing if they try to achieve a particular aim. Where a given motivation drives perpetrators, they will break all the conventional regulatory frameworks.

After the perpetrators decide to carry out the wrongdoing, the justification (*Rationalization*) side of the triangle is activated. When a reasonably good perpetrator chooses to engage in an unlawful act, there is a dissonance in their rationale. Hence, the professional offender repudiates any accountability, mischief, and the presence of a victim (Eaton & Korach, 2016). As a result, it is not hard for the professional offender to refuse any damage or presence of a victim owing to the nature from whom the white-collar criminal is stealing. This notion of justifying occupational crime is supported extensively by academics in white-collar scams (Stadler & Benson, 2012). Justification among the actors for engaging in occupation fraud is due to their supposed absence of public status/reputation. Individuals who engage in occupational fraud do not regard themselves as offenders and are less likely to find fault over their wrongdoings. As described by Cressey (1971), the inclination for fraud is depicted as a triangle of perceived opportunity, perceived pressure, and perceived rationalization, as presented in the figure below.

This theory applies to this study as it explains why individuals commit crimes in organizations. Individuals commit crimes because of opportunity caused by weak financial controls, motivation to attain the set organizational goals or their financial needs/success, and rationalization. Thus, the theory is suitable for the study.

1.13 Conceptual Framework

According to Kivunja (2018), a conceptual framework denotes an illustrative depiction of the connection between the independent and dependent variables. In this study, the independent variables comprise organizational ethics, financial controls, board oversight, and corporate size, while the dependent variable is occupational crime. Figure 1.1 represents the conceptual framework explaining the relationship between the variables of this study.

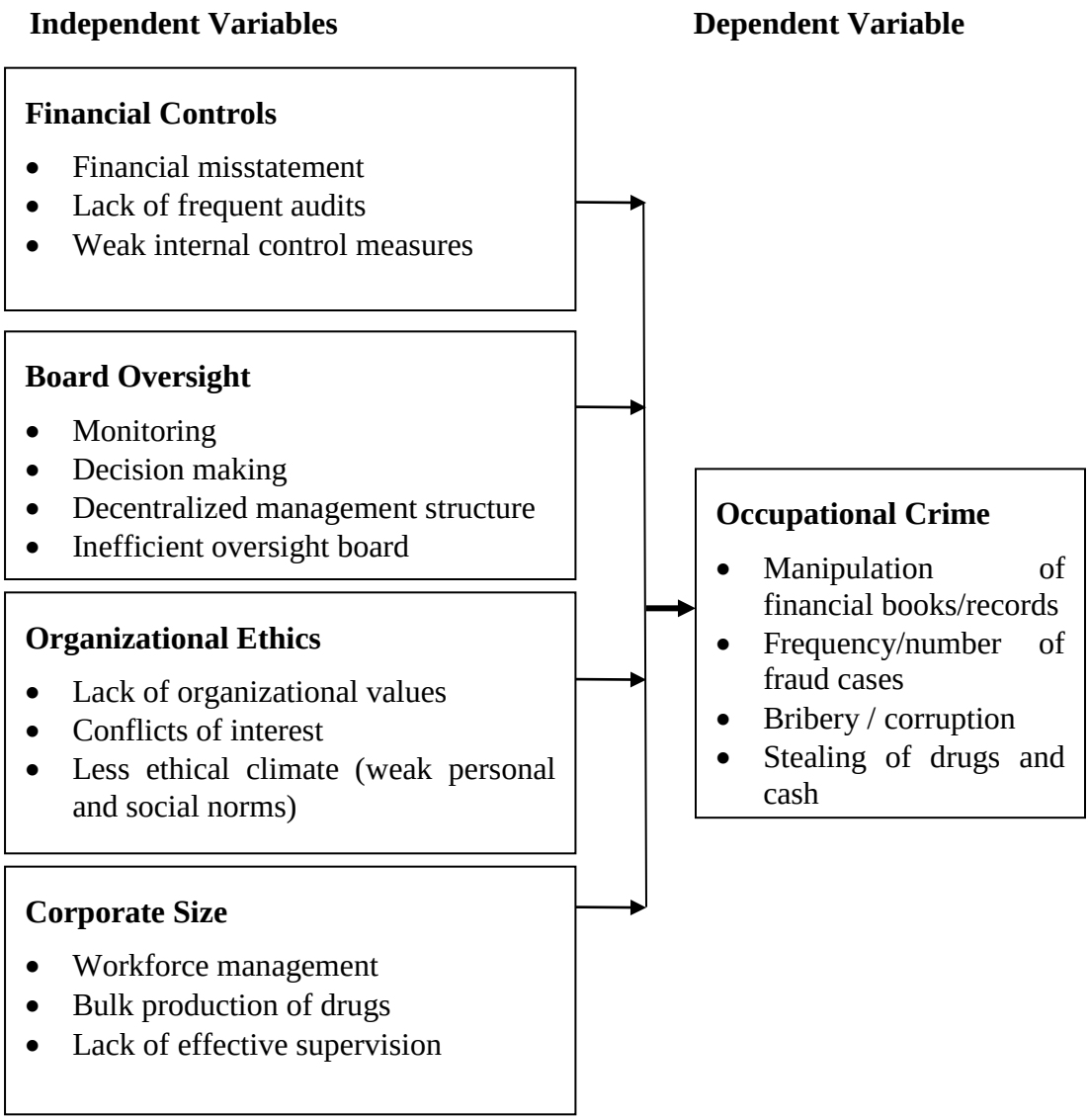

Figure 1.1 Conceptual Framework Showing the Association between Independent and Dependent Variables

Financial controls in this study refer to internal controls that are put in place by organizations to monitor their financial activities in a company. Financial controls entail measures, procedures, and ways a firm checks and manages its financial resources' trend, distribution, and spending (Wakiriba, Ngahu & Wagoki, 2014). This ensures individuals are answerable for the cost of their actions on others. Financial controls such as internal auditing help prevent people from engaging

in embezzlement, financial overstatements, or misstatements without concern for answerability. Some of the most common components of effective financial controls include frequent audits, regulatory environment, evaluation of risks, regulatory events, information and communication, and monitoring (Oguda, 2015). To ensure laid down financial controls are effective, they should be appraised and remedied regularly as periodic evaluation may escalate the susceptibility to fraud, as the perpetrators may discover and abuse the flaws in internal control mechanisms.

Gagliardi (2014) indicates financial control systems as the most effective and fundamental tools for preventing occupational fraud. Laufer (2011), citing *The Federal Accounting Standards Board (FASB),* indicates the application and maintaining Auditing Standards to control occupational fraud. Some of the guidelines for ensuring prudence of internal financial controls include;

a. Ensuring that all transactions carried out by the company authorized;
b. Ensuring that all transactions executed by the company are documented or recorded. This is vital in upholding asset accountability or in the preparation of financial statements;
c. Limiting access to assets or accounts to only authorized personnel;

According to Laufer (2011), financial control systems are instrumental in occupational fraud prevention. Financial control systems can help avert unintended mistakes and lessen waste besides depressing fraud within the company.

Board oversight refers to the supervisory role played by the board members in the daily operations and management of the firm (Bossu & Rossi, 2019). Poor board oversight can result in uncontrolled policy making at the management level of the corporation. The firm's board is responsible for observing the executive. At the same time, the executive is responsible for checking the middle management and monitoring the line managers or supervisors. When the

company administration and its board members are unconcerned or unresponsive to the firm's operations, wrong decisions are prone.

The presence or lack thereof of Board oversight profoundly affects the intermediate loss and extent of occupational fraud (Baesens, Van Vlasselaer & Verbeke, 2015). Devoted and apparent fraud risk oversight by the Board can help boost the company's ethical character by establishing an anti-fraud culture within the organization. Moreover, Halbouni, Obeid, and Garbou (2016) avers that the involvement of the Board in fraud-risk management initiatives can be a positive deterrent for employees from engaging in any form of occupational fraud. This is because the Board's engagement in fraud-risk management initiatives can help increase the perception of detection in the company. Increasing the perception in the company that likely offenders will be caught is a very successful deterrence strategy toward preventing occupational fraud.

Organizational ethics in this study implies the generally established principles and values that guide the individual and conduct within the company (Kolthoff, 2016). Organizational ethics influence the ethical behavior of their workforce both from a business perspective. Moreover, the institutional principles of a firm add to the "justification" side of the Fraud Triangle. According to the ACFE (2016), if senior managers do not maintain and uphold high moral values in the organization, then employees are likely to commit fraud. This is because employees tend to closely monitor their managers' conduct, which influences their actions too. The senior managers should communicate what they expect from their workers and offer leadership by providing safer mechanisms for reporting perpetrators and rewarding integrity (ACFE, 2016). The establishment of higher ethical values in a firm through the principles and the activities of administration can help dissuade the workforce's immoral behavior, such as corruption, asset misappropriation, and larceny (Hess & Broughton, 2014).

Ocansey and Ganu (2017) also emphasize that organizational culture is critical in managing occupational fraud risks, especially among employees. When morals are firmly entrenched in organizational culture and established by senior management, a firm is more likely to lessen occupational fraud incidences such as financial misstatement.

Corporate size refers to the size of a firm or company. According to Van Erp (2018), corporate size significantly correlates with the likelihood of occupational fraud in a company. According to Osborne and Hammoud (2017), corporate size refers to the typically large firms with complex operations, high revenues, and a considerable workforce. Owing to the firm's complex operations, monitoring employee activities is ineffective. Poor employee monitoring and supervision give them the chance to undertake occupational crime. According to the fraud triangle theory, the size of a firm relates to the opportunity side of occupational fraud. This is because larger organizations are quite devolved. The bigger the institution, the more multifaceted it develops, making it easier to hide financial misdeeds in the records or manipulate manufactured quantities.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This segment presents the concept of pharmaceutical crime, a conceptual and empirical analysis of the literature related to this study, a summary of the literature reviewed, and the research gaps. The conceptual and empirical literature has been presented as per each research objective.

2.2 Concept of Pharmaceutical Crime

Pharmaceutical occupational crime refers to whichever activity, be it in selling, generating, or experimenting drug or a medical piece of equipment leads to a state or company spending extra money on medicine. According to Thornton, Brinkhuis, Amrit, and Aly (2015), a common occupational crime scheme in the pharmaceutical industry include promoting medicine in a way that encourages health professionals to recommend medication contrary to the recommended level by the Food and Drug Administration. In support, Kennedy, Haberman, and Wilson (2018) indicate that occupational crime schemes in the pharmaceutical industry include selling un-labeled drugs, generating and marketing faulty or poor quality medicine and equipment, and exaggerating the cost paid by the health insurers for the medicine.

When the manufacturers of medicine misinform the medical practitioners on the approval of the correct medicinal prescription, for instance, misinformation on the medicine intended for treating cardiovascular cases to be administered for treating migraines cases, it is then promoted as an off-label. According to Braithwaite (2013), some of the notable offenses committed by big medical manufacturing firms contrary to the approval set by the Food and Drug Administration include tipping the doctors and pharmacists with different kinds of enticements to recommend

their ‘renowned’ medicine. Such enticements come in the form of rewards like free vouchers to attend spas or luxurious dinners, some amounting to Kshs 1,010,000, even though they dishonestly kept such kinds of practices out of the limelight in the form of promotional seminars or education; it is usually just corruption, (Thornton et al., 2015).

According to Akomea-Frimpong and Andoh (2020), the most common offenses among pharmaceutical manufacturing firms include falsifying research outcomes and concealing data on harmful drugs. Other forms of pharmaceutical crimes include giving wrong information regarding medicine, breaching manufacturing values, and over-exaggeration of cost of healthcare plans for pricier trademark drugs even though the patient is given poor quality or generic medicine.

The Kenyan pharmaceutical business comprises licensed importers and those who manufacture the drugs locally. According to the Pharmaceutical Society of Kenya (2016), health facilities are estimated to be about 4758 across the county. About 9,000 pharmaceutical products have been approved and licensed to be distributed in Kenya. Kenya supplies about 50% of the pharmaceutical products in the COMESA market. About 30% of the pharmaceutical producers in COMESA are based in Kenya. Pharmaceutical Society of Kenya (2016) indicates that about 31 pharmaceutical manufacturing companies have been accredited. These firms formulate, wrap up and process mass medicine into dosage using primarily imported active components and recipients. Most manufactured compositions of medicine produced in Kenya are non-sanitary or sold directly to the clients without approval.

2.3 Financial Controls and Occupational Crime

Financial controls are also referred to as the internal controls that are put in place by organizations to monitor their financial activities. Koutoupis and Pappa (2018 describe internal

controls as a practice influenced by the institution's executive committee, managers, and other staff, created to offer practical guarantee concerning the attainment of goals with respect to efficacy and success of processes, the consistency of financial reporting and conformity to the relevant regulations. The lack of appropriate controls may enable offenders to abuse the various flaws to engage in fraud. Thus, the firm has to tackle fraud risk in a prudent way for the internal control structure to succeed (Petraşcu & Tieanu, 2014).

Oguda (2015) highlighted that the components of effective financial control, which comprise regular assessments, regulatory setting, evaluation of risk, control measures, information and communication, and oversight, should be carried out as a whole (simultaneously) to create a cohesive system that responds dynamically to varying circumstances. Financial controls should be evaluated and remedied regularly to seal possible loopholes because periodic assessment may escalate the susceptibility of fraud.

Fardon (2013) describes numerous practices necessary to ensure robust internal control measures are in place for the administration to identify and mitigate fraud effectively. This consists of a skilled workforce dedicated fully to fraud identification, discovery and deterrence, and appropriate control of accounting undertakings consistently, ensuring physical security measures are in place. This can be ensured by ascertaining that valuable assets are safely away to discourage theft and creating approval limits to specific accounting undertakings such as petty cash and cheque signing for particular amounts.

In Malaysia, Omar (2013) assessed the significance of forensic accounting in government agencies. The study carried out a case study on the Inland Revenue Board of Malaysia, Ministry of Education, and Shah Alam Court Council. The study employed structured interviews and questionnaires to collect quantitative data. Results showed that forensic accounting is an

effective financial strategy for controlling financial fraud and crime. The study, however, presents contextual gaps as it was conducted in Malaysia and focused on the Revenue Board. This study sought to analyze the influence of financial controls on occupational crime in pharmaceutical firms in Nairobi County.

In Saudi Arabia, Alhassan (2017) did a study to determine the influence of forensic accounting on the manipulation of financial reports in Saudi Arabia. The researcher used structured questionnaires to capture raw data from 120 respondents. The results revealed that forensic accounting had a statistically positive influence in identifying manipulated financial reports, making it easy to recognize misappropriated resources and suspect transactions. Even though the study revealed that forensic accounting helps to detect manipulated financial reports, it was carried out in a different context. This study was done in Nairobi County and focused on pharmaceutical firms.

In Nigeria, Abiola and Oyewole (2013) assessed the effectiveness of using financial records to identify fraud in particular financial institutions and revealed a positive and significant association linking risk evaluation and fraud recognition. Akinyomi (2010), in a research on the influence of financial records on Nigerian financial institutions, established a positive association connecting risk evaluation and fraud control while examining occupational fraud in Nigerian financial institutions. Though the studies sought to establish the impact of financial statements on fraud control and detection, they were carried out in Nigeria. Moreover, the studies centered only the financial institutions. However, this study sought to evaluate the impact of financial controls on occupational crime in the pharmaceutical manufacturing firms in Nairobi County.

In Kenya, Wahinya and Ondigo (2017) pursued to determine the impact of forensic accounting on the mitigation of commercial crime amidst listed firms in the Nairobi Securities Exchange.

The study used a descriptive research design. Cumulatively, sixty-one (61) listed companies in the Nairobi Securities Exchange were evaluated. Results showed that the robust presence of internal controls, board override controls, and separation of duties and tasks significantly impact the mitigation of corporate crimes. However, the study focused only on the firms highlighted in the Nairobi Securities Exchange in Kenya. This study sought to understand the impact of financial controls on occupational crime in the pharmaceutical manufacturing firms in Nairobi County.

Similarly, Makori (2016) looked at the influence of internal control on fraud risk control in the financial institutions in Kisii town. The study used a descriptive research design. The study sampled 130 participants working across the 15 financial institutions within Kisii town. Findings indicated that internal controls positively and significantly influence fraud risk management. The study, however, centered only on the financial institutions, specifically in Kisii town in Kenya. Thus, it presents a contextual knowledge gap. This study mitigated this gap by investigating the influence of financial controls on occupational crime in pharmaceutical manufacturing firms in Nairobi County.

2.4 Board Oversight and Occupational Crime

Executive board oversight is critical to deterring occupational fraud opportunities in a company. The lack of appropriate controls exposes the company, given that opportunities for occupational fraud are prevalent. Circumstances or developments that would typically not be considered unlawful opportunities turn out to be such when an absence of sound control exists. Usually, the absence of oversight is caused by an unsystematic or devolved organizational structure (Shover, Hochstetler & Alalehto, 2013).

Soltani (2014) contends that company committees usually are attributed to a majority of corporate fraud occurrences due to their inability to oversee the organization's processes and operations effectively. When occupational fraud occurs in a company, the accountability falls squarely on top executives and committee members. Thus, committee members are answerable for overseeing the top executive (managers), while the managers are accountable for oversighting the intermediate or line managers. Once executive committee members and top management fail to oversee or institute control measures, bad policymaking is expected.

Additionally, in companies with devolved administrative structure, distribution of obligations are common. This distribution/delegation of responsibilities can lead to *a divide between what the top executive considers as being carried out and what subordinate staff is rendering* (Soley, 2017). On the other hand, the senior executive may exploit this delegation of responsibilities due to the absence of direct accountability to vindicate the internal occupation offenses committed in the company. Thus, the level of delegation in a company and the resultant lack of sufficient oversight can indicate an occupational crime.

Lack of proper supervision or control can impact those desiring to engage in occupational fraud. Lachney (2018) affirms that the absence of reliable supervision provides prospects for unlawful actions that would not have taken place and relate to the opportunistic part of the Fraud Triangle. If workers can engage in white-collar crime in favor of the firm without the board's approval, equally, the staff can commit the same crimes against the firm. Companies that frequently carry out internal audits have experienced lesser fraud rates and are less likely to record fraud cases than firms without the equivalent financial control measures (Zager, Malis & Novak, 2016).

2.5 Organizational Ethics and Occupational Crime

The obligation and honesty from the workers' side have substantial importance irrespective of the prevailing internal controls to identify and avert fraud (Ocansey & Ganu, 2017). Each company has a group workforce that assumes the obligation to work in the company's interest. The obligation to serve justly is essential to executing responsibilities, which upon breach translates to the misuse of position trust.

Morality requires the determination of correct and immoral situations concerning activities, and a lack of ethics in the firm can lead to loopholes in the policymaking process (Warrick, 2017). Specifically, activities that would rationally be considered immoral would not be branded as such by the institutional leadership. Good organizational ethics is vital in averting occupational crimes such as fraud and helps put proper ethical behavior within all levels of the organization (Schwartz, 2013). According to Ermann and Lundman (2012), corrupt and dishonest activities are more likely to happen with no ethics.

Misusing a position of responsibility includes getting the financial benefit that the offender/ perpetrator does not merit (Holtfreter and Kristy, 2015). This is because the affected company undergoes financial damage equal to the sum of the scheme carried out by the fraudster. For instance, a worker tasked with daily cash deposit cash at the financial institution conceals some money and deposits less than the required amount. The daily variance could be unnoticed owing to the size of the omitted total, but in the long run, the actor decides to steal a higher sum. This can happen given the presence of dire internal control measures.

Firms can influence the values of the staff normally or from an occupational perspective (Pearce & Snider, 2013). The company ethics can add to the "justification" standpoint of the Fraud Triangle. Occupational crimes are typically fueled by moral incongruity (Carvalho, 2017).

Hence, the robust the ethical charisma of the staff, it is more challenging for them to justify an "immoral" act. The contrast between morality in formulating a judgment for the firm and in formulating a personal resolution is vague. Suppose an ethical compass when determining to engage in corporate fraud leads the offender. In that case, that influence can occur when they partake in occupational fraud. A robust logic of principles does not fade merely due to the offender's change.

Failure by the senior executive or management to align and maintain high ethical standards makes workers likely to commit fraud (Omar, Johari & Hasnan, 2015). Workers carefully watch their superiors' conduct; any unethical behavior can influence their conduct too. The top management ought to communicate their expectations to employees and lead by their examples by providing safer mechanisms for reporting perpetrators and rewarding integrity (ACFE, 2016). The creation of higher ethical culture in an organization through the values and activities of management can help dissuade employees' unethical behavior (Hess & Broughton, 2014).

In addition, Rae and Wong (2012) indicate that some of the practical tools for entrenching and strengthening an organizational culture that senior executives should pay attention to include control measures (such as internal and external financial controls), responses to severe occurrences, and organizational predicaments and training as well as mentoring. Moreover, a senior executive should also ensure reward systems and principles for staffing, selection, job promotion, retirement, and removal. However, for these policies to gain authenticity and have a meaningful impact on the staff, they have to go further than empty talk, but there should be a match between words and actions. Workers are continuously assessing managers' judgments and conduct as the core pointers of what is acceptable and intolerable in the firm. That is, staff watch for commitment in their leaders to what they acknowledge and exude through their daily

conduct. Hence, if senior management does not exhibit good behavior, they would have no ethical power to dissuade crimes from happening in their organizations.

Soley (2017) conducted a study to evaluate the probable grounds of occupational crime within organizations in the United States. The findings are that a lack of a proper functioning board can make the company vulnerable to occupational crimes. The study, however, points out a lack of proper functioning board as a general contributing factor to corporate crimes. The study also did not evaluate the influence or effect of board oversight on corporate crimes. Specifically, this research investigated the influence of board oversight on occupational crimes in pharmaceutical manufacturing firms in Nairobi. Similarly, a survey conducted by Price Water House Coopers (2012) revealed that corporate crime cases could be reduced with efficient examination abilities and management, greater understanding of deterrence and expectation, and successful action when fraud occurs. The study, however, evaluated possible solutions for corporate crimes in general.

Shao (2016) sought to find the most effective forms of internal controls to avert occupational crimes in small firms in the United States. The outcome showed that board oversight, training personnel on fraud, setting up a clear punitive anti-fraud policy, and using independent external third-party auditors have considerable impact in controlling occupational fraud. The study indicated that it is essential for the board to carry out regular oversight to ensure that accounting and auditing practices are adhered to. This is because administrative and company board oversight is critical to avoiding corporate schemes loopholes within a company. The lack of adequate checks and balances predisposes the company to exploitation by white-collar criminals. Proper over-sighting ensures that there are no vulnerabilities that can be exploited. The study only points out the role of board oversight in ensuring that accounting and auditing practices are

adhered to. This study sought to understand the impact of board oversight on occupation crimes in the pharmaceutical manufacturing firms in Nairobi County.

Fardon (2013), in a study to determine best practices for curbing corporate crime in the United Kingdom, indicated that board over sighting/supervision has a significantly positive impact in mitigating financial fraud. Moreover, assigning skilled staff to focus on full-time monitoring of accounting activities regularly can reduce fraudulent cases. However, the study only sought to determine the best practices for curbing organizational crimes. This study specifically looked at the impact of board oversight on occupational crimes in pharmaceutical manufacturing firms in Nairobi.

A study by Rupert (2015) investigated the influence of oversight and reporting on fraud and corruption in the pharmaceutical sector in China. Results showed that dishonest marketing individuals would link with a rival pharmaceutical company regardless of whether they prepared to accept or were sacked. In pre-employment selection and background, appropriate thoroughness is hardly carried out on subordinate workers; the new company will unintentionally take over a new street shrewd worker who is well conversant with the ability and disguise of corruption. Though the study focused on pharmaceutical firms, it was conducted in China; thus, it presents a contextual knowledge gap. Moreover, the study evaluated the influence of oversight and reporting on fraud and corruption in the pharmaceutical sector. This study investigated the influence of board oversight on occupational crime in the pharmaceutical manufacturing firms in Nairobi County.

In Nigeria, Eferakeya, Enaibre, and Offor (2016) examined the association between corporate governance and fraud prevention. Specifically, the study sought to determine the influence of audit committees, internal and external audits, and governance approaches employed Board of

Directors to prevent fraud. The study utilized multiple regression estimation techniques to evaluate the data. Results indicated that audit committee, internal and external audit, and governance approaches employed by the Board of Directors significantly negatively influence fraud deterrence. The study presents contextual and conceptual knowledge gaps since it was conducted in Nigeria. To bridge these gaps, this study evaluated the influence of financial controls, board oversight, organizational ethics, and corporate size in mitigating occupation crime in pharmaceutical manufacturing firms in Nairobi County in Kenya.

In South Africa, Naidoo (2017) analyzed the effectiveness of corporate governance in curbing the causal elements of occupational crime in large firms. The study employed an explorative research design. The study targeted managers and executives from large organizations and corporate governance experts. Results indicated that adopting corporate governance plays a significant role in controlling drivers of commercial crime, such as conspiracy among employees. The study also found that corporate governance enables organizations to nurture ethical culture and value systems for addressing commercial crime. Even though the study highlighted the role of corporate governance in mitigating commercial crime, it was carried out in a different context (South Africa). This study was conducted in Kenya, specifically in the pharmaceutical industry in Nairobi County.

In Kenya, Mwikamba and Rosana (2016) investigated corporate governance's usefulness in detecting accounting fraud in the universities in Kenya. Specifically, the researcher assessed how board oversight, internal controls adopted by the Universities, and policies and procedures help detect accounting fraud. The study employed a descriptive research design. Forty-eight respondents comprising financial controllers, chief accountants, and internal auditors in sixteen universities in Nairobi and Kiambu Counties were sampled. Results showed that board oversight,

such as monitoring activities, internal controls, policies, and risk assessment measures, significantly influence the detection of accounting fraud within Kenyan Universities. However, the study focused only on accounting fraud. This study focuses on occupational-related fraud/crimes in the pharmaceutical industry in Nairobi County.

Shover, Hochstetler, and Alalehto (2013) sought to examine the association between individual morality and occupational fraud in America. The study found that highly moral "good citizens" has less chance of committing an occupational crime. The study indicated that individuals with higher morality were dissuaded by their inner morality from engaging in occupational fraud. However, the study revealed that individuals with low personal morality justified their actions of engaging in white-collar crime based on the 'rationalization side of the fraud triangle.' Even though the study focused on the link between individual morality and occupational crime, it did not assess the role played by organization ethics in individual participation in white-collar crime.

Moreover, the study employed the logic and concepts of crime-as-choice theory (rational choice theory and routine activity theory) to underpin the disparity in causative factors of white-collar crime. The present study employed the fraud triangle theory. Its basis of occupational fraud is hinged on the opportunity caused by weak financial controls, motivation to attain the set organizational goals or financial needs/success, and rationalization for committing a crime.

Gorsira, Steg, Denkers, and Huisman (2018) investigated the relationship between the ethical climate of organizations and the employee tendency to engage in corruption in the Netherlands. The study sampled public officials and business personnel. Results indicated that the organization's ethical climate influences individual and social norms regarding corruption. Workers who consider their organizational culture unethical develop fragile individual social behavior vulnerable to fraudulent incidences. However, the study looked at corruption as a form

of organized crime; it only focused on the ethical climate of the organizations. This study examined financial controls, board oversight, corporate size, and organization ethics to determine the correlation between them and occupational crime.

De Vries and van Gelder (2015) looked at the influence of personality and organizational characteristics on workplace delinquency across firms in the Netherlands. The study focused on a sample of 455 participants. Specifically, the study evaluated the impact of employee humility and conscientiousness on organizational ethical culture. The study's findings showed that unethical behaviors such as lack of personal conscientiousness and humility are the predisposing factors for occupational crime in organizations. Companies should hire or promote managers with strong moral personalities and ethical values to develop a positive control work setting to mitigate occupational fraud risk. The study, however, focused only on firms within the Netherlands. The study also focused on the influence of personality and organizational characteristics on workplace delinquency. This study looks at the impact of organizational ethics to determine how it influences occupational crime in pharmaceutical manufacturing firms in Nairobi County.

Ocansey and Ganu (2017) sought to determine the influence of ethics and organizational culture in controlling occupational crimes in the Media industry in Ghana. The study findings showed that organizational ethics considerably impact the corporate culture. The study's findings revealed that organizational culture plays a significant part in managing the risks brought about by work-related crimes. The study indicated that firms whose corporate cultures are solidly entrenched in ethics are more likely to reduce incidences of occupational fraud. However, the study looked at the role of ethics and corporate culture in containing occupational fraud in the Media industry. This study evaluated the influence of organizational ethics on occupational

crime. Moreover, the study was centered on the media industry in Ghana, whereas this study concentrates on the pharmaceutical manufacturing firms in Nairobi County.

In Nigeria, Moses (2018) assessed the correlation between organizational culture and financial record fraud among companies listed on the Nigeria Securities Exchange. The study adopted a survey design to sample data from firms listed on Nigeria Securities Exchange in Rivers State. Findings indicated that corporate culture (transparency and accountability) significantly influences financial records fraud. The study established that transparency and accountability in the organization are significant in minimizing the prevalence of financial statement fraud. However, the study only focused on the contribution of corporate culture and firms listed on the Nigeria Securities Exchange. Thus, it was imperative to carry out this research to evaluate the impact of organizational ethics on occupational crime in pharmaceutical manufacturing firms in Nairobi County.

In South Africa, Dzomira (2015) examined the influence of governance on fraud risk control in the public sector. The descriptive research design was used to describe the provincial audit results between 2011-14 across the nine public companies in South Africa. With the help of Atlas-ti qualitative software, content analysis was used to evaluate the qualitative raw data. Outcomes showed that good ethical business practices, such as a culture of honesty, have a positive and significant consequence on fraud risk control in the public sector in South Africa. Findings also indicated that sound ethical organizational culture is critical in fraud risk control in the state institutions in South Africa, leading to efficient service provision. However, the study only focused on public sector firms in South Africa; hence, its presence of a contextual knowledge gap. This study focused on the pharmaceutical industry in Nairobi County in Kenya.

In Kenya, Kagozi (2017) investigated the influence of organizational ethics on fraud risk control in financial institutions. The study employed descriptive research to characterize the effects of organizational ethics on risk control in financial institutions. The study's sample population involved internal auditors from the 42 financial institutions registered by the CBK in Nairobi County. Findings showed that internal auditors' professional ethics, such as honesty and candidness, has a positive and noteworthy influence on risk management in financial institutions. Even though the study was carried out in Kenya, the study focused on risk control, particularly in the financial sector, presenting conceptual and contextual knowledge gaps. This study bridged these gaps by examining the influence of financial controls, board oversight, organizational ethics, and corporate size in the pharmaceutical manufacturing firms in Nairobi County in Kenya.

2.6 Corporate Size and Occupational Crime

The size of a firm or company affects the likelihood of organizational crime (Van Erp, 2018). Naidoo (2017) posits that huge-sized firms must, by obligation, entrust or devolve policymaking and establish complex systems to work proficiently. The consequent absence of individual accountability in decision-making cultivates an atmosphere where occupational crime occurs. According to the fraud triangle theory, firm size extends to the opportunity element of white-collar crime. Bigger companies have more devolved governance structures. The bigger the firm, the more sophisticated occupational crimes get. For instance, it may be less complex to conceal malpractices, such as financial records.

Simpson, Piquero, Vieraitis, Tibbetts, and Blankenship (2012) indicate that opportunity is subjective. A chance for occupation crime is only opened when the perpetrator admits it. Benson and Simpson (2014) assert that although occupational crimes in the corporate world are diverse,

corporate size may help create crime opportunities. Specifically, large corporate firms are more prone and likely to present bigger opportunities for occupational crime. However, with the 'rationalization' in the Fraud Triangle, one's justification to commit a crime may be influenced by the corporate size for certain types of occupational crime.

Yost and Croes (2016) assessed the predisposing factors for engaging in fraudulent/ opportunistic behavior among publicly listed restaurant companies between the years 2002-2014. The study focused on publicly listed restaurants in the United States. The study used an experimental research design to identify the rationale for occupational fraud in listed restaurant companies. The findings indicated that company size, debt, employee turnover, and organizational structure correlate statistically positively with fraudulent incidences. Though the study investigated the causative factors for fraud, it only looked at the restaurant industry. The study also focused on firms in the United States, presenting a contextual knowledge gap. This study, however, was carried out in the pharmaceutical industry in Nairobi County in Kenya.

Moore (2016) examined the relationship between organization size and occupational fraud in the United States. The study sought to determine the link between organization size and the rate of recurrence and seriousness of occupational fraud. The study employed a quantitative non-experimental correlational approach. The study sampled eleven Certified Fraud Examiners from sixteen states in America. The outcome of this study determined a relationship between firm size and the frequency of occurrence and severity of occupational fraud. Results showed that smaller businesses are significantly more influenced by occupational fraud than larger businesses. Although the study focused on the organization size and occupational fraud, the study has geographical limitations. Thus, this study needed to be carried out in the Kenyan context, specifically the pharmaceutical industry in Nairobi County.

The Association of Certified Fraud Examiners (2018) examined the relationship between organization size and its risk of fraud. The study was based on 2690 cases of occupational fraud committed across organizations in 125 different countries between the years 2016-2017. The study targeted both small local businesses and multinational corporations. The study's findings indicated that an organization's risk for occupational was associated with the organizational ability to put internal controls into place. The study revealed that smaller organizations with less than 100 staff are more likely to experience occupational fraud cases. This is because smaller organizations have less capital and face challenges in implementing job separation and other essential fraud controls.

Moreover, the study indicated that larger organizations face fraud risks such as corruption, non-cash fraud, billing, and cash on hand. The study, however, focused on different firms in a broader context. This study specifically sought to determine the impact of corporate size on occupational crime in the pharmaceutical manufacturing firms in Nairobi County in Kenya.

Nia and Said (2015) sought to establish the connection between company size and deeds of asset misappropriation, fraudulent statements, and corruption within financial institutions in Iran. His study revealed that firms that became victims of asset misappropriation and fraudulent statements were smaller. The findings indicated that size might help make opportunities for crime but to a smaller extent. The study indicated that occupational fraud in larger financial institutions is because of greater opportunities available. Though the study looked at the association between the company size and occupational fraud, the study was conducted in a different context (in financial institutions and Iran). Moreover, the study only looked at the financial institutions centered on the pharmaceutical manufacturing firms in Nairobi County in Kenya.

In Uganda, Kultanen (2017) sought to determine the strategies for fraud prevention and detection in Ugandan university organizations. The study employed the interview method as a data collection tool. The study used thematic analysis methods to analyze collected data. Results revealed that smaller government-owned organizations and commercialized universities are more likely to experience incidences of fraud. The study also indicated that implementing and creating fraud risk management measures and strategies are vital in reducing and preventing fraud in universities in Uganda. However, the study presents conceptual and contextual knowledge gaps as it only focused on universities. To bridge these knowledge gaps, this study looked at financial controls, board oversight, organizational ethics, and corporate size in the pharmaceutical manufacturing firms in Nairobi County in Kenya.

In Kenya, Iminza and Kiragu (2015) investigated the contribution of bank size on occupational fraud risk in financial institutions. The study targeted thirty commercial banks licensed in Kenya. The study employed bivariate linear regression to establish the association between bank size and occupational fraud risk in Kenyan financial institutions. Results of the study revealed that bank size has a positive and significant influence on occupational fraud risk within financial institutions in Kenya. Even though the study was conducted in Kenya, it focused only on commercial banks. This study bridged these gaps by carrying them out in the pharmaceutical manufacturing firms in Nairobi County in Kenya.

2.7 Summary of the Reviewed Literature

This section presents the theoretical and empirical literature studies concerning the subject matter of the study. The theoretical foundation of this study is the Fraud Triangle Theory. From the various theories, the study reviewed the literature on organizational ethics, financial controls, board oversight, reporting, and a firm's size. This section also presents the research gaps in the

reviewed literature and how this study can bridge the gaps. It was thus imperative to carry out a study focusing on pharmaceutical manufacturing companies to ascertain the factors that influence corporate crimes.

2.8 Research Gaps

The reviewed literature in this study revealed that few studies had been conducted to establish the factors influencing occupational crime in corporate organizations in pharmaceutical firms in Kenya. Moreover, most of these studies were conducted in different contexts or focused on concepts other than the study. For instance, a study by Makori (2016) which looked at the effect of internal control systems on fraud risk, only looked at financial firms in Kisii town. Similarly, a study by Wahinya and Ondigo (2017), which looked at the impact of forensic accounting on the prevention of corporate crime, only focused on publicly listed firms in the Nairobi Securities Exchange. Though the study found robust internal controls as a panacea for corporate crime, the findings cannot be conclusively applied to occupational fraud in the pharmaceutical sector.

Other studies, such as by Soley (2017), which sought to determine the potential causes of occupational crime within firms, only looked at the firms in the United States. Equally, a study by Gorsira, Steg, Denkers, and Huisman (2018) looked at the relationship between the ethical climate of organizations and the employee tendency to engage in corruption only focused on firms within the Netherlands. Though the studies focused on elements such as in this study (organizational ethics), they were carried out in a different context. Moreover, studies such as by Ocansey and Ganu (2017), which sought to determine the role of ethics and corporate culture in managing occupational fraud, only looked at the firms in the Media industry in Ghana. Likewise, Yost and Croes (2016) assessed the predisposing factors for engaging in fraudulent behavior

among publicly listed restaurant companies in the United States. Both studies were conducted in different contexts (Ghana and United States, respectively).

Lastly, Rupert (2015) study sought to determine the impact of oversight and reporting on fraud and corruption in the pharmaceutical sector, focusing only on firms within China. Moreover, the study only sought to establish the impact of oversight and reporting on fraud. Thus, the study presents both contextual (China) and conceptual knowledge gaps. To address the above highlighted and identified literature gaps, this study focused on financial controls, board oversight, organizational ethics, and corporate size to fully understand their impact on occupational crime in pharmaceutical companies in Nairobi County.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction to Research Methodology

This chapter presents the study methodology that was adopted in doing the thesis. The section presents the study's design, target population, sampling techniques and procedure used for sampling, methods of collecting data, pilot tests, and the procedure for data analysis.

3.2 Research Design

The research design refers to a plan to generate answers to research questions (Blumberg, Cooper, and Schindler, 2014). This study employed a descriptive research design. This is because a descriptive research method can be used to collect data about the present as is. According to Mugenda and Mugenda (2012), descriptive research is appropriate as it generally

allows for wide-ranging inferences about the variables focused on the target populations. Moreover, the use of descriptive research design helped the study to comprehensively analyze and describe the predisposing factors influencing occupational crime in the pharmaceutical sector in Nairobi County.

3.3 Location of the Study

This study was carried out in Nairobi County. The reason for selecting this County is that most of the pharmaceutical manufacturing firms concerned with manufacturing and distribution are located in Nairobi. According to Attaran (2015), most occupational crimes on Nairobi's pharmaceutical products include exaggerating the cost of drugs, repackaging drugs, and selling poor quality or generic drugs. Also, sampling pharmaceutical manufacturing firms within Nairobi County enabled the researcher to reduce commuting time during data collection. The map of the research site of this study is shown in appendix 6.

3.4 Target Population

Neuman (2013) describes a population as a collection of elements with similar characteristics. The target sample consisted of 26 licensed pharmaceutical Manufacturing firms in Nairobi County (Kenya Association of Pharmaceutical Industry, 2020). Due to feasibility and cost constraints, the study specifically targeted one (1) staff from each of the three levels of management: top-level management, middle-level management, and the subordinate staff from all 26 pharmaceutical manufacturing firms in Nairobi County. This allowed the researcher to capture and describe comprehensively how organizational culture influences occupational crime within the various levels of management, including the subordinate staff. In addition, the study

focused on the three levels of management because the levels of occupational crimes committed at each level vary. Hence, seventy-eight (78) respondents were sampled.

3.5 Sample and Sampling Procedure

3.5.1 Sampling Technique and Sample Size

Garg and Kothari (2014) describe a sample as a subsection of the population to be examined. Simply put, a sample is a true representation of the whole population. Given that the study's target population is small (26 pharmaceutical manufacturing firms), a census was employed. Bryman and Bell (2015) indicate that a census is appropriate for use on a population with less than 200 samples, given that they possess unique characteristics. A census reduces sampling error and gives data on all the elements/persons in the population. Given that the target sample for this study was less than 200 (78), a census was used to sample the respondents. Moreover, the study used a purposive sampling method to select key informants for the interview. This is because purposive sampling enables the researcher to choose only respondents or informants who are knowledgeable about the subject. Since no hypothesis is being tested in this study, the number of key informants was selected purposively from the sampled Pharmaceutical Manufacturing Firms in Nairobi County.

According to Dworkin (2012), the appropriate number of participants' (key informants) in an in-depth study varies. However, the suggested minimum sample of between 5 to 50 participants is considered adequate for the interview. Hence, eight (8) key informants were selected for this study's in-depth discussion with the researcher. The purpose of using Key Informant was to allow the researcher to investigate occupational fraud in pharmaceutical firms further.

Table 3.1 Sample Size Distribution

Category	Sample Size	Sample (%)
Top management	26	33.33333
Middle level management	26	33.33333
Subordinate Staff	26	33.33333
Total	**78**	**100.0000**

The sample size distribution in table 3.1 is due to the selection of one sample from each of the three levels of management (top-level management, middle-level management, and subordinate staff) in all 26 pharmaceutical manufacturing companies in Nairobi. The respondents from the respective levels of management were selected purposively.

3.6 Data Collection Instruments

The study employed self-administered questionnaires for data collection. Saunders, Lewis, and Thornhill (2012) indicate that proper, consistent, and established research instruments are the most fundamental prerequisites of a structured survey. Bearing in mind the study's goal, closed-ended and open-ended questionnaire items were adopted because it allows the researcher to generate adequate and only significant information.

3.6.1 Closed-Ended Questionnaires for the Respondents

The study employed closed-ended questionnaires. This is because closed-ended questionnaires are easy to administer and take less time for the respondents to answer (Cummings, Kohn & Hulley, 2013). Moreover, semi-structured questionnaires allow the researcher to compare easily the answers provided by the respondents.

The questionnaire is divided into two parts; Part A and Part B. Part A has questions regarding the respondents' profiles, such as age bracket, level of education, and experience. Section B, on the other hand, contains five subsections with Likert-scaled questions formulated according to each

research objective/question. The Likert scale is an interval scale that explicitly uses five pillars between 1 and 5. A Likert scale questionnaire is preferred because it is easy to code participant responses into a quantitative format for data analysis. The five-point Likert scale questions let the participants state their degree of agreement/disagreement with each questionnaire item. Each item contains five reaction classifications: Strongly Disagree, Moderately Agree, Agree, and Strongly Agree. The questionnaire that was used in this study is presented in appendix 2.

3.6.2 Interview Guide / Schedule

The study employed semi-structured interviews with open-ended queries to obtain further information concerning occupational fraud in Pharmaceutical Firms. Semi-structured interviews with the help interview schedule (with a predetermined set of questions) were used as a guide during the interview. Semi-structured interviews allow the study to seek more in-depth information from the respondents. The interview schedule contains a pre-determined set of questions arranged thematically in line with the research questions. The interview schedule is as indicated in appendix 3.

The study carried out Key Informant Interviews with eight participants who are employees of the respective Pharmaceutical Companies. The eight Key Informants were selected randomly from the 26 Pharmaceutical Companies in Nairobi County. To ensure anonymity, participants were labeled as K1-K8. The aim of conducting in-depth interviews was to probe for more information concerning occupation crime in the pharmaceutical companies in Nairobi County. The discussion with the KIs was centered on four thematic areas, i.e., financial controls, board oversight, organizational ethics, and corporate size.

3.7 Data Collection Procedures

According to Burns and Grove (2010), data collection refers to an accurate, systematic collection of data pertinent to the study objectives. The study gathered raw data using semi-structured questionnaires distributed with the help of research assistants. The study gathered data using the drop and pick approach. Questionnaires were left and taken after one week. This was meant to allow the participants an adequate period to answer the questionnaires and enhance the response rate. In addition, a semi-structured interview sheet was used to lead the researcher to discuss with the key informants in the pharmaceutical firm to draw out specific information on occupational fraud. An interview sheet was used to lead the researcher during the interview.

3.8 Pilot Testing

The general guideline is that 5% to 10% of the selected sample is adequate for a pilot test (Cooper & Schindler, 2011). The study pilot tested the research instrument on six (6) staff at Universal Corporation Limited, which translates to 7% of the total sample. The selected respondents in the pilot study were not allowed to participate in the main study. The researcher addressed issues that emanated from the pilot testing of the research instrument, such as reliability, validity, and ambiguity of the research tools, before administering it in the actual study.

3.8.1 Reliability of the Research Instrument

Reliability implies the level of constancy with which the questionnaire (research tool) quantifies a characteristic (Sekaran & Bougie, 2010). Reliability analysis was utilized to establish the internal consistency between the study variables. The reliability of the study indicators was examined by determining the Cronbach's Alpha values for all items in the research instrument.

The Cronbach's alpha coefficient varies between 0 and 1, and alpha values closer to 1 are considered highly reliable. A research instrument with a good internal constancy should have high alpha coefficients. This study considered all the research instruments that yielded alpha values above 0.7. Thus, the Cronbach coefficient of 0.7 was used as a benchmark for determining the trustworthiness of the research tool.

Table 3.2 Reliability Results

Variable	Cronbach's Alpha	Number of Items	Interpretation
Financial Controls	.834	5	Acceptable
Board Oversight	.879	5	Acceptable
Organizational Ethics	.811	5	Acceptable
Corporate Size	.897	5	Acceptable
Occupational Crime	.793	4	Acceptable

The pilot study findings revealed that all variables had Cronbach's alpha coefficient above 0.7. The findings imply that the research instrument was reliable for data collection. This is in agreement with the commendations of Sekaran (2003) and Nunnally (1978), who indicated a Cronbach alpha coefficient threshold of 0.7 as acceptable for a research instrument for data collection.

3.8.2 Validity of the Research Instrument

Check and Schutt (2011) describes the validity of the research tools as a point to which the questionnaire essentially mirrors the theoretical concept being studied. This study used content validity to check whether the research instrument makes logical sense. According to Saunders, Lewis, and Thornhill (2012), evaluating content validity is not mathematical but a critical and subjective process. In this study, content validity was determined by giving the research tool to the Africa Nazarene University supervisors to review whether it follows the recommended

design and check for ambiguity and readability. This allowed the researcher to align and incorporate the reviews in the research instrument before the actual data gathering.

3.9 Data Analysis and Presentation

Ott and Longnecker (2015) describe data analysis as summarizing, editing, and organizing raw data systematically using statistical techniques to establish patterns, relationships, or trends. Collected data were cleaned, coded, and entered into excel sheets in readiness for data analysis. Statistical Package for Social Sciences (SPSS) version 22 was used to produce descriptive and inferential statistics. Descriptive statistics entails using measures of central tendency, for instance, means and frequencies, while inferential statistics involves the use of correlation and regression statistics.

Correlation analysis helped determine the relationship between the independent (organizational ethics, corporate size, financial controls, board oversight, and reporting) and the study's dependent (occupational crime) variables. A linear regression analysis model helped the study examine the effect of independent variables on occupational crime in pharmaceutical manufacturing firms in Nairobi County. A regression model of the following form was used.

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e}$$

Where:

Y = Occupational Crime

X_1 = Financial Controls

X_2 = Board Oversight

X_3 = Organizational Ethics

X_4= Corporate Size

β_i; $_{i=1,2,3,4}$ = Represents the coefficients for the different independent variables. $\boldsymbol{\varepsilon}$ is the error term presumed to be normally dispersed with a mean of zero and equal variance. Descriptive statistics

were used to define the characteristics of the data gathered. The evaluated data were depicted in chats, frequency, and percentage tables. This helped improve the clarification and comprehension of the findings of the research.

Qualitative data from the interview captured using notes and recording were organized and analyzed using thematic content analysis. The interview findings were presented thematically according to each objective.

3.10 Legal and Ethical Considerations

Legal and ethical considerations imply the protocol that should be maintained by a researcher while conducting research, for instance, respect for the respondent's dignity and privacy (Hammersley & Traianou, 2012). Before data gathering commenced, the study sought an endorsement letter from the Africa Nazarene University and NACOSTI. The researcher also sought consent from all the pharmaceutical manufacturing firms under study. The study asked the respondents for their consent and willingness to partake in the study. The participants were informed that the process was voluntary, and only those keen to partake were permitted to contribute. The study omitted the name section in the questionnaire to ensure the participants' anonymity. In addition, to assure the respondents of their confidentiality and privacy, the researcher informed them that the information they provided was going to be used for educational reasons only and that there was no release of the information to anybody whatsoever.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

This section presents the findings of the study based on participants' responses derived from the data collection process. The research findings are presented using figures, charts, and tables. The study used figures and charts to present the demographic findings, while tables were used to present the descriptive and inferential analysis findings. The findings of the descriptive analysis are presented according to the study objectives.

The study administered Seventy-eight (78) questionnaires to the respondents. However, seventy-one questionnaires were duly filled and returned. The distribution of the questionnaire response by the study participants is indicated in Table 4.1 below.

Table 4.1 Response Rate

Category	Respondent Category	Frequency	Percentage (%)
Duly Filled Questionnaires	Top-Level Management	21	26.9

	Middle-Level Management	24	30.8
	Top management	26	33.3
Questionnaires not responded to		7	9.0
Total		**78**	**100**

The findings in Table 4.1 indicates that the overall response rate is 90.1%. According to Fincham (2008), a 60-80% response rate is suitable for descriptive studies. Hence, a response rate of 90.1% is very appropriate for this study.

4.2 Distribution of Demographic Characteristics

The study tried to ascertain the distribution of participants' demographic information such as occupation, level of Education, working department, gender, and the number of years working in the pharmaceutical industry. The distribution of demographic characteristics is presented in subsections 4.21, 4.2.2, 4.2.3, 4.2.4, and 4.2.5.

4.2.1 Respondents Age

The study sought to determine the age distribution of the participants who partook in the study. The findings of the study are as indicated in Table 4.2.

Table 4.2 Respondents Age

Age Bracket	**Respondent Distribution**			**Frequency**	**Percent (%)**
Less than 30 years	3(TM)	6 (MM)	10 (S	19	26.8
Between 31-40 years	4(TM),	8 (MM)	9 (S)	21	29.6
Between 41-50 years	5 (TM)	4 (MM)	6 (S)	15	21.1
Over 51 years	9 (TM)	6 (MM)	1 (S)	16	22.5
Total				**71**	**100**

Key: TM=Top Level Management; **MM=** Middle Level Management; **S=**Subordinate Level

The results in Table 4.2 indicate that out of the 71 participants who responded, 29.6% were aged between 31 and 40. Approximately 26% of the respondents indicated that they are below 30

years old, 22.5% indicated that they are above 50 years, and 21.1% were between 41 and 50. The findings imply that most of the workforce in the pharmaceutical firms in Nairobi County has diverse aged groups even though the age diversity of the staff can be attributed to sampled groups in senior/middle and subordinate levels.

4.2.2 Respondents' Education Level

The study probed to determine the level of education of the sampled respondents. The findings of the study are shown in Figure 4.1.

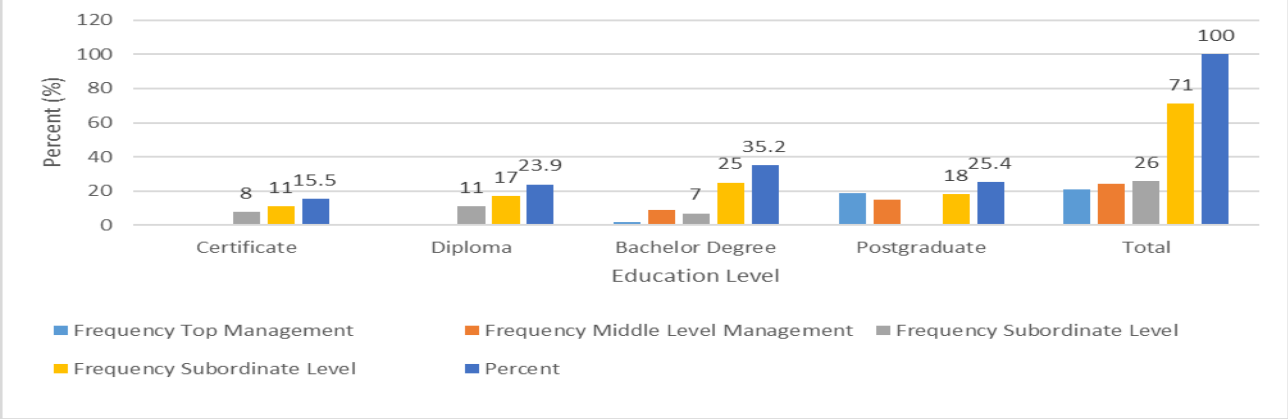

Figure 4.1 Respondents' Level of Education

The results in Figure 4.1 indicate that the education level of the most (35.2%) of the respondents have a bachelor's degree while 25.4% of them have a postgraduate degree. The results also illustrated that 23.9% of the respondents have a diploma education level while only 15.5% of the sampled respondents demonstrated a certificate level. The findings imply that most of the staff in the pharmaceutical industry in Nairobi County are literate. This implies that with literacy, interpretation of the questions was easy, contributing to high reliability.

4.2.3 Respondents' Working Department

The study sought to determine the distribution of respondents based on their work departments in their respective pharmaceutical companies. The findings of the study are shown in Figure 4.2.

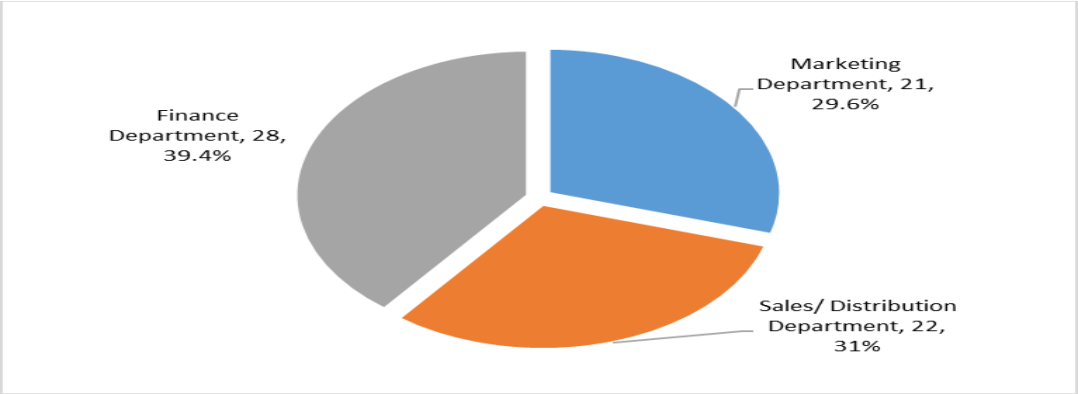

Figure 4.2 Respondents' Working Department

The findings in Figure 4.2 indicate that the majority, 39.4% of the sampled participants, work in the finance department. In comparison, 31% work in the sales/ distribution department, and 29.6% indicated that they work in the marketing department. The findings on the distribution of the respondents' working departments are because the study majorly sampled participants in the sales or distribution, finance, and marketing departments. After all, they are involved in the distribution, selling, off-label marketing, and handling financial records (statements).

4.2.4 Respondents' Gender

The study sought to determine the gender of respondents who participated. The findings of the study are illustrated in Figure 4.3.

Figure 4.3 Respondents' Gender

The findings in Figure 4.3 indicate that the majority (64.8%) of the sampled participants were males, while 35.2% were female. The findings show that the gender distribution in most of the pharmaceutical firms in Nairobi County is in line with the two-thirds gender rule enshrined in the Constitution of Kenya 2010.

4.2.5 Respondents' Number of Years Worked

The study sought to determine the years the respondents have worked in their respective pharmaceutical companies. The findings of the study are illustrated in Figure 4.4.

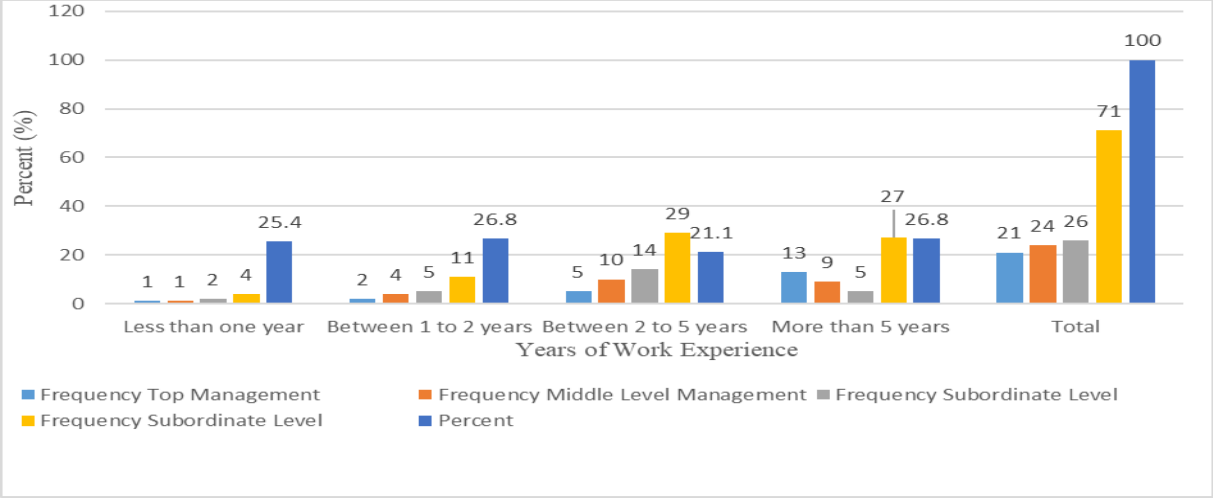

Figure 4.4 Respondents' Number of Years Worked

The findings in Figure 4.4 showed that most of the sampled respondents indicated that they have worked in a pharmaceutical company for between 2 and 5 years. Those who indicated that they

have worked for more than 5 years were 38.03%, while 15.49% of the sampled respondents indicated that they have worked for between 1 and 2 years. Finally, only 5.63% of the respondents noted that they have worked in a pharmaceutical company for less than a year. The significance of the findings is that most of the sampled have vast experience working in a pharmaceutical company and are expected to have a high understanding of the various occupation fraud incidences.

4.3 Findings of Descriptive Analysis

The study used descriptive statistics to determine the mean and standard deviation of the respondents' answers following the Likert-scaled questionnaire items. A scale of 1 to 5 was used in the study. Quantification of Likert scale classifications was carried out by allocating numerical values to the different categories to enable statistical illustration of data where 1 = Strongly Disagree; 2 = Disagree; 3 = Moderately Agree; 4 =Agree and 5 = Strongly Agree. The study used means and standard deviation to interpret the results of the descriptive analysis. The study obtained means and standard deviation using the Likert Scale responses of 1 to 5 based on the participants' answers, as shown in Table 4.3.

Table 4.3 Showing Mean Scale

Mean Range	**Interpretation**
4.5-5	Strongly Agree
3.5-4.4	Agree
2.5-3.4	Moderately Agree
1.5-2.4	Disagree
0-1.4	Strongly Disagree

Findings of descriptive analysis have been presented according to the respective study objectives.

4.3.1 Influence of Financial Controls on Occupational Crime

The study sought to ascertain whether the respondents agreed or disagreed with the statements on financial controls in their company. The findings of the study are illustrated in Table 4.4.

Table 4.4 Effect of Financial Controls on Occupational Crime

Statements	SD	D	MA	A	SA	mean	std. dev
Most occupational fraud cases are related to financial misstatement	5.6%	12.7%	35.2%	35.2%	11.3%	3.98	0.87
Lack of frequent auditing increases the case of occupational crimes	1.4%	15.5%	31.0%	35.2%	16.9%	3.71	0.93
The organization has cases of financial records manipulation.	2.8%	7.0%	8.5%	32.4%	49.3%	3.87	0.85
There is improper disclosure of financial statement information in the organization.	0.0%	12.7%	31.0%	43.7%	12.7%	3.56	0.87
Poor accounting and financial controls increases occupational crime cases	1.4%	8.5%	33.8%	42.3%	14.1%	3.59	0.89
Average						**3.74**	**0.88**

Table 4.4 show that many respondents agree that most occupational fraud cases are related to financial misstatement (mean=3.98). Findings also suggested that the respondents agreed that a lack of frequent auditing increases the case of occupational crimes (mean=3.71). Results also revealed that most participants agreed that their organization has cases of financial records manipulation (mean=3.87). Additionally, findings revealed that respondents agreed that there is unlawful disclosure of financial statement information in the firm (mean=3.56). Lastly, results showed that most respondents indicated that they agree that poor accounting and financial controls increase occupational crime cases (mean=3.59). In conclusion, most respondents agreed with the assertions on financial controls and occupational fraud in the pharmaceutical company,

as shown by an average mean of 3.74. The findings also revealed that the answers the participants gave were less varied, as indicated by a standard deviation of 0.88, implying a slight divergence in the responses provided by the participants.

Interview Findings on the Influence of Financial Controls on Occupational Crime

Concerning occupational crimes committed by staff in the respective Pharmaceutical Companies, the informants noted corruption, financial misstatement, and asset misappropriation as the leading forms of occupational crimes in their companies. The informants also noted that they believe that existing financial controls in their company are reasonable; however, they pointed out that; regardless of the financial controls, top managerial heads could always find a way to embezzle company resources.

> Some common occupational crimes include stealing drugs, and cash, manipulating documents, colluding with third-party vendors/distributors, misusing company resources and assets, and engaging in accounting misconduct. The most notable loopholes occur during billing, packaging, and distribution, where some staff conspires with the other staff/outsiders.

In addition, the participants indicated that they believe the current financial controls in their company are effective, though they noted that financial control loopholes could arise due to poor oversight. Further, the participants noted that access to company funds is restricted to authorized chief financial officers only. As such, they asserted that no unauthorized staff could access company financial transactions except the sales staff, who often distribute drugs to various pharmaceutical outlets within the country. Some participants suggested adopting more punitive remedial measures such as compensation and dismissal as some of the solutions to occupational

crimes. However, some of them emphasized the need for random financial audits and oversight of financial statements as measures for preventing occupational crimes.

> The current loopholes in the company can be eliminated through multilayered controls where all billings, packaging, and financial transactions are subjected to strict verification and authorizations and regular financial oversights. Financial loopholes such as accounting misconduct should be mitigated using punitive measures and limiting financial access to authorized chief financial officers only.

4.3.2 Influence of Board Oversight on Occupational Crime

The study sought to determine whether the respondents agreed or disagreed with the company's statements on board oversight. The findings of the study are as indicated in Table 4.5.

Table 4.5 Influence of Board Oversight on Occupational Crime

Statements	**SA**	**D**	**MA**	**A**	**SA**	**mean**	**std. dev**
The absence of proper oversight creates opportunities for criminal actions that would otherwise have not existed	4.2%	2.5%	4.7%	35.2%	53.4%	4.58	0.72
Frequent internal audits leads to lesser cases of occupational financial crime	2.8%	1.9%	11.3%	38.1%	45.9%	4.40	0.92
Decentralized management structure allows for a diffusion of responsibility hence encouraging fraud to occur	0.0%	1.3%	11.9%	39.6%	47.2%	4.22	0.94
When board members and management show indifference in over sighting, criminal choices are more possible to arise	0.0%	5.6%	16.1%	39.4%	38.9%	3.98	0.82
Poor board oversight can result in unchecked policymaking at the management level	2.8%	5.6%	11.3%	33.8%	46.5%	4.06	0.87
Average						**4.25**	**0.85**

The findings in Table 4.5 showed that most respondents strongly agree that the absence of proper oversight creates opportunities for criminal actions that would otherwise have not existed (mean=4.58). Findings also showed that the respondents agreed that frequent internal audits lead to lesser cases of occupational financial crime (mean=4.40). Results also revealed that most participants agreed that a decentralized management structure allows for diffusion of

responsibility, encouraging fraud to occur (mean=4.22). Additionally, respondents agreed that when board members and management show indifference to over-sighting, criminal choices are more likely to arise (mean=3.98). Finally, results revealed that most respondents agreed that poor board oversight could result in unchecked policymaking at the management level (mean=4.06). In summary, most participants agreed with the statements on board oversight and occupational fraud in the pharmaceutical company, as indicated by an average mean of 4.25. The findings also revealed that the answers the participants gave were less varied, as showed by a standard deviation of 0.85, implying that most of the responses provided were similar or had little difference.

Interview Findings on the Influence of Board Oversight on Occupational Crime

As to whether the board fulfils its over sighting role, the participants affirmed that they believe their company board is executing its role correctly. However, they noted that the board should provide closer oversight. This is because; poor oversight can lead to little or no accountability on the part of management hence predisposing the company to occupational crimes. They also noted that board involvement in fraud-risk management initiatives in the company could help deter employees by increasing the perception of detection of occupational crimes.

4.3.3 Influence of Organizational Ethics on Occupational Crime

The study sought to determine whether the sampled respondents agreed or disagreed with the statements regarding organizational ethics in their company. The mean distribution of the participants' responses is as indicated in Table 4.6.

Table 4.6 Influence of Organizational Ethics on Occupational Crime

Statements	SD	D	MA	A	SA	mean	std.
Lack of organizational morality may predispose some employees to commit	1.5%	2.1%	11.1%	37.4%	47.9%	4.48	0.84

crime							
Conflict of interest influences staff work ethic	0.0%	2.8%	11.4%	31.7%	54.1%	4.35	0.91
Poor employee integrity influences the performance of the firm	1.4%	3.3%	6.9%	37.1%	51.3%	4.14	0.98
Dishonest staff would lead to some of their decisions being regarded as 'wrong' when they are right	0.8%	5.2%	9.3%	44.8%	39.9%	4.61	0.87
Poor organizational morality affects the decision-making process.	1.4%	2.9%	11.6%	42.3%	41.8%	4.11	0.92
Average						**4.34**	**0.90**

Table 4.6 showed that most participants strongly agree that a lack of organizational morality may predispose some employees to commit crimes (mean=4.48). Findings also revealed that the respondents agreed that conflict of interest influences staff work ethic (mean=4.35). Findings also revealed that most respondents agreed that poor employee integrity influences the firm's performance (mean=4.14). Moreover, results showed that the respondents strongly agreed that dishonest staff would lead to some of their decisions being regarded as 'wrong' when they are right (mean=4.61). Lastly, results revealed that most respondents indicated that they agree that poor organizational morality affects the decision-making process (mean=4.11). Most respondents agreed with the statements on organizational ethics and occupational fraud in the pharmaceutical company, as shown by an average mean of 4.34. The findings also shown by the responses given by the participants were less varied, as indicated by a standard deviation of 0.90, implying that most of the responses provided by the participants were primarily similar or had little difference.

Interview Findings on the Influence of Organizational Ethics on Occupational Crime

The participants noted that their company has a strict moral code regarding its organizational ethics. However, the participants noted that sometimes some company managers flout organizational ethics. For instance, K-5 noted that;

> Some managers expect junior staff to maintain higher integrity levels while they do not; this is demonstrated by the recent indictment of my senior manager over corruption allegations.

Overall, the participants indicated that the existing organizational culture does not encourage one to commit crimes. The respondents indicated that one's engagement in occupational crimes usually is due to opportunities, i.e., staff engages in dishonesty if they feel that level of accountability/checks is poor. In addition, participants observed that senior managers should maintain higher ethical standards to set an example for their junior staff to emulate. Holding higher ethical standards by the senior management can help dissuade the immoral behavior of employees.

> Overall, there is zero tolerance for corruption or malpractice in the company. However, some crimes, such as misstatement of sales entry amounts/figures, occur because of weak financial controls, which gives opportunity/motivates some staff to engage in misconduct. I think the board should devote their energy to fraud risk management. This can help boost the company's ethical character by establishing an anti-fraud culture. Moreover, board engagement in fraud risk management can help increase the perception of occupation fraud detection in the company, hence dissuading potential perpetrators.

4.3.4 Influence of Corporate Size on Occupational Crime

The study sought to determine whether the participants agreed or disagreed with corporate size statements in Pharmaceutical Manufacturing Company. The mean distribution of the participants' responses is shown in Table 4.7.

Table 4.7 Influence of Corporate Size on Occupational Crime

Statements	**SD**	**D**	**MA**	**A**	**SA**	**Mean**	**Std. Dev**
Large firms have higher opportunities to commit crime	2.8%	3.7%	11.0%	41.1%	41.4%	4.60	0.88
Large workforce management have more chances of committing occupation crime	1.2%	5.9%	14.3%	36.6%	42.0%	4.46	0.92
Big firms have higher tendencies of asset misappropriation	1.5%	3.8%	9.6%	37.9%	47.2%	4.42	0.89
Large firms have higher case of corruption, and fraudulent statements	2.1%	3.5%	17.1%	34.8%	42.5%	4.38	1.04
Bulk production of drugs makes monitoring difficult	3.6%	6.5%	13.2%	29.7%	47.0%	4.25	0.84
Average						**4.42**	**0.91**

Table 4.7 showed that most participants strongly agree that large firms have higher opportunities to commit crimes (mean=4.60). Results also indicated that the respondents strongly agreed that large workforce management has more chances of committing occupation crime (mean=4.46). Moreover, the findings indicated that most participants agreed that big firms have higher tendencies of asset misappropriation (mean=4.42). In addition, the findings showed that the participants agreed that large firms have higher cases of corruption and fraudulent statements (mean=4.38). Finally, results revealed that most respondents agree that bulk production of drugs makes monitoring difficult (mean=4.25). On average, most participants agree with corporate size and occupational fraud statements in the pharmaceutical company, as shown by an average mean of 4.42. The findings also showed that the responses given by the participants were less varied, as indicated by a standard deviation of 0.91, implying that the majority of the responses provided by the participants were primarily similar or had little difference.

Interview Findings on the Influence of Corporate Size on Occupational Crime

Regarding corporate size and occupational fraud, the participants observed that with an increased company workforce, there is more possibility for employee engagement in dishonest practices due to ineffective monitoring by complex operations. The participants also noted that incidences of fraud in the company resulted from staff identifying and exploiting loopholes such as those resulting from poor oversight and poor financial checks over time. In conclusion, the participants linked employee engagement in dishonest practices to poor employee monitoring and supervision, not company size.

4.3.5 Occupational Crime

The study sought to determine some of the most common forms of occupational fraud cases reported in the Pharmaceutical Companies. The findings of the study are shown in Table 4.8.

Table 4.8 Forms of Occupational Fraud

Form of occupational fraud	Frequency	Percent (%)
Asset misappropriation	15	21.1
Skimming	10	14.1
Noncash	9	12.7
Register disbursements	8	11.3
Financial statement fraud	7	9.9
Corruption	6	8.5
Payroll	6	8.5
Expense reimbursements	4	5.6
Billing	3	4.2
Cash on hand	2	2.8
Check and payment tampering	1	1.4
Total	**71**	**100**

The findings in Table 4.8 revealed numerous and diverse forms of fraud. Based on the findings, Asset misappropriation (21.1%) is the leading form of occupational fraud in pharmaceutical companies. Skimming is also another serious form of occupational fraud (14.1%), noncash (12.7%), register disbursements (11.3%), financial statement fraud (9.9%), Corruption and Payroll (both 8.5%), Expense reimbursements (5.6%), billing (4.2%), cash on hand (2.8%) and Check and payment tampering (1.4%). The findings imply that occupational fraud incidences are diverse and occur in a company based on the existing organizational structures such as governance (oversight) and control measures.

The study also sought to determine how occupation fraud cases can be detected or identified in the pharmaceutical company. The findings of the study are shown in Table 4.9.

Table 4.9 Fraud Detection Ways

Fraud Detection	Frequency	Percent (%)
Internal audit	13	18.3
Management review / oversight	13	18.3
Surveillance/monitoring	12	16.9
Account reconciliation	11	15.5

Tip / Anonymous reporting by employees	9	12.7
IT controls	8	11.3
External audit	5	7.0
Total	**71**	**100**

Results in Table 4.8 shows various ways to detect occupational fraud. Based on the above findings, the best way to detect occupation fraud is through internal audit and management review/ oversight (18.3%). Additionally, results showed that surveillance/monitoring (16.9%), account reconciliation (15.5%), tip / anonymous reporting by employees (12.7%), IT controls (11.3%), and external audit (7%) are important ways for detecting fraud.

The study also sought to determine the yearly frequency of occupational crime incidences in pharmaceutical companies in Nairobi County. The participants were needed to indicate the number of reported occupational crime incidences in their Pharmaceutical Company. The findings of the study are depicted in Table 4.10.

Table 4.10 Yearly Frequency of Occupational Crime Incidences

Fraud Incidences /Year	**Frequency**	**Percent (%)**
Below 3 cases	29	40.8
Between 3-5 cases	17	23.9
Between 5-8 cases	16	22.5
Between 8-10 cases	6	8.5
Above 10 cases	3	4.2
Total	**71**	**100**

Results in Table 4.10 revealed that the majority (40.8%) of the respondents indicated that the yearly frequency of occupational crime incidents reported by pharmaceutical companies was below 3 cases. Those who indicated between 3 and 5 cases were 23.9%, 22.5% between 5 and 8

cases, 8.5% between 8 and 10 cases, and only 4.2% indicated above 10 cases. Overall, the findings imply that occupational fraud cases in pharmaceutical companies are not widespread.

The study sought to determine the approximate yearly loss due to occupation fraud in pharmaceutical firms in Nairobi County. The findings of their responses are indicated in Figure 4.5.

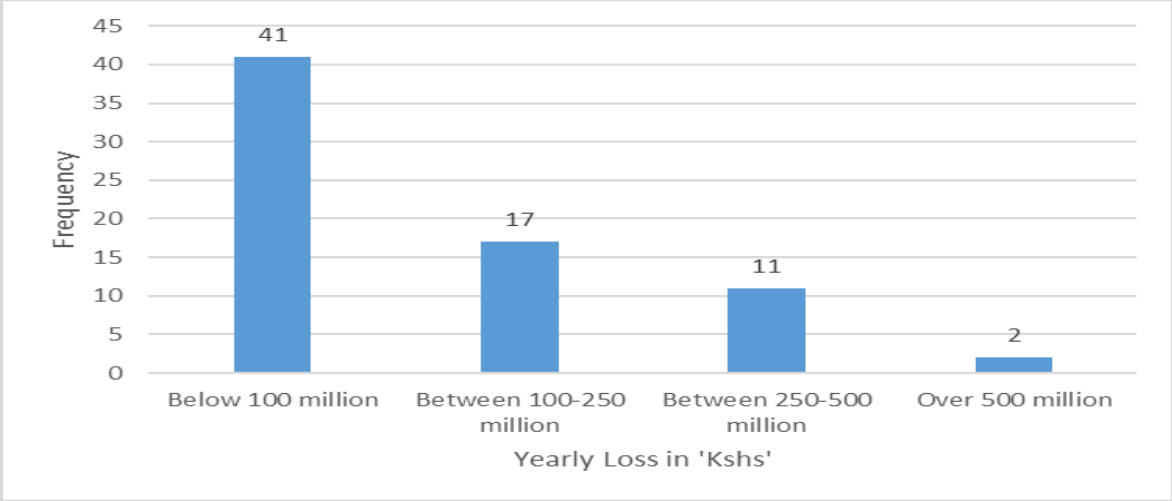

Figure 4.5 Approximate Yearly Financial Loss due to Occupational Crime

Results in Figure 4.5 revealed that most of the respondents (57.7%) indicated that the approximate yearly financial loss incurred by the pharmaceutical companies due to occupation fraud is below 100 million shillings. The findings also showed that those who indicated between 100 and 250 million shillings were 23.9%, while those who indicated between 250 and 500 million shillings were 15.5%. The results showed that only 2.8% of the respondents indicated that pharmaceutical companies lose over 500 million shillings yearly due to fraud. The findings indicate the huge losses pharmaceutical companies incur due to occupational-related crimes. Whereas the findings reveal pharmaceutical companies lose revenue due to occupational-related crimes, the average yearly losses range between 100 and 250 million.

The study also sought to examine the extent to which the participants agreed or disagreed with the statements regarding occupational crime. The findings of the study are as indicated in Table 4.11.

Table 4.11 Descriptive Statistics for Occupational Fraud

Statements	**D**	**MA**	**A**	**SA**	**mean**	**std. dev**
Occupational crimes leads to loss of revenue	0.0%	0.0%	64.8%	35.2%	4.67	0.48
Occupational crimes in pharmaceutical manufacturing firms leads to loss of life	0.0%	0.0%	50.7%	49.3%	4.55	0.56
Occupational crimes increases the cost of production	0.0%	1.4%	69.0%	29.6%	4.80	0.48
Occupational crimes such as sale of harmful drugs leads bad corporate image	0.0%	0.0%	63.4%	36.6%	4.54	0.52
Average					**4.64**	**0.51**

The findings in Table 4.11 showed that most participants strongly agree that occupational crimes lead to revenue loss (mean=4.67). Results also revealed that most respondents strongly agreed that occupational crimes in pharmaceutical manufacturing firms lead to loss of life (mean=4.55). Additionally, the results showed that most participants strongly agree that occupational crimes increase production costs (mean=4.80). Lastly, the study's findings indicated that most participants strongly agreed with the statement that occupational crimes such as the sale of harmful drugs lead to a bad corporate image (mean=4.54). In conclusion, most participants agree with the statements on occupational fraud in the pharmaceutical company, as shown by an

average mean of 4.64. The findings also revealed that the responses given by the participants were less varied, as indicated by a standard deviation of 0.51.

The study also asked the respondents to indicate whether they think occupational crimes/fraudulent behavior among their colleagues have affected their firm. The results of their responses are shown in Figure 4.6.

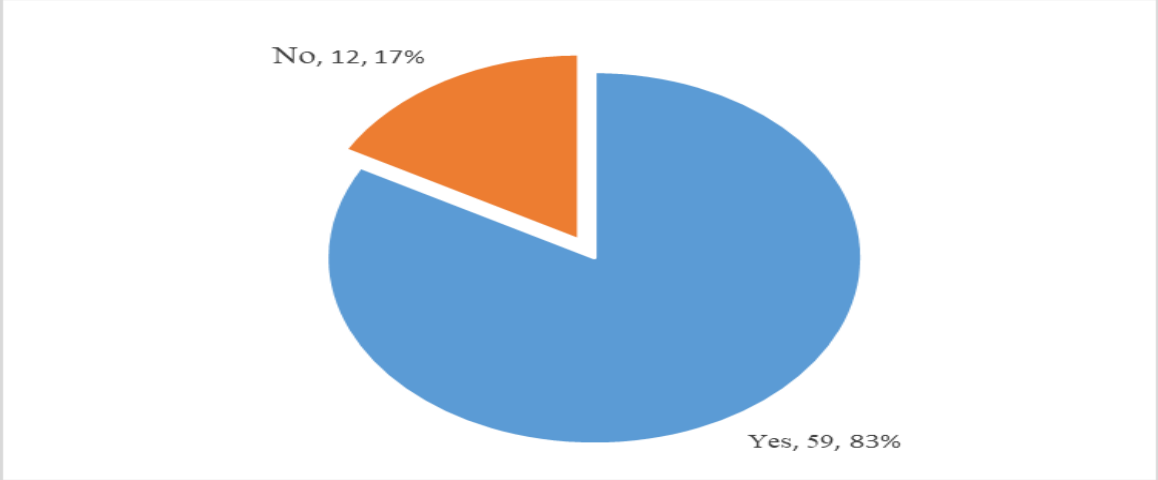

Figure 4.6 Influence of Occupational Crimes on the Firm

The results in Figure 4.6 showed that 83% of the participants indicated that they think that occupational crimes/fraudulent behavior among their colleagues have affected their firm. In comparison, only 17% do not think that it has affected their firm. The findings imply that most respondents are aware of the effect of occupational-related crime on their company, such as the decrease in the normal revenue.

4.4 Correlation Analysis

Correlation statistics were used to determine the association between the study variables. A Pearson correlation was used because the data used by the study was discrete. A negative Pearson correlation coefficient implies a negative correlation, while a positive Pearson correlation coefficient shows a positive correlation between the variables. A higher correlation

coefficient indicates a strong correlation between the variables. The results of the correlation analysis are indicated in Table 4.12.

Table 4.12 Correlation Results

Correlations		**Financial Controls**	**Board Oversight**	**Organizational Ethics**	**Corporate Size**	**Occupational Crime**
Financial Controls	Pearson Correlation	1	.350**	0.205	0.229	.559**
	Sig. (2-tailed)		0.003	0.087	0.055	0.000
Board Oversight	Pearson Correlation	.350**	1	.251*	0.221	.512**
	Sig. (2-tailed)	0.003		0.034	0.064	0.000
Organizational Ethics	Pearson Correlation	0.205	.251*	1	.257*	.467**
	Sig. (2-tailed)	0.087	0.034		0.031	0.000
Corporate Size	Pearson Correlation	0.229	0.221	.257*	1	.482**
	Sig. (2-tailed)	0.055	0.064	0.031		0.000
Occupational Crime	Pearson Correlation	.559**	.512**	.467**	.482**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	N	71	71	71	71	71

** Correlation is significant at the 0.01 level (2-tailed).

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

Correlations findings in Table 4.12 reveal that financial controls have a statistically strong positive and significant correlation with occupational crime in pharmaceutical companies, as indicated by a Pearson Correlation coefficient of 0.559 and a significance level of 0.000. The findings imply that lack of / poor financial controls is associated with increased occupational crime in pharmaceutical companies. The findings agree with the results of a study by Alhassan (2017), which revealed that forensic accounting has a positive and significant influence in identifying manipulated financial reports, making it easy to recognize misappropriated resources and suspect transactions. In support, the findings of Makori (2016) disclosed that internal control systems positively influence fraud risk management.

The study also showed that Board oversight has a positive and significant correlation with occupational crime in pharmaceutical companies, as indicated by a Pearson Correlation coefficient of 0.512 and a significance level of 0.000. Increasing board oversight in a pharmaceutical company can reduce occupational crime incidences. The findings agree with Fardon (2013) study, which found that board over-sight positively influences financial fraud. Moreover, assigning skilled staff to focus on full-time monitoring of accounting activities regularly can reduce fraudulent cases. In agreement, Eferakeya, Enaibre, and Offor (2016) revealed that internal audits, audit committees, external audits, and Boards of directors significantly influence fraud prevention.

Additionally, the findings showed that organizational ethics has a positive and significant correlation with an occupational crime in pharmaceutical companies, as indicated by a Pearson Correlation coefficient of 0.467 and a significance level of 0.000. This implies that more robust organizational ethics in pharmaceutical companies can enhance employee ethics, resulting in lower cases of occupational crimes. The results are consistent with Ocansey and Ganu's (2017) study, which showed that organizational ethics considerably impact the corporate culture. The study's findings revealed that corporate culture plays a significant role in managing the risks brought about by occupational crimes. The study indicated that firms whose corporate cultures are solidly entrenched in ethics are more likely to reduce incidences of occupational fraud. These results are supported by a study by Kagozi (2017), which revealed that internal auditors' professional ethics, such as honesty and candidness, has a positive and significant influence on risk management in the banking sector.

In conclusion, results showed that corporate size has a positive and significant correlation with an occupational crime in pharmaceutical companies, as indicated by a Pearson Correlation

coefficient of 0.482 and a significance level of 0.000. This implies that the bigger the company, the higher the occupation crime incidences. The findings are consistent with a study by Yost and Croes (2016), which indicated that company size, debt, employee turnover, and organizational structure correlate statistically with fraudulent incidences. The results also agree with the findings of Moore (2016), which indicated a relationship between organization size and the frequency of occurrence and severity of occupational fraud.

4.5 Regression Analysis

The study used the regression model to determine the influence of organizational culture on occupation crime in pharmaceutical companies. This enabled the study to answer the research questions. The overall regression model was $Y= \beta_0+ \beta_1X_1+ \beta_2X_2+ \beta_3X_3+ \beta_4X4+ \varepsilon$ Where; Y = Occupational crime, X_1 = Financial controls, X_2= Board oversight, X_3= Organizational Ethics, X_4= Corporate Size and ε = Error term. The summary results of the regression analysis are shown in table 4.13.

Table 4.12 Model Summary Results

R	R Square	Adjusted R Square	Std. Error of the Estimate
.765a	0.585	0.56	0.10039

a Predictors: (Constant), Corporate Size, Board Oversight, Organizational Ethics, Financial Controls

Model summary results in Table 4.13 indicate that the R square value was 0.585, implying that financial controls, board oversight, organizational ethics, and corporate size jointly account for up to 58.5% of the variation in occupational crimes in the pharmaceutical companies.

Table 4.14 Model Fitness /ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.939	4	0.235	23.282	.000b
Residual	0.665	66	0.01		
Total	1.604	70			

a Dependent Variable: Occupational Crime

b Predictors: (Constant), Corporate Size, Board Oversight, Organizational Ethics, Financial Controls

The model fitness (ANOVA) results in Table 4.14 indicate that the overall model linking organizational cultural practices (financial controls, board oversight, organizational ethics, and corporate size) to occupational crime in the pharmaceutical companies was positive and significant, as shown by a significance level of 0.000. This implies that organizational cultural practices can significantly predict occupational crime in pharmaceutical companies.

Table 4.15 Regression Model Coefficients

	Unstandardized Coefficients		**Standardized Coefficients**		
Coefficients [a]	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	0.812	0.316		2.574	0.012
Financial Controls	0.301	0.074	0.351	4.07	0.000
Board Oversight	0.252	0.084	0.262	3.02	0.004
Organizational Ethics	0.147	0.048	0.258	3.065	0.003
Corporate Size	0.106	0.032	0.278	3.306	0.002

a Dependent Variable: Occupational Crime

Hence, the overall regression model is;

Occupational Crime = **0.812**+ **0.301** (Financial Controls) + **0.252** (Board Oversight) + **0.147** (Organizational Ethics) + **0.106** (Corporate Size)

Regression analysis results in Table 4.15 shows that financial controls have a strong positive and significant influence on occupational crimes in pharmaceutical companies in Nairobi County, as indicated by a beta coefficient of 0.301 and a significance level of 0.000. The findings imply that a unit increase in the adoption of financial controls such as frequent auditing can lead to a 0.301 unit effect on occupational crimes in the Pharmaceutical Companies. These results agree with the findings of a study by Abiola and Oyewole (2013), which revealed a statistically positive and significant association linking risk evaluation and fraud recognition. Equally, the results agree with the findings of a study by Wahinya and Ondigo (2017), which indicated that robust internal

controls, management override controls, and separation of duties and tasks significantly impact the mitigation of corporate crimes.

The findings also show that board oversight positively and significantly influences occupational crimes in pharmaceutical companies in Nairobi County, as indicated by a beta coefficient of 0.252 and a significance level of 0.004. This implies that a unit increase in board oversight practices can lead to a 0.252 unit effect on occupational crimes in pharmaceutical companies. These results are consistent with the findings of a study by Soley (2017), which revealed that a lack of a proper functioning board could make the firm vulnerable to employee theft. Shao (2016) revealed that board oversight, personnel training on fraud, clear punitive anti-fraud policy, and use of independent external third-party auditors have considerable impact in controlling occupational fraud.

Moreover, the findings indicate that organizational ethics positively and significantly influence occupational crimes in pharmaceutical companies in Nairobi County, as shown by a beta coefficient of 0.147 and a significance level of 0.003. This implies that a unit change in organizational ethics can lead to a 0.147 unit effect on occupational crimes in pharmaceutical companies. These results agree with the findings of a study by Moses (2018) that indicated that corporate culture (transparency and accountability) has a negative and significant influence on financial statement fraud. The study established that transparency and accountability in the organization are significant in minimizing the prevalence of financial statement fraud. Similarly, the findings agree with those of Dzomira (2015), which revealed that good ethical business practices, such as a culture of honesty, significantly affect fraud risk management in the public sector in South Africa. The study also indicated that sound ethical organizational culture is

critical in fraud risk management in the public sector in South Africa, leading to efficient service delivery.

In conclusion, regression results showed that corporate size positively and significantly influences occupational crimes in pharmaceutical companies in Nairobi County, as shown by a beta coefficient of 0.106 and a significance level of 0.002. This implies that a unit change in the organization's corporate size, such as the staff's size with poor oversight, can lead to a 0.106 unit effect on occupational crimes in pharmaceutical companies. The findings are consistent with the results of a study by Nia and Said (2015), which revealed that firms that had fallen victim to asset misappropriation and fraudulent statements were smaller. The findings indicated that size might play a role in creating opportunities for crime, but to a smaller extent. The study indicated that occupational fraud in larger financial institutions is because of greater opportunities available. In support, a study by Iminza and Kiragu (2015) found that bank size positively and significantly influences occupational fraud risk in commercial banks in Kenya.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the discussions for the study results according to each study objective. The study's conclusions and recommendations were drawn from the analysis discussions.

5.2 Summary of Research Findings

A summary of the findings is presented systematically following the research objectives. The main findings of this study were that organizational ethics, company size, financial controls, and board oversight play a vital role in influencing occupation crime risks in a company.

5.2.1 Influence of Financial Controls on Occupational Crime

The study's findings showed that financial controls play a considerable role in occupational fraud incidences. The findings revealed that occupational fraud risks such as improper disclosure of financial statement information and lack of financial controls increase occupational crime cases in the company are caused by lack of financial controls. Lack of frequent auditing increases the case of occupational crimes. Lack of internal financial controls promotes occupational fraud incidences such as financial records manipulation and financial misstatement. The findings also indicated that lack of frequent auditing contributes to incidences of occupational fraud. In addition, correlation analysis findings showed that financial controls have a positive and significant association with occupational fraud in pharmaceutical companies, as indicated by a Pearson Correlation coefficient of 0.559 and a significance level of 0.000. Regression findings

also showed that internal financial controls positively and significantly influence occupational crimes in pharmaceutical companies in Nairobi County, as indicated by a beta coefficient of 0.301 and a significance level of 0.000. This implies that a unit increase in the adoption of financial controls such as frequent auditing can lead to a 0.301 unit reduction in occupational crimes in the Pharmaceutical Companies.

5.2.2 Influence of Board Oversight on Occupational Crime

The findings revealed that board oversight plays the primary role in occupational fraud incidences in a company. The study indicated that a lack of proper Board oversight creates opportunities for criminal activities. The study further indicated that poor board administration could result in unchecked decision-making at the managerial level, creating opportunities for individuals to commit crimes. Additionally, the study showed that indifference in over sighting and decision-making on criminal activities among the board members and management could contribute to occupational fraud incidences. Furthermore, correlation analysis findings showed that board oversight has a positive and significant association with occupational fraud in pharmaceutical companies, as indicated by a significance level of 0.000 and a Pearson Correlation coefficient of 0.512. Regression analysis findings also revealed that board oversight positively and significantly influences occupational crimes in pharmaceutical companies in Nairobi County, as indicated by a beta coefficient of 0.252 and a significance level of 0.004. This implies that a unit increase in board oversight practices can lead to a 0.252 unit reduction in occupational crimes in pharmaceutical companies.

5.2.3 Influence of Organizational Ethics on Occupational Crime

The findings of the study indicated that organizational ethics has a significant influence on the presence of occupational crime. For instance, if senior managers do not maintain and uphold

high moral values, employees are likely to commit crime-fraud. This is because employees tend to monitor their managers' conduct closely, and an exhibition of bad behavior can influence employee actions. The study indicated that a lack of organizational morality might predispose some employees to commit a crime. Furthermore, correlation analysis findings showed that organizational ethics has a positive and significant association with occupational fraud in pharmaceutical companies, as indicated by a significance level of 0.000 and Pearson Correlation coefficients of 0.467. Regression findings also revealed that organizational ethics has a positive and significant influence on occupational crimes in pharmaceutical companies in Nairobi County, as shown by a beta coefficient of 0.147 and a significance level of 0.003. This implies that a unit change in organizational ethics can lead to a 0.147 unit reduction in occupational crimes in pharmaceutical companies.

5.2.4 Influence of Corporate Size on Occupational Crime

The study's findings indicated that corporate size influences the likelihood of occupational fraud occurrence in a company. The study indicated that large firms have higher opportunities to commit a crime. The study indicated that complex operations, high revenues, and a big workforce influence the effectiveness of monitoring employee activities, thus creating chances for occupation crime. The study revealed that poor employee supervision allows them to undertake occupational crime. Furthermore, correlation analysis findings revealed that corporate size has a positive and significant association with occupational fraud in pharmaceutical companies, as indicated by a significance level of 0.000 and Pearson Correlation coefficients of 0.482. Regression findings also indicated that corporate size positively and significantly influences occupational crimes in pharmaceutical companies in Nairobi County, as shown by a beta coefficient of 0.106 and a significance level of 0.002. This implies that a unit change in the

organization's corporate size, such as the size of the staff with poor oversight, can lead to a 0.106 unit effect on occupational crimes in pharmaceutical companies.

5.3 Discussion of the Findings

Occupational crimes have been classified based on the offenses committed by persons serving alone or on an improvised basis, such as credit card fraud, tax fraud, and aid fraud. Lack of / poor accounting and financial controls makes the firm vulnerable to employee theft. Occupational crime is contributed by poor board oversight, which can lead to unchecked decision-making at the managerial level.

5.3.1 Influence of Financial Controls on Occupational Crime

The study sought to determine the influence of financial controls on occupational crime in pharmaceutical manufacturing companies in Nairobi County. The findings of this study have indicated that financial controls are instrumental in detecting and preventing occupational fraud such as financial misstatement and financial records manipulation. This implies that the lack of or presence of weak internal financial controls leads to increased incidences of occupational crime in the Pharmaceutical companies. The findings agree with the results of a study by Makori (2016), which showed that internal control systems influence fraud risk management positively and significantly. These results align with a study by Abiola and Oyewole (2013), which revealed a statistically positive and significant association linking risk evaluation and fraud recognition. Equally, the results agree with the findings of a study by Wahinya and Ondigo (2017), which indicated that robust internal controls, management override controls, and separation of duties and tasks significantly affect the mitigation of corporate crimes.

5.3.2 Influence of Board Oversight on Occupational Crime

The study sought to determine the influence of board oversight on occupational crime in pharmaceutical manufacturing companies in Nairobi County. The study found that board oversight influences occupational crimes in pharmaceutical companies. The study revealed that a lack of sound Board oversight creates opportunities for criminal activities. The study further indicated that poor board oversight could lead to unchecked decision-making at the managerial level, creating opportunities for individuals to commit crimes. The study also indicated that indifference in sighting and decision-making on criminal activities between the board members and management could contribute to occupational fraud incidences. These findings are corroborated by the results of a study by Fardon (2013), which indicated that board over sighting/supervision has a significantly positive impact in mitigating financial fraud. In support, Eferakeya, Enaibre, and Offor (2016) revealed that internal audits, audit committees, external audits, and the Board of Directors significantly influence fraud prevention. Similarly, a study by Soley (2017) revealed that a lack of a proper functioning board could make the firm vulnerable to employee theft. To mitigate occupational fraud, Shao (2016) indicated that proper board oversight, personnel training on fraud, a clear punitive anti-fraud policy as well as the use of independent external third-party auditors as some of the considerable ways to control occupational fraud.

5.3.3 Influence of Organizational Ethics on Occupational Crime

The study also sought to determine the influence of organizational ethics on occupational fraud in pharmaceutical firms in Nairobi County. The study's findings indicated that organizational ethics contributes significantly to the occurrences of occupational crimes. If senior managers do not maintain and uphold high moral values in the organization, employees are likely to commit

crime-fraud. This is because employees tend to monitor their managers' conduct closely, and an exhibition of bad behavior can influence employee actions. These findings are supported by a study by Ocansey and Ganu (2017), which revealed that corporate culture is vital in managing the risks associated with occupational crimes. The study indicated that firms whose corporate cultures are solidly entrenched in ethics are more likely to reduce incidences of occupational fraud. In support, Kagozi (2017) indicated that internal auditors' professional ethics, such as honesty and candidness, positively and significantly influence risk management in the banking sector. Similarly, Moses (2018) established that transparency and accountability in the organization are significant in minimizing the prevalence of financial statement fraud. Equally, the findings of this study agree with those of Dzomira (2015), which revealed that good ethical business practices, such as a culture of honesty, significantly affect fraud risk management in the public sector. The study also indicated that sound ethical organizational culture is critical in fraud risk management in the public sector, leading to efficient service delivery.

5.3.4 Influence of Corporate Size on Occupational Crime

The study sought to determine the influence of corporate size on occupational crime in pharmaceutical manufacturing companies in Nairobi County. The study's findings indicated that corporate size contributes to the likelihood of occupational fraud occurrence in a company. The study revealed that large firms have higher opportunities to commit a crime. The study also indicated that complex operations, high revenues, and a big workforce influence the effectiveness of monitoring employee activities, thus creating chances for occupation crime. The study revealed that poor employee supervision allows them to undertake occupational crime. Hess and Broughton (2014) assert that the creation of higher ethical culture in an organization, such as the establishment of strong organizational values and through activities of

administration, can help dissuade the immoral behavior of the workforce. These findings align with a study by Yost and Croes (2016), which indicated that company size, debt, employee turnover, and organizational structure correlate statistically with fraudulent incidences. The results also agree with the findings of Moore (2016), which revealed a connection between organization size and the frequency of occurrence and severity of occupational fraud.

5.3.5 Contributions of Fraud Triangle Theory to the Study

This study was anchored on Fraud Triangle Theory advocated for by Donald Cressey. As stipulated by the Fraud Triangle Theory, the underlying and causative factors of occupational crimes in Pharmaceutical Manufacturing Companies are stimulated by the 'presence of opportunity to steal,' 'motivation' and 'rationalization' of the act. The assumptions informed the selection of the study participants of the Fraud Triangle Theory (opportunity, motivation, and rationalization). As such, sales and distribution, finance, and marketing departments were targeted because the staff in these sections of the company are tasked with handling bulk pharmaceutical products, while some have access to the company's finances, including cash and financial statements or records tempted to manipulate. The theory anchors the results of this study support. For instance, the study found that weak internal controls allow the staff to engage in crime, including motivation to attain the set organizational goals or his financial needs or success. The findings of this study also support the theory that senior management's lack of moral values, such as engaging in fraudulent activities like stealing and misuse of company resources, can lead to rationalization and motivation of employee occupational-related crimes.

5.4 Conclusion

This study aimed to determine organizational culture's influence on occupational fraud in Pharmaceutical Companies in Nairobi County. The findings showed that organizational culture is

critical in influencing occupational crimes in Pharmaceutical Companies. Based on the findings, the study established that poor financial controls and poor board oversight are associated with higher occupational crimes in the company. Additionally, the study established that the presence and adherence to an organizational code of ethics are associated with decreased incidences of occupational fraud. Further, the study established that corporate size is associated with the frequency of occurrence and severity of occupational fraud. However, the study established that the level of employee monitoring determines occupational fraud incidences and corporate size.

5.5 Recommendations

Based on the conclusion, this study recommends the management of pharmaceutical companies to establish effective financial control measures. There is a need to conduct regular assessments of financial transactions and establish realistic regulatory measures such as fraud risk evaluation and oversight to combat occupation crimes in pharmaceutical companies. The management should evaluate existing financial controls to identify loopholes and remedy the company from exposure to employee fraud.

There is a need for the company board to provide regular oversight of the management of the company. This would help deter employees from engaging in occupational fraud, especially where loopholes exist. The board and top management must institute fraud risk-based monitoring policies to detect and help dissuade staff from engaging in occupational crimes. The study recommends the board, including top management, set up fraud-risk management control measures such as third-party audits and anonymous reporting to help combat and discourage staff from engaging in dishonest practices such as corruption and stealing.

Additionally, the study recommends the management of pharmaceutical companies to establish a clear ethical climate in their company. This would help create proper ethical behavior within all

organizational levels, which is crucial in preventing occupational crimes like fraud. The study also recommends that senior company management uphold and prioritize high ethical standards to inculcate good ethical behavior among the employees. This would help reduce employees engaging in occupational crimes by serving as good examples.

Finally, the study recommends that pharmaceutical companies set up proper governance structures, especially owing to their complex operations, to devolve oversight across the various company units. This would ensure responsibility and establish a chain of command, thereby putting individual responsibility among staff accountable for their actions. This is especially vital in large companies where oversight is difficult due to the complexity of operations.

5.6 Areas for Further Studies

This study focused on pharmaceutical companies in Nairobi County. Other scholarly studies should be conducted to determine the factors influencing employee engagement in occupational crimes. Other studies should also be done in other counties to determine the contribution of organizational culture to occupational crime. Moreover, further studies should be conducted to determine the influence of financial controls, board oversight, corporate size, and organizational ethics in other firms.

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APPENDIX 1: LETTER OF INTRODUCTION

AFRICA NAZARENE
UNIVERSITY

21st January, 2021

RE: TO WHOM IT MAY CONCERN

Githaiga Willy Wandahi (**16J03EMGP024**) is a bonafide student at Africa Nazarene University. He has finished his course work and has defended his thesis proposal entitled: - ***"Influence of Organizational Culture on Occupational Crime in Pharmaceutical Manufacturing Companies in Nairobi County".***

Any assistance accorded to him to facilitate data collection and finish his thesis is highly welcomed.

Rodney R. Reed

Prof. Rodney Reed.
DVC, Academic & Student Affairs

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **230579**

Date of Issue: **02/February/2021**

RESEARCH LICENSE

This is to Certify that Mr.. Willy Wandahi Githaiga of Africa Nazarene University, has been licensed to conduct research in Nairobi on the topic: Influence of Organizational Culture on Occupational Crime in Pharmaceutical Manufacturing Companies in Nairobi County for the period ending : 02/February/2022.

License No: **NACOSTI/P/21/8815**

230579

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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APPENDIX 2: QUESTIONNAIRE

Instructions

Kindly fill your response in the space provided or tick (√) as appropriate. All information provided here will be considered private and confidential and will be used for this research ONLY. Please DO NOT indicate your name on this questionnaire.

Section A: Demographic Information

1. Please indicate your age bracket
   a) Less than 30 years [ ]
   b) 31-40 years [ ]
   c) 41-50 years [ ]
   d) 51 years & above [ ]
2. What is your level of Education?
   a) Certificate [ ]
   b) Diploma [ ]
   c) Bachelor Degree [ ]
   d) Post graduate [ ]
3. Kindly indicate the department that you are working at in your company
   a) Marketing [ ]
   b) Sales [ ]
   c) Finance [ ]
4. Kindly indicate your gender
   a) Male [ ]
   b) Female [ ]
5. Kindly indicate the number of years you have been working in your pharmaceutical company
   a) Less than one year [ ]
   b) 1 to 2 year [ ]
   c) to 5 years [ ]
   d) More than 5 years [ ]

Section B: Financial Controls

1 Please indicate the extent to which you agree or disagree with the following statements on financial controls in your company.

Statement	**Strongly Disagree**	**Disagree**	**Moderately Agree**	**Agree**	**Strongly Agree**
Most occupational cases are related to financial misstatement					
Lack of frequent auditing increases the case of occupational crimes					
The organization has cases of financial records manipulation.					
There is improper disclosure of financial statement information in the organization.					
Poor accounting and financial controls increase occupational crime cases					

2 Do you think your organization has put in place proper financial control measures to curb fraud? …….

……

Section C: Board Oversight

1. Please indicate the extent to which you agree or disagree with the following statements on Board Oversight and its effect on occupational crime in your company.

Statement	**Strongly Disagree**	**Disagree**	**Moderately Agree**	**Agree**	**Strongly Agree**
A lack of credible oversight creates opportunities for criminal activities that would otherwise fail to exist					
Frequent internal audits lead to lesser cases of occupational financial crime					
A decentralized management structure allows for diffusion of responsibility to occurs					
When board members and management show					

Statement	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Agree
indifference in over sighting, criminal decisions are more likely to occur					
Poor board oversight can lead to unchecked decision-making at the managerial level					

2. In your opinion, do you think the over sighting role of our company's board is effective?
   ……
   ……
   ……

Section D: Organizational Ethics

1. Please indicate the extent to which you agree or disagree with the following statements on organizational ethics.

Statement	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Agree
Lack of organizational morality may predispose some employees to commit a crime					
Conflict of interest influences staff work ethic					
Poor employee integrity influences the performance of the firm					
Dishonest staff would lead to some of their decisions being regarded as 'wrong' when they are right					
Poor organizational morality affects the decision-making process.					

2. In your opinion, do you think your pharmaceutical firm's ethics encourages occupational crime cases?
   ……...
   ……

Section E: Corporate Size

1. Please indicate the extent to which you agree or disagree with the following statements on corporate size and occupational crime.

Statement	**Strongly Disagree**	**Disagree**	**Moderately Agree**	**Agree**	**Strongly Agree**
Large firms have higher opportunities to commit a crime					
Large workforce management have more chances of committing occupation crime					
Big firms have higher tendencies toward asset misappropriation					
Large firms have a higher case of corruption and fraudulent statements					
Bulk production of drugs makes monitoring difficult					

2. Do you think the size of your pharmaceutical company contributes to the extent of occupational crimes?

   i. Yes

   ii. No

If yes; please explain……

Section F: Occupational Crime

a. Kindly indicate the common form of occupational fraud cases reported in your Pharmaceutical Manufacturing Company

   i. Asset misappropriation [ ]

   ii. Corruption [ ]

   iii. Financial statement fraud [ ]

   iv. Cash on hand [ ]

v. Noncash [ ]
vi. Billing [ ]
vii. Check and payment tampering [ ]
viii. Expense reimbursements [ ]
ix. Skimming [ ]
x. Payroll [ ]
xi. Register disbursements [ ]

b. Kindly indicate how fraud cases usually are detected or identified in your company

i. Tip / Anonymous reporting by employees [ ]
ii. Internal audit [ ]
iii. Management review / oversight [ ]
iv. Account reconciliation [ ]
v. External audit [ ]
vi. Surveillance/monitoring [ ]
vii. IT controls [ ]

c. Kindly indicate the yearly frequency of occupational crime incidences / cases in your Pharmaceutical Manufacturing Company.

i. Below 3 cases
ii. Between 3-5 cases
iii. Between 5-8 cases
iv. Between 8-10 cases
v. Above 10 cases

d. Please indicate approximate yearly loss due to occupation fraud in your company

i. Below 100 million shillings
ii. Between 100-250 million shillings
iii. Between 250-500 million shillings
iv. Over 500 million shillings

e. Kindly indicate the extent to which you agree or disagree with the following statement on occupational Crime

Statement	Strongly Disagree	Disagree	Moderately Agree	Agree	Strongly Agree
Occupational crimes lead to a loss of revenue					
Occupational crimes in pharmaceutical manufacturing firms lead to loss of life					
Occupational crimes increase the cost of production					
Occupational crimes such as the sale of harmful drugs lead bad corporate image					

1. Do you think your colleagues' occupational crimes/fraudulent behavior has affected your firm?

   i. Yes

   ii. No

If yes, indicate reasons……..

APPENDIX 3: INTERVIEW SCHEDULE / GUIDE FOR KEY INFORMANTS

Dear Sir/Madam. I am Wandahi Willy Githaiga, a Master of Science in Governance, Peace and Security Studies Student at Africa Nazarene University. I am carrying out a study about organizational culture and its influence on occupational crime in pharmaceutical manufacturing companies in Kenya. The study seeks to understand the influence of financial controls, board oversight, organizational ethics, and corporate size on occupational crime and its implications on occupational fraud risk mitigation in pharmaceutical manufacturing firms in Kenya. The interview will take approximately 35 minutes. All responses you provide will be treated with the utmost confidentiality, and the results will only be used for academic purposes. Please confirm your consent towards proceeding with the study. Please remember you are free to withdraw your consent at any interview stage. I appreciate your cooperation.

A: Financial Controls

1. In your view, what are some of the crimes committed by staff in your company?
2. What do you think about the existing financial controls in your company? Does it have some loopholes that one can exploit to commit fraud?
3. What can you say about the number of individuals authorized by your company to access financial transactions?
4. Is access to assets or accounts only limited to authorized personnel in your company?
5. What measures should your company put in place to reduce such crimes?

B: Board Oversight

6. In your opinion, does the board fulfill its over sighting role?
7. Can you name some issues on which the board should focus more?
8. Do you think the presence or lack thereof of Board oversight affects the extent of occupational fraud in your company?
9. Do you think the involvement of the Board in fraud-risk management initiatives in your company can help deter employees from engaging in any form of occupational fraud?

C: Organizational Ethics

10. What is your view on your company's ethics?
11. Do you think the existing organizational culture encourages one to commit crime or malpractices?
12. Does it have a stringent employee code of conduct?
13. Do you think your organizational ethics are why some engage in dishonest practices?

14. Do you think the management's creation of a higher ethical culture within the organization can help dissuade employees from engaging in unethical behavior?
15. Do you think entrenching strong cultural values in the organization, especially by the management, can help lessen incidences of occupational fraud in your company?

D: Corporate Size

16. What can you say about the size of your company and incidences of fraud among your colleagues?
17. Can your company's growth over the years be attributed to increased fraud cases?
18. Do you think there is any correlation between the level of employee monitoring and supervision with the size of your company?

APPENDIX 4: LIST OF PHARMACEUTICAL MANUFACTURING FIRMS IN NAIROBI COUNTY (2020)

No.	Pharmaceutical Company	Company size (No. of Employees)
1.	Benmed Pharmaceuticals	Between 20-30
2.	Beta Healthcare International Limited	105
3.	Biodeal Laboratories Ltd.	400
4.	Biopharma Limited	68
5.	Comet Healthcare Limited	Between 51-200
6.	Concept (Africa) Pharmaceuticals Ltd	Between 51-200
7.	Cosmos Pharmaceutical Limited	500
8.	Dawa Ltd.	400
9.	Didy Pharmaceuticals Ltd.	Between 11-50
10.	Elys chemicals Industries Ltd	68
11.	Eurox Pharmaceuticals Ltd	14
12.	Gesto pharmaceuticals Ltd	Between 26-50
13.	GlaxoSmithKline Pharmaceutical Ltd	70
14.	Globe pharmacy	Between 11-50
15.	Harley‘s Ltd	14
16.	Hightech Pharmaceuticals Ltd.	Between 11-50
17.	Infusion (K) Ltd (IKL)	Between 11-50
18.	Infusion Medicare Ltd	Between 11-50
19.	Jaskam & Company Ltd	Between 11-50
20.	KAM Industries Ltd	100
21.	Laboratories & allied (Lab & allied)	81
22.	Mac’s pharmaceuticals Ltd.	19
23.	Njimia Kenya Ltd.	Between 11-50
24.	Pharmaceutical Manufacturing Company	Between 11-50
25.	Regal Pharmaceuticals	61
26.	Sphinx Pharmaceuticals ltd	125
27.	Universal Corporation Limited	501 (used for Pilot Test)

APPENDIX 5: ACFE OCCUPATIONAL FRAUD CASES BY COUNTRY (SUB-SAHARAN AFRICA)

Country	Annual Number of Fraud Cases					
	2015	2016	2017	2018	2019	2020
Angola		4		3		1
Botswana		2		1		1
Cameroon		2		1		5
Central African Republic		-		1		1
Chad		-		3		4
Democratic Republic of Congo		-		3		2
Cote d'Ivoire		2		5		1
Equatorial Guinea		-		1		4
Gambia		1		1		5
Ghana		11		8		2
Guinea		-		1		1
Kenya		41		34		12
Liberia		5		8		53
Madagascar		-		2		2
Malawi		3		3		8
Mali		1		4		4
Mauritania		2		1		10
Mauritius		4		2		6
Mozambique		-		1		3
Namibia		1		4		3
Nigeria		70		55		49
Rwanda		-		1		3
Senegal		3		1		2
Somalia		1		2		-
South Africa		87		87		77
Sudan		1		1		2
Swaziland		1		1		1
Tanzania		8		5		7
Togo		-		-		4
Uganda		11		11		16
Zambia		7		5		3
Zimbabwe		9		10		9

APPENDIX 6: MAP OF NAIROBI COUNTY SHOWING PHARMACEUTICAL MANUFACTURING FIRMS