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# Chief Executive Officers' entrepreneurial risk-taking behaviour and non-financial performance of family-owned businesses in Nairobi, Kenya.

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**CHIEF EXECUTIVE OFFICERS' ENTREPRENEURIAL RISK-TAKING  
BEHAVIOUR AND NON-FINANCIAL PERFORMANCE OF FAMILY-OWNED  
BUSINESSES IN NAIROBI, KENYA**

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**114294**



**A research dissertation submitted in partial fulfilment of the requirements for the  
degree of Master of Business Administration (MBA) of Strathmore University**

**Strathmore Business School  
Strathmore University  
Nairobi, Kenya**


**May, 2024**

## DECLARATION

I declare that this dissertation has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself.

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Date: May, 2024

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Name of Supervisor: Prof. Ruth Kiraka

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## ABSTRACT

Family-owned businesses contribute to as much as 70-90% to the economies around the world through innovation, job creation, among other important ways. The management of family-owned businesses therefore ought to be given important consideration as this determines their success, and consequently, their contribution to the GDP. One important factor of success of family-owned businesses is the CEOs entrepreneurial risk-taking behaviour, which has been associated with both the financial and non-financial performance of family-owned businesses. The study sought to examine the influence of family and non-family CEOs entrepreneurial risk-taking behaviour on the non-financial performance of family-owned businesses in Nairobi, Kenya. The specific objectives were to compare how the characteristics of family and non-family CEOs influence entrepreneurial risk-taking behaviour, how risk-taking behaviour affects non-financial performance and to determine the moderating effect of business decision making on the relationship between entrepreneurial risk-taking behaviour and non-financial performance of family-owned business enterprises in Nairobi Kenya. This study, anchored on Upper Echelons theory and Agency Theory, applied descriptive cross sectional research design and sourced primary data among 100 CEOs of family-owned enterprises in Nairobi County. Descriptive and inferential statistics analysed the data. Results showed that there was an inverse and not statistically significant effect of age and education qualifications on the non-financial performance of family-owned businesses. Further, there was a positive and not statistically significant effect of CEO tenure on the non-financial performance of family-owned businesses. Business decision making had a positive and statistically significant moderating effect on the relationship between entrepreneurial risk-taking behaviour and non-financial performance of family-owned enterprises in Nairobi County. This study concludes that risk-taking behaviour should be encouraged within family firms as it yields positive performance outcomes, irrespective of the kinship of the CEO. It can be concluded that there is need for adoption, formulation and incorporation of structural frameworks for risk evaluation, innovation and channelling of energy into most viable options that would enhance long-term sustainability. It is recommended that family businesses should not have a bias when hiring a CEO. CEOs (whether family or not) should not shy away from engaging in risk-taking to enhance business performance.

**Key words:** CEO Characteristics, CEO Entrepreneurial Risk-Taking Behaviour, Business Decision Making, Non-Financial Performance, Family-Owned Businesses, Family and Non-Family CEO.

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## DEDICATION

For my parents, John and Dorcas: thank you for the opportunities you have afforded me and the sacrifices you have made to give me the life I have. You have given me more than I could possibly give you back - I will forever be indebted to you.



## CHAPTER ONE: INTRODUCTION

### 1.1 Background of the Study

Family-owned businesses play an important role in the economic development of nations across the world. According to Pieper, Kellermanns, and Astrachan (2021), family-owned businesses are essential to the growth and prosperity of the nations they are found in through the creation of millions of jobs, tax returns, and general contribution to the GDP. It is estimated that there are 5.5 million family firms in the United States of America, which contribute 64% to the GDP, equivalent to \$5.9 trillion (Van Der Vliet, 2021). In Spain, family businesses account for 70% of the GDP and 70% of jobs in the private sector (Rahman, Galván and Martínez, 2017), while in Belgium, 77% of all firms are family businesses and contribute to 45% of the jobs in the country (McGrath and O'Toole, 2018). The success of global economies, for example those in America and Europe, are therefore heavily dependent on family-owned businesses.

Since family firms control as much as 70-90% of all firms globally (McGrath and O'Toole, 2018; Nurunnabi, 2021; Zellweger, 2017), it is important that their management is given important consideration. One of the components that determine the success or failure of family businesses is the CEOs entrepreneurial risk-taking behaviour. According to Zahra (2018, p. 219), “the entrepreneurial risk-taking construct refers more directly to those actions that lead to the creation of business regardless of the approach a company employs”. Entrepreneurial risk-taking behaviour focusses on the willingness of an entrepreneur to pursue business opportunities that are risky and uncertain but with potentially rewarding returns to the business. This behaviour is therefore important in not just the running of family businesses; it is what sustains them.

Family-owned firms are also the engines of many economies in the African continent. For example, family-owned firms make up 80% of the businesses in South Africa and play a significant role in job-creation (Myeko and Iwu, 2019), while in Kenya, family businesses contribute approximately 40% of market value of goods and services produced in a given time (Amadala, 2020). The foregoing statistics point to the crucial role that family businesses play in the growth of economies world over. These firms contribute to economic growth of nations, are credited with innovations and job creation and play a role in social responsibility across the

world. There is need to therefore nurture and support family-owned business in different contexts, as well as study ways in which they can be made better.

## **1.2 CEO Entrepreneurial Risk-Taking Behaviour in Family-Owned Businesses**

Risk-taking attitudes and behaviour can be demonstrated in a number of ways, for example with respect to financial, intellectual, social, achievement risk-taking (Breivik, et al., 2020). Specifically, Breivik et al. (2020) argued that financial risk-taking focuses on an individual's willingness to invest with the aim of getting bigger returns; intellectual risk-taking is about adopting novel approaches to doing things as opposed to sticking to traditional well-established ways, while in social risk-taking, an individual seeks to stand out with respect to social contexts and practices; conformity is thus frowned upon. Achievement risk-taking includes setting the bar higher with respect to goals and objectives in whichever field an individual is in. In order to succeed, a CEO ought to engage in these risk-taking behaviours.

There are a number of characteristics related to a CEOs entrepreneurial risk-taking behaviour in family-owned businesses that play a role in the success of these firms. For example, family-owned businesses with family CEOs have been shown in literature to perform differently as compared to those with non-family CEOs. Family businesses that are run by family CEOs are more likely to be risk-averse than those run by a non-family CEO, and this is more pronounced for firms that want to remain in control of their businesses (Hiebl, 2013; Martino, Rigolini, & D'Onza, 2020). Similarly, the choice of family or non-family members in the Top Management Team (TMT) of family businesses is an aspect of entrepreneurial risk that may affect the performance of such firms (Vandekerckhof, Steijvers, Hendriks and Voordeckers, 2015).

A CEO's age, tenure and professional experience, for example how long they have been at the helm in the family business and their board experience, also impacts the risk-taking behaviour in family-owned businesses, especially when related to family or non-family CEO (Wang & Poutziouris, 2010; Yeaoh & Hooy, 2020; Visintin, et al., 2017). A study by Chen and Zheng (2014) revealed that a CEO's tenure track was significantly associated with risk-taking behaviour in organizations, which consequently affected the performance of such firms. Specifically, their study showed that declining career concerns as one approached retirement was associated with increased risk-taking by the CEOs studied. Loukil and Yousfi (2022) established that old-tenured CEOs were less likely to engage in risk-taking behaviour, while

Farag and Mallin (2018) established that younger CEOs are more likely to take risks as compared to their older counterparts.

Gender is also an important factor when family vs nonfamily CEOs are taken into consideration in family-owned firms (Visintin et al., 2017). Some studies have focused on the gender of the CEO with respect to risk-taking behaviour, with some concluding that it plays a role. Muhammad et al., (2022) in their study concluded that having women on the corporate board played a role on the risk-taking decisions that firms took. This implied that having women on boards contributed to risk-taking behaviours as compared to having men only in such boards. A study by Bsoul, et al., (2022) showed that in the Jordanian context, the gender of a CEO was not significantly related to the performance of a firm.

Finally, the educational qualifications of a CEO have also been correlated to the performance of family-owned businesses with respect to family vs nonfamily CEOs. For example, knowledge and skills have been positively correlated with non-family CEOs (Zona, 2016). Some studies have shown that CEOs with higher qualifications are more likely to make risky decisions compared to those with lower qualifications. Farag and Mallin (2018) in their study concluded that CEOs with post-graduate diplomas were more likely to take risks as compared to those with lower qualifications. Loukil and Yousfi (2022) in their study realised that CEOs with business-related qualifications were more likely to engage in risky ventures for their firms, while those with post-graduate qualifications were more risk-averse than those without. Martino et al. (2020) also supported the argument of CEOs being risk-averse yet they had higher educational qualifications.

### **1.2.1 CEO Entrepreneurial Risk-Taking Behaviour and Business Decisions in Family-Owned Businesses**

The entrepreneurial risk-taking behaviour of family vs non-family CEOs in family-owned businesses also affects the decisions that these leaders take, and this contributes to the eventual progress and performance of their firms. One of the decisions affected by a CEOs entrepreneurial risk-taking behaviour is that of venturing into new markets. Studies have shown that new market entry is connected to a CEOs entrepreneurial risk-taking behaviour. For example, Zahra (2005) study showed that longer CEO tenure negatively correlated with risk-

taking behaviour, specifically firm innovation and new market entry. This implies that such CEOs would hardly venture into new markets.

CEO entrepreneurial risk-taking behaviour has also been linked to business decisions such as expansion and launching new products within the firm and beyond. Even then, Naldi, et al., (2007) observed that one of the challenges that family-owned businesses face is the fear of taking risks as all wealth is invested in the firm and this is dependent on whether the CEO is family or non-family; this consequently affects business decisions such as expansion and launching into new markets. This is echoed by Alkaabi and Dixon (2014) who argued that most family-owned firms are risk-averse (especially with family CEO), and this denies them opportunities to expand and launch new products and markets.

Martino, et al., (2020) observed that the CEO family relationship in family-owned businesses also determine the risk-taking in such firms. Specifically, they argued that non-family CEOs may be more predisposed to take risks such as decisions to innovate or even create new projects within family-owned firms, as compared to family CEOs who could be conservative and more interested in control of the business. This suggests that while risk-taking is concerned with decisions by family-owned firms, the nature of the CEO contributes to this kind of relationship.

Business decision-making is an important component in organizations, and how it is done determines the extent of success of such firms. Zona (2016) argued that business decision-making will be undertaken differently depending on whether the CEO in family-owned firms is from the family, or not. Specifically, use of knowledge and skills within such firms work well with non-family CEOs, while family CEOs are an asset where there is cognitive conflict. This is also supported by Yopie and Itan (2016) who argued that non-family CEOs in family firms tend to make business decisions that add more value to the firm and hence enhance their performance.

### **1.2.2 CEO Entrepreneurial Risk-Taking Behaviour and Non-Financial Performance Of Family-Owned Businesses**

Family vs non-family CEOs entrepreneurial risk-taking behaviour in family-owned businesses affects non-financial performance of such organizations, for example innovation levels and

new product development among others. Kraiczy, et al., (2015) argued that a CEOs entrepreneurial risk-taking behaviour was significantly associated with a firm's innovativeness, this contributed positively to new product development hence improving innovation in such family firms. Specifically, when members of the Top Management Team (TMT) were family, their interaction was likely to affect their individual risk-taking with respect to new products. Thus, being family as a CEO was likely to reduce their risk and propensity for new products.

Another aspect of non-financial performance is brand or business image. As the survival of family firms is dependent on the perception that the world has about such firms, it is important that they are well branded. Some studies such as that by Memili, et al., (2010) showed that entrepreneurial risk-taking was associated with the brand image of family-owned businesses, and this by extension contributed to their overall performance as a business. The foregoing authors noted that family CEOs were likely to be careful about the brand image of the family, hence make careful decisions about the firm as compared to the non-family CEOs; they (family CEOs) may also try to avoid problems that may 'dent' the family name or business.

Generally, the performance of family-owned businesses can be measured in both financial and non-financial metrics (Delen, et al., 2013). Financial metrics used in such firms include Return on Assets, Return on Investments, profitability, sales revenue, sales growth, among others (Agyapong & Acquah, 2021; Williams Jr., 2018). There are many non-financial performance indicators used to measure the performance of firms, and these include growth in the number of employees, growth in the number of outlets, number and diversity of products, innovation levels, growth in customer numbers and other aspects of performance that may not be measured in monetary terms (Kotane & Kuzmina-Merlino, 2012; Williams Jr., 2018). Also, when it comes to explaining the different risk-taking behaviour of family and non-family CEOs and the subsequent impact on firm performance (financial and non-financial), the role played by socio-emotional wealth cannot be ignored. Socio-emotional wealth, which refers to the non-financial benefits that are derived from family identification with the firm, the opportunity for the family to be altruistic, and the need for identification and belonging (Gomez-Mejia, et al., 2007) is another measure of non-financial performance.

### **1.3 Family-Owned Businesses in Kenya**

Family-owned businesses are one of the leading drivers of Kenya's economic growth mainly through job creation, and account for 75% to 90% of business organizations (Lee, 2018; Ndemo, 2018). According to PricewaterhouseCoopers (2018), Kenyan family-owned businesses are looking to grow faster and thus are keen on having the right people and organizational structures that will enable them to achieve desired growth. Family-owned businesses are believed to have a competitive advantage at a time when digital disruption is becoming a major aspect of how businesses are run and thus there is a need to innovate in order to grow.

Based on a survey of 46 family-owned firms, PricewaterhouseCoopers (2018) noted some of the challenges that are faced by family firms which include innovation (66%), access to the right skills (60%) and digitalization (44%). The survey also found that most family firms are not adequately prepared to grow to the next level and thus there is advocacy for a strong combination of managers in top management who possess the right technical skills and who are risk-takers, attributes that are necessary to grow the firms. Of the firms surveyed, 61% noted that they would be ready to incorporate professionals from outside the family business in order to improve performance. Some studies such as Martino, et al., (2020) have shown that the having a family CEO is negatively correlated with entrepreneurial risk-taking, suggesting that a non-family CEO may be better placed for improved performance within the family business.

### **1.4 Statement of the Problem**

Despite family businesses playing an instrumental role in national economies, the survival rate for many of them (as compared to non-family businesses) is quite low owing to the many challenges they face (Agyapong & Acquah, 2021). For example, the global survey on family business by Deloitte (2019) found that only 17 per cent of family businesses in Kenya survive beyond the third generation. A CEOs entrepreneurial risk-taking behaviour is one core ingredient that has been shown in literature to contribute to the success or failure of family businesses, especially when correlated with family vs non-family CEOs (Zahra, 2018).

According to Nurunnabi (2021), family businesses globally account for up to 70% of the world's GDP. In Kenya, family businesses play an instrumental role in the economic development of the nation, through job creation and strengthening of local economies where they are situated (i.e., through improved infrastructure), among many others (Amadala, 2020; Ndemo, 2018). This implies that family businesses are the backbone of economies and greater attention must be given to them. The success of Kenya's Vision 2030, which seeks to transform the country into a middle-income country, is heavily reliant on the success of family-owned businesses in the nation (Business Today, 2021; GOK, 2008).

Studies have shown that there is a positive link between entrepreneurial risk-taking and family business non-financial performance. Specifically, within family-owned businesses, whether a CEO comes from the family or not, affects their entrepreneurial risk-taking behaviour in areas such as innovation, venturing in new markets, launching of new products among others, (Gomez-Mejia et al., 2007; Martino et al., 2020; Zahra, 2005). This therefore suggests the need to give more attention to family vs non-family CEOs in family-owned firms, and in relation to their entrepreneurial risk-taking behaviour. Consequently, this study sought to fill the gap in the Kenyan context, by examining the entrepreneurial risk-taking behaviour of family vs non-family CEOs in family-owned businesses with respect to non-financial performance. While financial measures have been used in literature to measure the progress or success of family firms, financial data is often difficult to obtain as owners/managers of family firms are generally reluctant to release financial information to outsiders (Chao & Spillan, 2010). This guided the choice of non-financial performance indicators to measure the performance of family-owned firms in this study. Specifically, innovation, brand image, and business growth were used in this study to measure non-financial performance.

## **1.5 Research Objectives**

### **1.5.1 General Objective**

The general objective of this study was to examine the influence of family and non-family CEOs entrepreneurial risk-taking behaviour on the non-financial performance of family-owned businesses in Nairobi, Kenya.

### **1.5.2 Specific Objectives**

The specific objectives were to:

- i. Compare how the characteristics of family and non-family CEOs influence entrepreneurial risk-taking behaviour in family-owned businesses in Nairobi, Kenya.
- ii. Assess the effect of family and non-family CEO entrepreneurial risk-taking behaviour on the non-financial performance of family-owned businesses in Nairobi County Kenya.
- iii. Determine the moderating effect of business decision making on the relationship between entrepreneurial risk-taking behaviour and non-financial performance of family-owned business enterprises in Nairobi Kenya.

### **1.5.3 Research Questions**

- i. How do the characteristics of family and non-family CEOs influence entrepreneurial risk-taking behaviour in family-owned businesses in Nairobi County Kenya?
- ii. What is the effect of family and non-family CEO entrepreneurial risk-taking behaviour on the non-financial performance of family-owned businesses in Nairobi County Kenya?
- iii. What is the moderating influence of business decision making on the relationship between CEO entrepreneurial risk-taking behaviour and the non-financial performance of family-owned businesses in Nairobi County Kenya?

## **1.6 Scope of the Study**

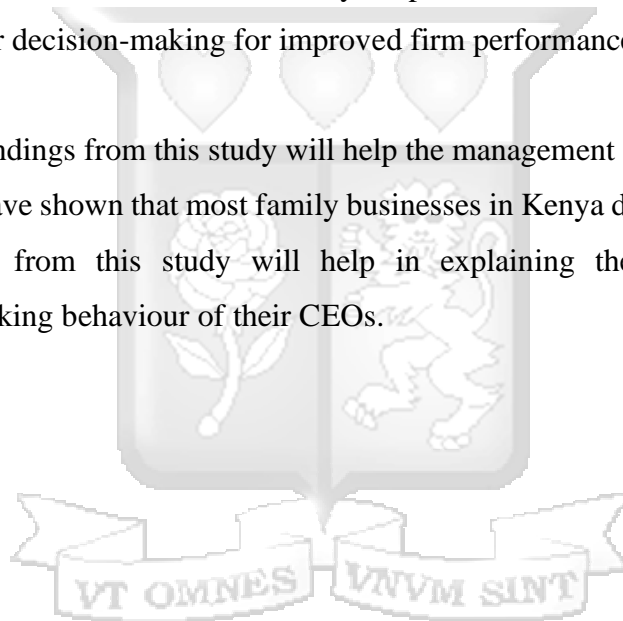
The target population of the current study was family-owned businesses in Nairobi County. The study targeted CEOs of family-owned businesses drawn from various sectors in Nairobi County responded to the study questions through questionnaires over a period of one month. Thus, the study focussed only on family-owned firms in Nairobi County, and not beyond. Further, this study gave attention to family vs non-family CEOs with respect to their entrepreneurial risk-taking and non-financial performance in family firms. Other variables on family firms, such as their financial performance were therefore not focused on.

## 1.7 Significance of the Study

It is hoped that this study's findings will benefit the family business research field in Kenya. As this study focuses on the influence of CEO entrepreneurial risk-taking behaviour on the non-financial performance of family-owned businesses in Kenya, it will add more knowledge on the leadership and management of family businesses in Kenya.

This study is also significant and will be useful to policy makers in the field of family business in Kenya and neighbouring contexts. As family businesses are crucial to the growth of the Kenyan economy, understanding the entrepreneurial risk-taking behaviour of family and non-family CEOs in family-owned businesses in Kenya is paramount because it would aid owners and managers in better decision-making for improved firm performance.

It is also hoped that findings from this study will help the management of family businesses in Kenya. As statistics have shown that most family businesses in Kenya do not last beyond three generations, findings from this study will help in explaining the contribution of the entrepreneurial risk-taking behaviour of their CEOs.



## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter reviews literature related to the study objectives. Specifically, literature is reviewed on characteristics of CEO, the CEO entrepreneurial risk-taking behaviour, the relationship between entrepreneurial risk-taking behaviour and business decisions in family-owned business, and finally, the effect of CEO entrepreneurial risk-taking behaviour on the non-financial performance of family-owned businesses – and all these are discussed by comparing family vs non-family CEOs in family-owned businesses. The theoretical framework is first discussed, followed by global and local empirical reviews.

### **2.2 Theoretical Framework**

#### **2.2.1 Upper Echelons Theory**

The upper echelons theory was postulated in 1984 and is associated with Donald Hambrick and Phyllis Mason (Hambrick & Mason, 1984). The theory argues that organizational CEO background and characteristics play an instrumental role in organizational performance. Thus, the CEOs educational background, their previous job and professional experiences, among others contribute to the firms' financial and non-financial performance. According to this theory, since values and other intrinsic characteristics of CEOs may not be overtly seen, they can nonetheless be measured using observable traits such as educational qualifications, tenure, age, experience, gender, etc. (Hambrick & Mason, 1984; Martino et al., 2020).

According to Hambrick (2007), the values, experiences and even the personalities of executives (i.e. CEOs) greatly influence not just the interpretation of the events and situations that face them, but also how they interpret such events or circumstances. The theory argues that 'executives' experiences, values, and personalities affect their field of vision, selective perception (what they actually see and hear), and interpretation (Hambrick, 2007, p.337).

An important tenet in upper echelon's theory is the belief that organizations reflect the top management or their executives, and this is because all the important decisions regarding the

organization, whether strategic or not, or those involving risk-taking are made by the top management (Hambrick & Mason, 1984). Within the family-owned business literature, Martino et al. (2020) observed that upper echelons theory needs to consider the familial nature of CEOs in these kinds of businesses as they affect the decision-making and even strategic choices made by such firms.

This theory is relevant in responding to all the three research questions in this study. The first research question focuses on a CEOs entrepreneurial risk-taking behaviour, especially the characteristics around it; the second focuses on CEO entrepreneurial risk-taking behaviour and business decisions in family-owned firms, and the last question focuses on CEO entrepreneurial risk-taking behaviour and non-financial performance of the firm. In these objectives, the CEOs entrepreneurial risk-taking behaviour stands out, and is dependent on their experiences, values, demographic characteristics, etc. as argued by the Upper Echelons theory.

### **2.2.2 Agency Theory**

This theory was developed by Jensen and Meckling (1976) who defined agency relationship as a contract under which the principals (the owners) engage the agent (the CEO) to perform some tasks on their behalf. This theory states that both principals and agents are self-interested individuals who aim to maximize their utility. It is therefore expected that the agents may not always act in the best interest of the principals and this could therefore lead to the problem of agency costs arising. Agency costs are defined as the conflicts that may arise as a result of the divergence between the agent's decisions and those decisions which would maximize the principal's welfare (Jensen & Meckling, 1976). These costs are exacerbated by the different types of ownership structures such that firms that have a dispersed ownership structure have greater costs compared to those that have a more concentrated ownership structure where principals have greater control over the agent.

This theory is relevant to this study because it provided the theoretical foundation that explains family businesses' aversion to entrepreneurial risk (Wang & Poutziouris, 2010). Agency theory states that high ownership levels affect risk-taking negatively because when wealth is undiversified, few people bear the financial burden, and this discourages them from engaging

in risky behaviour (Fama & Jensen, 1983). Proponents of agency theory also assert that engagement in risky behaviour is largely influenced by the firm's ownership and management structure (Jensen & Meckling, 1976). Since the manager in a family firm controls the firm strategically and operationally, his or her risk-taking behaviour is likely to have a significant influence on the firm's performance outcomes (Harris & Ogbonna, 2007).

Jensen and Meckling (1976) posed a situation in which a family business is managed by either the owner-manager or an outside-manager. According to agency theory, the owner-manager will have a low preference for risky investments characterized by uncertain outcomes due to his/her high ownership stakes. On the other hand, outside-managers, because of their low ownership stakes, are likely to be less risk averse and are likely to have an inclination to pursue high-risk strategies (Huybrechts, Voordeckers, & Lybaert, 2012). As a result, non-family CEOs are likely to steer their organizations to higher levels of performance (Martino et al., 2020).

This theory also asserts that the risk-taking behaviour of the principals and agents is dependent on their risk preferences and that the agents involved frame their decisions in financial terms (Kumeto, 2015). This means that agents tend to make decisions that will avoid losses to their personal wealth even if it means taking riskier actions in order to avert loss, such that an agent who anticipates loss is more likely to make riskier decisions so as to preserve their personal wealth (Gómez-Mejía & Wiseman, 1998). The family CEO in this context is the principal, and the non-family CEO is the agent.

Even though agents and principals are sometimes the same in family businesses, agency theory helps to understand how the CEO entrepreneurial behaviour of a family CEO versus a non-family CEO may influence non-financial performance of family-owned business more so owing to the socioemotional wealth factor (Gomez-Mejia et al., 2011; Zahra, 2005). As socioemotional wealth in family businesses led by family CEOs is often stronger, such businesses may be hesitant to relinquish control of their firms (to non-family CEOs) and this is likely to have an effect on the performance of the business. This theory is therefore relevant in responding to all the study objectives.

## **2.3 Empirical Review of Literature**

### **2.3.1 CEO Characteristics and Risk-Taking Behaviour in Family-Owned Businesses**

#### ***2.3.1.1 CEO tenure, age and professional experience***

A cross-sectional study by Wang and Poutziouris (2010) examined entrepreneurial risk-taking in 236 UK firms (from Fame database) and 324 respondents and focussed on owner-managers, or family CEOs with respect to risk-taking. Regression analysis was used to analyse the results which sought to associate risk-taking intensity and the nature of owner-managers and of owner families. Results from this study showed that the owner-manager's age is negatively connected to risk-taking, implying that younger CEOs were more likely to take risks compared to their older counterparts. These findings suggest that older and younger CEOs may engage in different entrepreneurial risk-taking behaviour in family-owned businesses. Non-family CEOs were however not considered.

Yeoh and Hooy (2020) also studied the relationship between age and risk-taking behaviour among CEOs. Their study, which was carried out in 190 Malaysian family-owned businesses revealed that younger and older CEOs are less likely to take risks, while CEOs in the middle age range are more likely to take risks. Family CEOs who were approaching retirement seemed to be risk-takers, perhaps with the desire to create a legacy for their firms. Further, the authors suggested that younger CEOs may lack experience and have more to lose, while older CEOs may be more risk-averse due to their desire to maintain stability and preserve their legacy. In contrast, middle-aged CEOs may have more experience and be more willing to take risks to grow the business. This therefore implies that age is an important consideration as far as CEO risk-taking behaviour is concerned. The non-family CEO was however not considered in this study.

A study by Sun, Huang, and Su (2023) studied how non-family CEOs in family-owned businesses contributed to innovation in these firms, and considered the background characteristics of such CEOs. The study used panel data of 452 Chinese listed family firms for their data. Findings from the study revealed that non-family CEOs with professional and technical experience were positively correlated with family firms' innovation, while those politically connected had a negative correlation with innovation. This implies that professional experience in non-family CEOs may be an asset to family firms' innovation, and overall performance. However, this study differs from the current one as there is no comparison to family CEOs, and the focus is only on innovation.

### ***2.3.1.2 CEO Gender***

A study in Italy by Amore, et al. (2014) investigated how the gender factor interacted at the top management of family-owned firms, and the potential effect this had on firm performance. The study used longitudinal data from family firms in Italy. Findings showed that in general, increasing the number of women in the top management team enhanced the performance of family firms. Even then, findings showed that firms were likely to benefit from women directors who were from the non-family background, than those from the family. This implies that female non-family directors or CEOs tended to be more beneficial to family-owned firms, than those arising from the family.

On contrary, a study by González, Guzmán, Pablo, and Trujillo (2020) established that having female directors at the top management team of family firms did not contribute to better performance. Data for the study was collected from 523 family businesses in Colombia. Findings generally revealed that having women at the board level of family firms did not enhance performance, contrary to the study by Amore et al. (2014). However, the study established that non-family female board directors had a positive impact on the performance of family businesses in Colombia. This suggest that the results may be different for female from family and non-family in some family firms. However, the role of female directors in the board is different from those of firm CEO, and likely to yield different results.

Bsoul et al. (2022) study was based on upper echelons theory and sought to investigate the relationship between CEO demographics and CEO risk-taking. The study was based on 82 Amman Stock Exchange for the period 2015–2019 in Jordan. Among others, results from the study showed that gender was not at all related to risk-taking among CEOs in the family-owned firms studied, even though the study did not directly compare family vs non-family CEOs. This implies that gender in some cases is related to risk-taking, while in other cases, it is not. It is probable that other factors (such as the context or culture) play a role in gender's association with risk-taking. Although the study focusses on gender, it doesn't compare family vs non-family CEO.

### ***2.3.1.3 CEO Educational Qualifications***

The educational qualifications of CEOs within family-owned businesses have also been linked to risk-taking behaviour. Ramón-Llorens, García-Meca, and Duréndez (2017) in their study

among Spanish family-owned firms used questionnaires to study the effects of CEO demographics on internationalization of family firms. Their findings showed that more educated CEOs were likely to engage decisions that led to internationalization of their businesses as compared to those with basic knowledge of the international markets. The study argued for the need for family-owned businesses to hire non-family CEOs who would be more pre-disposed to taking risks such as venturing to international markets.

Another study by Farag and Mallin (2018) focused on risk-taking in 892 non-financial firms listed on Shanghai and Shenzhen Stock Exchange between 1999-2009. Findings from their study, among others, revealed that CEO education and risk-taking was significantly and positively associated, implying that more educated CEOs were likely to be risk-takers and engage in innovative ideas. This was associated with being open-minded that advanced educational qualifications granted an individual. This therefore suggests that CEO educational qualifications may contribute to their firms' risk-taking, which may consequently contribute to improved performance in the organization. The comparison between family and non-family CEO was, however, not included in the study.

On the contrary, Bsoul et al. (2022) study established that within Jordanian manufacturing firms, educational levels were negatively associated with risk-taking. Specifically, the study revealed that when the levels of education increase, CEOs risk-taking decreased and vice versa. The foregoing discussions are in agreement with those of Martino et al. (2018) who similarly established that more qualified CEOs (with MBAs and PhDs) were less likely to take risks as they are often trained to avoid huge losses and mistakes. On this variable, however, the study did not compare family vs non-family CEO.

In their study, Huybrechts et al. (2012) sought to examine the risk-taking behaviour of family and non-family CEOs. In the study, 836 family businesses in Belgium took part, and data was collected via surveys. Descriptive and inferential statistics were used to analyse the data. Findings from the study revealed that having a non-family CEO contributed to the firm taking entrepreneurial risk-taking, but this was evident in the early years of their work, and disappeared as the years advanced. This suggests that non-family CEO may be more pre-disposed to take risks than those from the family.

Financial, intellectual, social, achievement and existential risk-taking behaviour have an effect on the firms' CEO undertakings. In their study, Breivik et al. (2020) sought to understand risk-taking distribution across the socio-demographic background and personality in Norway. Findings showed, among others, that individuals were risk averse, unlikely to take physical and existential risks. Further, males, more educated individuals and those younger were more likely to take risks than females, less educated and older individuals respectively. This may suggest that risk-taking in organizations and among CEOs may be contributed by other factors such as their gender and educational levels.

### **2.3.2 CEO Entrepreneurial Risk-Taking Behaviour and Non-Financial Performance of Family-Owned Businesses**

In their study on family and non-family Swedish Small and Medium Enterprises, Naldi et al. (2007) sought to establish the relationship between entrepreneurial orientation, risk-taking, and performance in these firms. Stratified sampling was used which yielded 265 family and 435 non-family firms. Results showed that risk-taking by CEOs in these firms is positively associated with innovation levels but negatively linked to firm performance. Their study findings showed that family businesses headed by family CEOs tend to take fewer risks compared to those headed by non-family ones, mainly because there exists an overlap between ownership and management. This implies that often, the owners and managers in family firms are usually the same individuals and thus the agency costs tend to be low mainly because of a lesser need of formal monitoring and control systems. Consequently, family businesses run by family CEOs are likely to engage in activities before thoroughly considering the positive and negative outcomes that are attributed to poor controls and which eventually lead to poor financial performance of their businesses.

Similarly, a study by Ekanayake and Hewa (2017) focused on examining the influence of family management and involvement in the financial and non-financial goals of 82 family firms in Sri Lanka. Findings showed that family ownership and family involvement contributed positively to the firm's non-financial goals such as job opportunities, family concerns, family objectives, among others. The study did not however focus on the specific role of the CEO, or their risk-taking behaviours, or on the role of non-family CEO. Whereas these few studies have evaluated the relationship between the CEO entrepreneurial risk-taking behaviour and non-

financial performance, not much has been done. There is even less evidence of the relationship between non-financial performance and the family versus non-family CEO.

Family CEOs tend to place high value on socio-emotional wealth and sometimes may place it before other priorities in order to serve the interests of the family firm such as control and continuity. Gomez-Mejia et al. (2007) found that in family firms that are professionally managed by non-family members, less value is attached to socio-emotional wealth (the focus tends to be on financial returns) in comparison to those that are managed by the family. Hernández-Linares, Kellermanns, López-Fernández, and Sarkar (2019) found that socio-emotional wealth moderates the relationship between family CEOs risk-taking and business performance, in other words, family CEOs and their firms would only take risks if it enhanced their socio-emotional wealth. Thus, the need to preserve socio-emotional wealth may lead the CEOs to take actions that will minimize damage to performance. This is contrary to what the non-family CEOs would undertake.

Studies have been carried out with respect to social risk-taking, which is concerned with individual seeking to stand out with respect to social contexts and practices. An experimental study in Istanbul, Turkey by Alan, et al., (2020) sought to understand gender differences with respect to leadership, and used children and teenagers as the population under study. Data was drawn from two cohorts of students in Grade four and eight in Istanbul, Turkey. Findings from the study showed that girls had less social confidence in public, hence were unwilling to take social risks, as compared to boys. This was demonstrated by their unwillingness to perform public tasks that would put their confidence on trial, yet these were expectations of leadership positions. It has been suggested that women are more risk-averse than men, even in organizations, and this explains their unwillingness to take up organizational positions (Alan, et al., 2023).

With intellectual risk-taking, individuals engage in newer approaches of doing things, rather than focusing on the status quo (Breivik et al., 2020). As with learners in schools, intellectual risk-taking involves daring to ask risky questions or attempting experiments that have not been done before which may fail or have negative consequences (Beghetto, 2009). The study by (Beghetto, 2009) focused on 585 learners in elementary schools in the Pacific Northwest. Findings revealed that older students were unwilling to engage in intellectual risk-taking, while those with high levels of scientific ability were more willing to engage in this type of risk-

taking. Intellectual risk-taking has been suggested as a potentially important factor in the post-COVID-19 workplace (Riaz, et al, 2023).

Achievement risk-taking involves setting the bar higher with respect to the attainment of personal, or in this case, organizational goals. When leaders in organizations demonstrate achievement risk-taking, they set higher targets for their organizations, which consequently improve organizational performance. According to Edmondson (2018), this involves making the organization fearless so that individuals within such firms are motivated to set high goals for themselves and the firm. Thus, for organizations to attain their set goals, setting and being committed to goals is insufficient, action plans towards their attainment are more crucial (Gagné, 2018).

### **2.3.3 Business Decision-Making in Family Businesses**

Business decision making refers to choices made by individuals or organisations that affect the operations of the business and among CEOs, is a crucial process whose outcome has the potential to affect organizational staff and income, hence needs to be carefully handled (De Smet, Rinaudo, Lund, & Weiss, 2023). In relation to family-owned businesses, business decisions can be affected by the source of information that the CEO has access to, this could either be their individual information (where the CEO relies on their own information), others information (where the CEO relies on other people's information) and cooperative decision-making (where decisions are joint of information gathered from other people).

A study by Avruchir, et al. (2016) examined the differences between family and non-family CEOs in family firms in relation to internationalization. The case study focused on one Brazilian family firm that appointed a non-family CEO to replace a deceased family CEO, and was anchored on the resource-based view of the firm. Data for the study was collected through 13 interviews with significant participants such as current and former managers of the organizations, journalists who had written stories and reports on the organization. Archival data on the organization (reports, journalistic pieces, and other relevant written data on the organization) were also used for the study. Findings from the study revealed that the non-family CEO decisions were heavily influenced by the owners of firm and although the non-family

CEO helped the family firm under study to expand to new markets internationally, the end-result was a riskier position for the organization which eventually led to its bankruptcy.

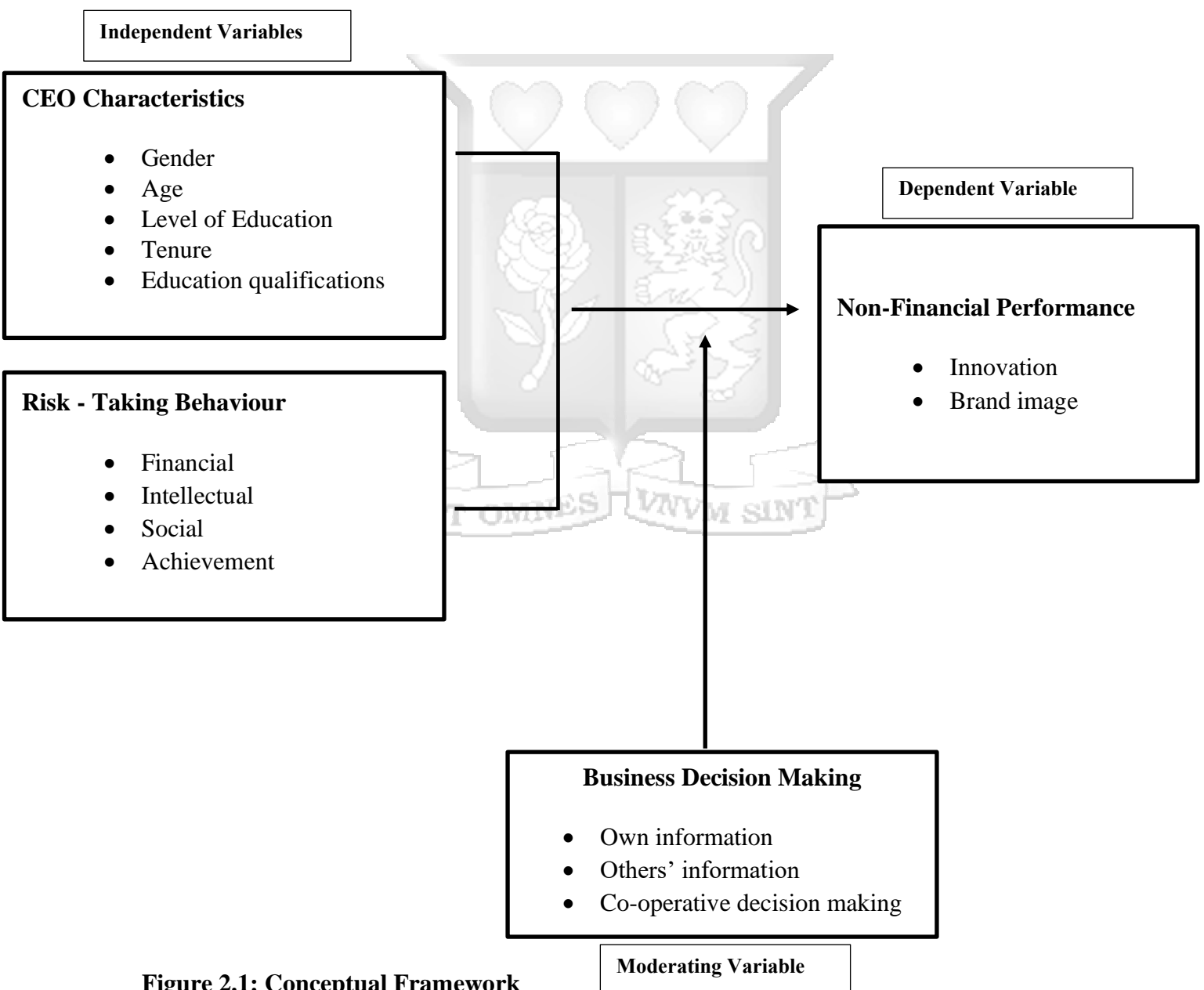
Another study by Chung, et al., (2021) examined if non-family CEOs in family-owned businesses contributed to innovation, an aspect of business decisions based on Taiwanese family-owned firms. The study used data from 6,201 firm-year observations where regression analyses were run. Results showed that non-family CEO and their involvement in innovation would be moderated by family involvement in management, and board independence. Having family members in the management team seemed to hinder the non-family CEO from adopting innovative approaches and products in the organization. This could suggest that the non-family CEO decision-making was influenced by information sourced from others (i.e the board), and this had an effect on the choices made which affected business outcomes. Although the study did not do a comparison between family vs non-family CEOs, it helps to show how the source of information can affect business decisions. Further, decision making process can be reliant on individual information, cooperative and consultative information.

## **2.5 Research Gaps**

The literature reviewed in this chapter has focused on the study objectives, which mainly focus on CEO entrepreneurial risk-taking and family-owned businesses with respect to family vs non-family CEO. In examining the influence of CEO risk-taking behaviour on firm performance, the salient factors that influence risk such as the characteristics of CEO, risk-taking and business decisions are important to investigate. Very few studies have been done that compare between family and non-family CEO risk-taking and business decisions. It can be noted that a number of empirical studies such as Hernández-Linares et al. (2019), Kraiczy et al. (2014) and Gomez-Mejia, Hynes et al. (2007) do not distinguish between financial and non-financial performance of businesses. This study adds to the body of knowledge by focusing exclusively on non-financial performance of family-owned firms. Further, the literature reviewed shows that the main focus has been on family-owned businesses in developed countries, and hardly from developing countries such as Kenya. There was therefore need to investigate CEO entrepreneurial risk-taking behaviour with respect to non-financial performance of family businesses in Kenya.

## 2.6 Conceptual Framework

The conceptual framework presents a hypothesized relationship between study variables. In the current empirical examination, it was argued that CEO characteristics, CEO risk taking behaviour and business decision making affects non-financial performance of family-owned enterprises in Kenya. Figure 2.1 below shows the conceptual framework which indicates the relationship among the study variables.



**Figure 2.1: Conceptual Framework**

**Source: Researcher (2024)**

## 2.7 Operationalization of Study Variables

Table 2.1 below shows how the variables in this study were operationalised.

**Table 2.1: Operationalization of Study Variables**

Variable	Variable Type	Indicators	Measurement Scale	Item in Survey Tool	Supporting Literature
CEO Characteristics	Independent	<ul style="list-style-type: none"> <li>• Family vs. non-family CEO</li> <li>• Gender</li> <li>• Age</li> <li>• Education Qualifications</li> <li>• Tenure</li> </ul>	Interval	1-5	(Farag & Mallin, 2018; Hiebl, 2013; Loukil & Yousfi, 2022; Vandekerkhof, Steijvers, Hendriks, & Voordeckers, 2015)
CEO Entrepreneurial Risk-Taking Behaviour	Independent	<ul style="list-style-type: none"> <li>• Financial risk-taking</li> <li>• Intellectual risk-taking</li> <li>• Social risk-taking</li> <li>• Achievement risk-taking</li> </ul>	Interval	6-31	Hiebl (2013), Naldi et al (2007), Mishra and McConaughy (1999), Martino et al. (2020), Sener (2014)
Business Decision-Making	Moderating	<ul style="list-style-type: none"> <li>• Own information</li> <li>• Others' information</li> <li>• Co-operative decision</li> </ul>	Interval	32-48	Al Hijji, et al. (2018); De Smet et al. (2023); Omarli (2017)
Family-Owned Business' Non-Financial Performance	Dependent	<ul style="list-style-type: none"> <li>• Innovation</li> <li>• Brand image</li> <li>• Growth</li> </ul>	Interval	49-68	(Ekanayake & Hewa Kuruppuge, 2017; Hernández-Linares et al. 2019; Huybrechts et al. 2012; Mishra & McConaughy, 1999)

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

Research methodology refers to the systematic approach that is used to collect, analyse and present data (Saunders, Lewis, & Thornhill, 2016). This chapter outlines the research philosophy, research design, the data collection instruments and procedures as well as the data analysis methods that used in the study.

### **3.2 Research Philosophy**

A research philosophy refers to a system of beliefs and assumptions about the development of knowledge (Saunders et al., 2016). This research study was underpinned by the positivism research philosophy which assesses the relationship among study variables (Bryman, 2012). This approach was relevant because the study aimed to investigate the correlations between CEO entrepreneurial risk-taking behaviour and non-financial performance of family-owned businesses. The positivist philosophy also informed the choice of research method (quantitative) because, unlike the interpretivist approach, this philosophy is objective and reliable (Cohen, Manion, & Morrison, 2007; Saunders et al., 2016). Further, the study relied on quantitative data to examine conceptualized theoretical relationship between variables under examination. Further, the study compared family and family CEO characteristics and risk-taking behaviour effect on non-financial performance.

### **3.3 Research Design**

A research design is a basic plan that guides the data collection and analysis of the research being undertaken (Cohen et al., 2007). The study adopted descriptive cross sectional research design to respond to the study questions. The research design was descriptive since it sought to respond to questions on who, why and how in regard to CEO entrepreneurial characteristics risk-taking behaviour on non-financial performance of family-owned enterprises (Saunders et al., 2016). Moreover, the study adopted comparative approach in relation to CEO

characteristics and CEO risk taking behaviour on non-financial performance of family-owned enterprises in Nairobi County.

### **3.4 Target Population**

The target population refers to the complete set of cases or group members that is the actual focus of the study (Cohen et al., 2007; Kothari, 2018). The target population for this study were CEOs of registered family-owned small and medium businesses drawn from various sectors in Nairobi. Nairobi County is cosmopolitan hence it was easy to draw a true representative of the whole country's demographic characteristics on aspects of gender, education qualification among others. The target population for this study were family-owned Small and Medium Enterprises (SMEs) in Nairobi County that were licensed. The population size was drawn from a 2016 MSME Survey done by KNBS, there are 1.56 million licensed MSMEs in Kenya. From that survey 15.8% are family-owned micro, 21.7% are family-owned small enterprises and 16.5% are family-owned medium enterprises out of which 17.1% hailed from Nairobi County. The population size was 101,902.

### **3.5 Sample Size and Sampling Technique**

Sampling is concerned with the choosing of a portion of individuals from within an entire group to estimate the characteristics of the population, and which ensures representativeness (Bryman, 2012). For this study, non-probability purposive sampling was used. This sampling technique is most applicable in populations that are difficult to access due to their closed nature (Cohen et al., 2007) and also because there is no public database on family businesses in Nairobi County.

This study estimated the population of family firms from this survey and used the Yamane (1967) formula as follows to determine the sample size.

$$n = \frac{N}{1 + Ne^2}$$

Where:

n= corrected sample size

N = population size, and

e = Margin of error (MoE), e = 0.10 based on the research condition.

$$n=101,902/(1+101,902(0.10)^2)$$

$$n= 99.9 \sim 100$$

### **3.6 Data Collection Instruments and Procedure**

This study used primary data which was collected using structured questionnaires that were given to CEOs of family-owned businesses. An advantage of questionnaires is that they can reach many respondents within a short period of time (Cohen et al., 2007). With questionnaires, the intention was to collect data on the general characteristics of the CEOs as well as the non-financial performance data relevant to the study.

The questionnaire (Appendix III) – had four sections. The first section addressed the general characteristics of the CEO. The second section collected information on the CEOs entrepreneurial risk-taking behaviour, while the third section focused on the CEOs entrepreneurial risk-taking behaviour with respect to business decision-making. The last section focuses on the non-financial performance of the firm.

The questionnaires were distributed individually to the respondents who were given two days to answer the study questions, and an additional time of one week was given to those who needed it. Questionnaires were administered both electronically and in person, and were followed up with phone calls.

### **3.7 Research Quality**

#### **3.7.1 Reliability of Research Instrument**

Reliability refers to the degree which a research instrument yields consistent results (Bryman, 2012; Cohen et al., 2007). The study used Cronbach's alpha coefficient which ranges between 0 and 1 to test for data reliability. The need to test for reliability was to ensure that the scores from the research instrument were stable and consistent such that respondents answered questions in the same way and consistently (Tavakol & Dennick, 2011).

### 3.8 Data Analysis and Presentation

Data analysis took place at two levels: descriptive and inferential statistical levels. All the filled questionnaires were referenced and coded to facilitate data entry. The study generated quantitative data that was analysed using descriptive analysis such as mean, median, and standard deviation using Statistical Package for Social Sciences (SPSS) and Microsoft Excel. Descriptive analysis was useful in analysing the respondents' demographics, which were useful in responding to the first study objective which focused on examining how characteristics of family and non-family CEOs influenced CEO entrepreneurial risk-taking behaviour in family-owned businesses. Inferential data analysis was carried out using Spearman's rank correlation analysis to determine the strength and the direction of the relationship between the dependent variables (i.e., characteristics of CEO entrepreneurial risk-taking behaviour in family-owned businesses, and CEO entrepreneurial risk-taking behaviour on the business decisions taken) and dependent variable (non-financial performance of family-owned businesses). T-tests were used to determine if there exist significant differences between the means of the foregoing independent and dependent variables.

Sekaran (2010), states that multiple regression analysis attempts to determine whether a group of variables predict a given dependent variable and hence attempt to increase the accuracy of the estimate. The multiple regression model for this study was as follows: Multiple linear regression model with dependent variable (Y) – non-financial performance, independent variables CEO characteristics, Risk-Taking behaviour and moderating variable Z (Business Decision-Making) were used to show whether the stated independent variables significantly influenced firm non-financial performance. Models used in the study were as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon \dots \dots \text{Model without moderation}$$

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 Z + \beta_7 X_1 * Z + \beta_8 X_2 * Z + \beta_9 X_3 * Z + \beta_{10} X_4 * Z + \beta_{11} X_5 * Z + \epsilon \dots \dots \text{Model with moderation}$$

Where;

Y= Non-financial performance; X1= Gender, X2= Age, X3= Education qualifications, X4= CEO tenure, X5= CEO entrepreneurial risk-taking, Z= Business decision making.

To determine the influence of the moderating variable, the  $R^2$  from the model without moderation was compared to the model with moderation. Also, the significance of the interaction terms was investigated. To examine the moderating effect of business decision making, a partial derivative with respect to independent variables was carried out and marginal change in slope coefficient was compared to the original coefficient. Similar approaches have been adopted by (Wairimu, et al., 2019).

$$\frac{\partial \text{Non-financial performance}}{\partial \text{Gender}} = \beta_1 + \beta_7 Z$$

$$\frac{\partial \text{Non-financial performance}}{\partial \text{Age}} = \beta_2 + \beta_8 Z$$

$$\frac{\partial \text{Non-financial performance}}{\partial \text{Education qualifications}} = \beta_3 + \beta_9 Z$$

$$\frac{\partial \text{Non-financial performance}}{\partial \text{CEO tenure}} = \beta_4 + \beta_{10} Z$$

$$\frac{\partial \text{Non-financial performance}}{\partial \text{Entrepreneurial Risk Taking}} = \beta_5 + \beta_{11} Z$$

Comparative analysis between moderated and non-moderated slope coefficients for business decision making depicts the moderating effect of it on CEO characteristics and entrepreneurial risk-taking ( $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$ ). If the marginal contribution while compared to the non-moderated coefficient differs, then there is a moderating effect of business decision making on CEO characteristics and CEO entrepreneurial risk-taking.

### 3.9 Ethical Considerations

The researcher got ethical approval from the University which may be found in Appendix I and a research permit from the National Commission for Science, Technology and Innovation (NACOSTI) found in Appendix II. The issues of access and ethics were addressed before the commencement of the study, and consent forms (found in Appendix IV) were given to the CEOs before administering the questionnaires to ensure that they were willing participants. Anonymity and confidentiality were ensured by reporting group data and the information gathered was solely used for academic study. Respondent's participation was voluntary and the respondents were given the option to withdraw from it if they wished to. The intended purposes of the findings were outlined in the consent form handed to participants.



## CHAPTER FOUR: ANALYSIS AND PRESENTATION OF RESEARCH FINDINGS

### 4.1 Introduction

The current chapter presents study findings that were derived from primary data collected through the questionnaires. The study applied descriptive and inferential statistics to analyse the data. The main objective of the study was to examine the influence of family and non-family CEOs entrepreneurial risk-taking behaviour on the non-financial performance of family-owned businesses in Nairobi, Kenya. Specifically, the study sought to: compare how the characteristics of family and non-family CEOs influence entrepreneurial risk-taking behaviour in family-owned businesses, determine the influence of family and non-family CEOs' entrepreneurial risk-taking behaviour on the business decisions taken, and assess the effect of family and non-family CEO entrepreneurial risk-taking behaviour on the non-financial performance of family-owned businesses. Descriptive and inferential statistics were used to analyse the data.

### 4.2 Response Rate

The response for the current study was 81% since 80 questionnaires out of 99 were filled as shown in Table 4.1 below. The response rate was considered sufficient since Saunders et al. (2014) observed that a response rate of 60% is expected in social sciences. This rate is due to the prior mapping of targeted respondents before actual data collection.

**Table 4.1: Response Rate**

Questionnaires	Frequency	Percentage
Issued and completely filled	80	81
Not returned	19	19
<b>Total</b>	<b>99</b>	<b>100</b>

### 4.3 Reliability Analysis

A Cronbach Alpha's value of 0.7 and 0.9 is generally recommended by authors such as Cooper and Schindler (2014), and this was adopted in this study. A pilot study was carried among 20 family-owned enterprises which were drawn from Kiambu County. They were considered due to its proximity to Nairobi County. The findings below show that the variables used in the study

were reliable as their reliability values exceeded the threshold of 0.7 as per Malhotra (2015) recommendations. This, therefore, indicates that the research instrument was reliable.

**Table 4.2 Reliability Statistics**

<b>Variables</b>	<b>Number of items</b>	<b>Cronbach's Alpha</b>	<b>Comments</b>
Entrepreneurial risk-taking behaviour	26	0.840	Accepted
Business decision making	17	0.885	Accepted
Non-financial performance	19	0.845	Accepted

#### **4.4 Descriptive Statistics for CEO Characteristics**

The study sought respondents' background information that included gender, age in years, education qualifications, tenure, and family membership of the CEO. Findings for specific variables are presented in the next sub-sections.

##### **4.4.1 Gender**

Table 4.3 below presents the respondents' gender information.

**Table 4.3: CEO Gender**

<b>CEO Family Membership</b>	<b>Gender</b>	<b>N</b>	<b>%</b>
Non-Family CEO	Female	5	14.3%
	Male	30	85.7%
Family CEO	Female	10	22.2%
	Male	35	77.8%

Results of the study depict that 85.7% of the non-family CEOs were male and 14.3% female while for family CEOs, the findings indicate that 77.8% were male and 22.2% female. This implies that most of the family-owned small and medium enterprises in the study are predominantly managed by male CEOs.

##### **4.4.2 Age of Respondents**

Respondent's age was tabulated as shown in Table 4.2.

**Table 4.4: Age of the CEO**

CEO Family Membership	Age	N	%
Non-Family CEO	25 years and below	2	5.7%
	26-35 years	1	2.9%
	36-45 years	11	31.4%
	46-55 years	19	54.3%
	Above 55 years	2	5.7%
Family CEO	25 years and below	4	8.9%
	26-35 years	4	8.9%
	36-45 years	16	35.6%
	46-55 years	12	26.7%
	Above 55 years	9	20%

According to Table 4.4 above, the age distribution in firms led by non-family CEOs, 5.7% were aged below 25 years while 2.9% were aged between 26 to 35 years. On the other hand, in firms led by family CEOs, 8.9% were 25 years and below and 8.9% were between 26 to 35 years. Among the respondents, the youth were the minority at only 31.4% while those between 36-45 years old were the majority at 54.3%.

#### 4.4.3 Educational Qualifications

As shown in Table 4.5 below, education qualifications were categorized into five: no formal education, Post-Graduate Diploma, Secondary Diploma, Bachelors' Degree, Master's Degree and PhD.

**Table 4.5: CEO Educational Qualifications**

CEO Family Membership	Education Qualifications	N	%
Non-Family CEO	No formal education	0	0%
	Secondary Diploma	0	0%
	Post-Graduate Diploma	1	2.9%
	Bachelor's Degree	14	40.0%
	Master's Degree	18	51.4%
	PhD	2	5.7%
Family CEO	No formal education	8	17.8%
	Secondary Diploma	12	26.7%
	Post-Graduate Diploma	7	15.6%
	Bachelor's Degree	12	26.7%
	Master's Degree	5	11.1%
	PhD	1	2.2%

For firms led by non-family CEOs, 40% held Bachelor's Degrees while 51.4% held Master's Degrees and only 2.9% had Post-Graduate Diplomas. On the other hand, in firms led by family

CEOs, 17.8% had no formal education, 26.7% had a Secondary Diploma, 15.6% had attained a Bachelor's Degree, 11.1% had a Master's Degree and 2.2% were PhD holders.

#### 4.4.4 Tenure

Table 4.6 below shows that CEO tenure in firms led by non-family CEOs.

**Table 4.6: Tenure of the CEO**

CEO Family Membership	Tenure	N	%
Non-Family CEO	Below 5 years	6	17.1%
	6 to 10 years	8	22.9%
	11 to 15 years	12	34.3%
	16 to 20 years	8	22.9%
	Above 21 years	1	2.9%
Family CEO	Below 5 years	11	24.4%
	6 to 10 years	12	26.7%
	11 to 15 years	11	24.4%
	16 to 20 years	5	11.1%
	Above 21 years	6	13.3%

Findings indicate, 17.1% had served below 5 years, 22.9% had served for a period between 6 to 10 years, 34.3% for 11 to 15 years, 22.9% for 16 to 20 years and only 2.9% for a period above 21 years. In firms led by family CEOs, 24.4% had served below 5 years, 26.7% had served for a period between 6 to 10 years, 24.4% for 11 to 15 years, 11.1% for 16 to 20 years and 13.3% for a period above 21 years.

#### 4.5 Descriptive Statistics on Entrepreneurial Risk-Taking Behaviour

The first objective of the study sought to compare how the characteristics of family and non-family CEOs influenced entrepreneurial risk-taking behaviour in family-owned businesses. Respondents' rating was sought using a five-point Likert scale and responses were analysed using, mean, and standard deviation as shown in Table 4.7 below.

**Table 4.7: Descriptive Statistics on Entrepreneurial Risk-Taking Behaviour**

	Family CEO		Non-Fam CEO	
	Mean	Std. Dev	Mean	Std. Dev
<b>Financial Risk-Taking</b>				
I allocate organization resources into new product development with no supporting evidence	2.7	1.3	2.9	1.3
I seek debt financing for new ventures	3.7	1	3.7	0.9
I invest business surplus into diversified products	3.1	1.4	3.2	1.1
I invest business surplus into new markets	2.9	1.4	2.9	1.2
I incur organization resources without consideration of budgetary allocations	3	1.3	2.7	1.3
I undertake only those assignments which are remunerated on commission basis	2.8	1.5	2.8	1.4
I invest business surplus in speculative investment opportunities	3.2	1.2	3	1.3
I invest business profit in government securities	3	1.2	3.3	1.2
I allocate organization resources into new product development with no supporting evidence	2.7	1.3	2.9	1.3
<b>Overall Mean</b>	<b>3.01</b>	<b>1.29</b>	<b>3.04</b>	<b>1.22</b>
<b>Intellectual Risk-Taking</b>				
I pursue new and discomfoting business ideas	3.9	1.1	3.8	1.1
I pursue business opportunities whose certainty is unclear	3.3	1.4	3	1.4
I question investment opportunities by others and myself	3.6	1.3	3.3	1.4
<b>Overall Mean</b>	<b>3.6</b>	<b>1.3</b>	<b>3.4</b>	<b>1.3</b>
<b>Social Risk-Taking</b>				
I always defend and unpopular opinion that I believe in	3.6	1.3	3.7	1.4
I always listen to investment advisory that attract limited attention	3.6	1.4	3.5	1.4
I argue with investment team in public to support my options	3.9	1.2	3.3	1.5
I attend investment forums that are different from others	3.8	1.2	3.6	1.2
I stand up for other dissenting opinions even if they are minority	3.7	1.2	3.2	1.3
I spent time with investment mentors who are not liked by many	3.6	1.4	3	1.4
<b>Overall Mean</b>	<b>3.7</b>	<b>1.3</b>	<b>3.4</b>	<b>1.4</b>
<b>Achievement Risk-Taking</b>				
I have a strong need to be successful in running the business	4.2	0.8	4.4	1
I actively participate in programs to hone my management skills	4.5	0.5	4.5	0.5
I am responsible for the decisions I make	4.3	0.7	4.6	0.6
I am willing to compete with other CEOs	4.6	0.5	4.5	0.7
I effectively manage my time between business management and pursuance of personal activities	4.2	0.8	4.4	1
I am open to competition with other CEOs in similar business activities	4.4	0.5	4.5	0.5
To optimize my achievements, I always seek support from subordinate staff	4.5	0.5	4.5	0.7
I take responsibility for all outcomes that we achieve in the business enterprise	4.6	0.5	4.6	0.5
<b>Overall Mean</b>	<b>4.4</b>	<b>0.6</b>	<b>4.3</b>	<b>0.7</b>

*Key: 1- Not at all; 2-Rarely; 3-Moderately; 4-Often and 5-Always*

For family CEOs, when it comes to financial risk-taking, the majority of them often sought debt financing for new ventures (mean of 3.7), while only a few (mean of 2.7) moderately allocated the organization's resources into new products with no supporting evidence. This depicts that financial resources were carefully allocated and few were risk seekers. The same applies to non-family CEOs, in which most of them reported that they often sought debt financing for new ventures and invested business surplus into diversified products (mean of 3.7 and 3.2 respectively).

A smaller fraction of non-family CEOs (mean of 2.7) reported that they moderately incurred organization resources without consideration of budgetary allocations. It can thus be concluded that when it comes to financial risk-taking, both family and non-family CEOs did engage in risk-taking behaviour albeit moderately (as evidenced by an overall mean of 3.01 for family CEOs and 3.04 for non-family CEOs as shown in Table 4.5).

On intellectual risk-taking, both family and non-family CEOs reported that they often pursued new and discomfoting business ideas (mean of 3.6 and 3.4 respectively).

Regarding social risk-taking, it was found that family CEOs took more social risks, often listened to investment advisories that attracted limited attention (mean of 3.6), and often argued with investment teams in public to support their options (mean of 3.9). On the other hand, non-family CEOs moderately argued with investment teams in public to support their options (mean of 3.3) and also moderately stood up for other dissenting opinions even if they were the minority.

Concerning achievement risk-taking behaviour, the results indicate that both family and non-family CEOs reported that they always have a strong need to be successful in running their business (mean of 4.2 and 4.4 respectively). Similarly, both family and non-family CEOs always participated actively in programs that honed their management skills (mean of 4.5).

Non-family CEOs reported that they were always responsible for decisions that they made (mean 4.6) while family CEOs had a lower mean of 4.3. Both types of CEOs reported that they are willing to compete with other CEOs in similar business activities (mean of 4.5 and 4.5 respectively). It was also found that both family and non-family CEOs alike sought support from subordinate staff in order to optimise their achievements (mean of 4.5). Further, both

types of CEOs of family-owned businesses always took responsibility for all outcomes they achieved in their business enterprises (mean of 4.6).

#### 4.6 Descriptive Statistics on Non-Financial Performance

The second objective was to assess the effect of family and non-family CEO entrepreneurial risk-taking behaviour on the non-financial performance of family-owned businesses. An examination of non-financial performance on a five-point Likert scale ranging from strongly disagree to strongly agree is tabulated in Table 4.8 below.

**Table 4.8: Descriptive Statistics on Non-Financial Performance**

	Family CEO		Non-Fam CEO	
	Mean	Std. Dev	Mean	Std. Dev
<b>Innovation</b>				
We have changed outdated products and process	4.4	0.7	4.5	0.5
We have enhanced the quality of our products and services	4.5	0.7	4.5	0.5
We have improved our production process and efficiency	4.4	0.5	4.5	0.5
We have enhanced production capacity and services	4.6	0.7	4.5	0.5
We have reduced production costs per unit	4.3	0.7	4.4	0.5
We have enhanced health and safety of our production process	4.6	0.7	4.6	0.5
<b>Overall Mean</b>	<b>4.5</b>	<b>0.7</b>	<b>4.5</b>	<b>0.5</b>
<b>Brand Image</b>				
We brand our products so that we may attract and retain customers	4.6	0.6	4.7	0.5
Branding our products is crucial for our business success	4.6	0.6	4.7	0.5
In our business line, enterprises that have branded their products are deemed to have superior products	4.5	0.5	4.5	0.7
When pricing our products, brand is crucial	4.6	0.5	4.5	0.7
Our branded products are deemed to be of superior quality	4.6	0.6	4.6	0.5
Branding is in our response to our clients' expectations	4.5	0.7	4.4	0.5
Branding enables us to create memories of our customers purchasing procedure	4.5	0.7	4.4	0.8
<b>Overall Mean</b>	<b>4.6</b>	<b>0.6</b>	<b>4.5</b>	<b>0.6</b>
<b>Growth</b>				
We have increased our range of product and services	4.5	0.7	4.2	0.7
Our new products are outcomes of innovation	4.4	0.8	4.2	0.8
Our new product development are outcomes of research and development	4.4	0.7	4.5	0.8
Our new products are of superior quality	4.5	0.6	4.4	0.7
Our new products have strong value	4.6	0.6	4.5	0.6
Our new are products exciting	4.7	0.5	4.5	0.6
We have ventured into new markets	4.5	0.6	4.4	0.5
<b>Overall Mean</b>	<b>4.5</b>	<b>0.6</b>	<b>4.4</b>	<b>0.7</b>

*(1- Strongly Disagree; 2-Disagree; 3-Undecided; 4-Agree and 5-Strongly Agree)*

Both family and non-family CEOs either strongly agreed or agreed that they had changed outdated products and processes, enhanced the quality of products and services, improved production process and efficiency, enhanced production capacity and services, reduced production costs per unit and enhanced health and safety of their production process. This is evidenced by an overall mean score of 4.5 for both family CEOs and non-family CEOs.

When it comes to brand image, both family and non-family CEOs reported that they strongly agree they brand their products so that they attract and retain customers and that branding their products is crucial for business success (mean of 4.6 for family CEOs, and 4.7 for non-family CEOs). Similarly, both types of CEOs strongly agree that branded products in their business line are deemed to be superior (mean of 4.5). In addition, both family and non-family CEOs reported that branding is in response to clients' expectations and that it enables them to create memories of their customers' purchasing procedure (mean of 4.5 and 4.4 respectively).

Lastly, concerning business growth, both family CEOs and non-family CEOs reported that they strongly agreed that they had increased their range of products and services (mean of 4.5 and 4.2 respectively). Hence, there is a need for CEOs to embrace innovation in order to increase product range and enhance efficiency. In addition, both family and non-family CEOs that their new products are of superior quality, have strong value and are exciting. It can be deduced that this is a result of high levels of innovation output. Lastly, both family and non-family CEOs reported that they have ventured into new markets (mean of 4.5 and 4.4 respectively).

#### **4.7 Descriptive Statistics on Business Decision-Making**

The third objective sought to examine the moderating effect of business decision-making on the relationship between entrepreneurial risk-taking behaviour and non-financial performance of family-owned businesses. Respondents' rating was sought on a five-point Likert scale ranging from 1 to 5 as shown in Table 4.9 below.

**Table 4.9: Descriptive Statistics on Business Decision-Making**

	Family CEO		Non-Fam CEO	
	Mean	Std. Dev	Mean	Std. Dev
<b>Own Information</b>				
When making decisions, I am not influenced by external information sources	3.8	1.2	3.8	1.3
Whenever I refrain from reliance on external sources of information, decisions made are appropriate	3.7	1.4	3.6	1.1
My decisions should always be limited to information at my discretion	3.7	1.3	3.6	1.2
Since I am responsible, then all decisions should be based on my knowledge	3.7	1.5	3.4	1.4
Even if I have to consult prior to making decisions, the decisions ought to be anchored on my information	3.3	1.5	3.2	1.6
My decisions are correct and followers abide by them even when made on my knowledge alone	3.5	1.5	3.3	1.5
As a CEO even when I consult, I make decisions based on my knowledge	3.8	1.2	3.7	1.5
Even I make formal consultations, all decisions are based on my knowledge	3.8	1.4	3.6	1.6
<b>Overall Mean</b>	<b>3.7</b>	<b>1.4</b>	<b>3.5</b>	<b>1.4</b>
<b>Others' Information</b>				
My decision-making is effective provided I seek additional information from others	4.1	0.8	4.3	0.8
Even though my decision-making should be independent, it should be based on information acquired from others	4.1	0.8	3.9	1.1
Though my decision-making is on personal judgement, there is need for consultation with others	4.2	0.8	4.2	1.1
Effective and corrective decisions are made whenever I decide on my own though I listen from other people	4.3	0.9	3.8	1.3
Even though I should decide on my own, the decision ought to be based on information gathered from other people	4.3	0.9	4.4	1.1
<b>Overall Mean</b>	<b>4.2</b>	<b>0.8</b>	<b>4.1</b>	<b>1.1</b>
<b>Cooperative Decision-Making</b>				
My decisions should be joint of information gathered from other people	4	1	4.1	1
My decisions should not be individualistic though anchored on information sourced from others	4.1	0.8	4.2	0.9
Joint decision making is a prerequisite for administrative actions	4.1	0.9	4.2	0.7
As a CEO, to be effective I am always considerate of mutual decision making and considerate of information sourced from others	4.2	1	4.3	0.8
<b>Overall Mean</b>	<b>4.1</b>	<b>0.9</b>	<b>4.23</b>	<b>0.9</b>
Overall average Family CEO (mean = 4, 1.03) Non-family CEO (mean = 3.94, 1.11)				

**Key: 1- Strongly Disagree; 2-Disagree; 3-Undecided; 4-Agree and 5-Strongly Agree**

Concerning reliance on their own information in decision-making, both family and non-family CEOs generally agreed that when making decisions, they are not influenced by external information sources (mean of 3.8). Fewer agreed that even if they had to consult before making

decisions, the decision ought to be anchored on their information (mean of 3.3 for family CEOs and 3.2 for non-family CEOs). Generally, the findings report that both family and non-family CEOs agreed that they made business decisions based on their own information (overall mean of 3.7 for family CEOs and 3.5 for non-family CEOs).

Regarding reliance on other's information, family CEOs reported a higher score (mean of 4.2) compared to their non-family CEO counterparts (mean of 4.1). Family CEOs agreed that even though they should decide on their own, decisions ought to be based on information gathered from other people. Both types of CEOs also agree that even though decision-making should be independent, it should be based on information acquired from others (mean of 4.2 for both family and non-family CEOs). The reliance on other organisational members' information is an indicator of strong organizational culture and is crucial in making strategic decisions in organisations.

Similarly, in cooperative decision-making, both family and non-family CEOs agreed that their decisions should not be individualistic though anchored on information sourced from others and that joint decision-making is a prerequisite for administrative actions (mean of 4.1 for family CEOs and mean of 4.2 for non-family CEOs).

#### **4.8 Spearman Rank Correlation Analysis**

Spearman's rank correlation analysis was applied to examine the strength of the effect of CEO characteristics, CEO entrepreneurial risk-taking behaviour, business decision-making, and non-financial performance of family-owned businesses led by non-family CEOs and family CEOs as shown in Table. 4.10 and 4.11 below respectively.

**Table 4.10: Spearman Rank Correlation Analysis (Non-Family CEO)**

			Non-Financial Performance	Gender	Age	Education qualifications	CEO Tenure	Entrepreneurial Risk - Taking Behaviour	Business Decision Making
Non – Family CEO	Non-Financial Performance	Correlation Coefficient	--						
		Sig. (2-tailed)	.						
	Gender	Correlation Coefficient	-0.089	--					
		Sig. (2-tailed)	0.611	.					
	Age	Correlation Coefficient	-0.087	0.247	--				
		Sig. (2-tailed)	0.618	0.152	.				
	Education Qualifications	Correlation Coefficient	-0.086	0.14	0.032	--			
		Sig. (2-tailed)	0.623	0.422	0.854	.			
	CEO Tenure	Correlation Coefficient	0.237	0.205	-0.001	-0.207	--		
		Sig. (2-tailed)	0.17	0.237	0.995	0.234	.		
	Entrepreneurial Risk-Taking Behaviour	Correlation Coefficient	.682**	-.388*	-0.09	-0.202	-0.05	--	
		Sig. (2-tailed)	0.00	0.021	0.608	0.244	0.774	.	
	Business Decision Making	Correlation Coefficient	.721**	-0.154	-0.127	-0.007	0.073	.752**	--
		Sig. (2-tailed)	0	0.378	0.466	0.967	0.676	0	.

N=35

Results in Table 4.10 above depict that in businesses run by non-family CEOs, there was an inverse statistically not significant effect of gender on non-financial performance ( $\rho = -0.089$ ,  $p\text{-value} > 0.05$ ). Secondly, there was an inverse and not statistically significant effect of age and education qualifications on the non-financial performance of family-owned businesses ( $\rho = -0.087$ ,  $p\text{-value} > 0.05$ ) and ( $\rho = -0.086$ ,  $p\text{-value} > 0.05$ ) respectively. Further, there was a positive and not statistically significant effect of CEO tenure ( $\rho = 0.237$ ,  $p\text{ value} > 0.05$ ) on the non-financial performance of family-owned businesses. In addition, there was a

strong positive statistically significant effect of entrepreneurial risk-taking behaviour on the non-financial performance of family-owned enterprises ( $\rho = 0.682$ ,  $p\text{-value} < 0.05$ ). Business decision-making had a positive statistically significant effect on the non-financial performance of family-owned businesses ( $\rho = 0.721$ ,  $p\text{-value} < 0.05$ ).

**Table 4.11: Spearman Rank Correlation Analysis (Family CEO)**

Family CEO	Non-Financial Performance	Correlation Coefficient	--						
		Sig. (2-tailed)	.						
	Gender	Correlation Coefficient	-.387**	--					
		Sig. (2-tailed)	0.009	.					
	Age	Correlation Coefficient	-0.172	-0.124	--				
		Sig. (2-tailed)	0.259	0.417	.				
	Education Qualifications	Correlation Coefficient	0.034	0.086	0.251	--			
		Sig. (2-tailed)	0.824	0.572	0.096	.			
	CEO Tenure	Correlation Coefficient	0.16	0.044	-0.003	.455**	--		
		Sig. (2-tailed)	0.292	0.772	0.986	0.002	.		
	Entrepreneurial Risk-Taking Behaviour	Correlation Coefficient	.710**	-.523**	-0.116	0.026	0.117	--	
		Sig. (2-tailed)	0.00	0.000	0.448	0.863	0.445	.	
	Business Decision Making	Correlation Coefficient	.709**	-.494**	0.029	0.266	0.219	.695**	--
		Sig. (2-tailed)	0.00	0.001	0.852	0.077	0.148	.00	.

N = 45

For firms led by family CEOs, there was an inverse statistically significant effect of gender on non-financial performance ( $\rho = -0.387$ ,  $p\text{-value} < 0.05$ ) as shown in Table 4.11 above. Secondly, there was an inverse and not statistically significant effect of age and education qualifications on the non-financial performance of family-owned businesses ( $\rho = -0.172$ ,  $p\text{-value} > 0.05$ ) and ( $\rho = -0.034$ ,  $p\text{-value} > 0.05$ ) respectively. Further, there was a positive and not statistically significant effect of CEO tenure ( $\rho = 0.16$ ,  $p\text{ value} > 0.292$ ) on the non-

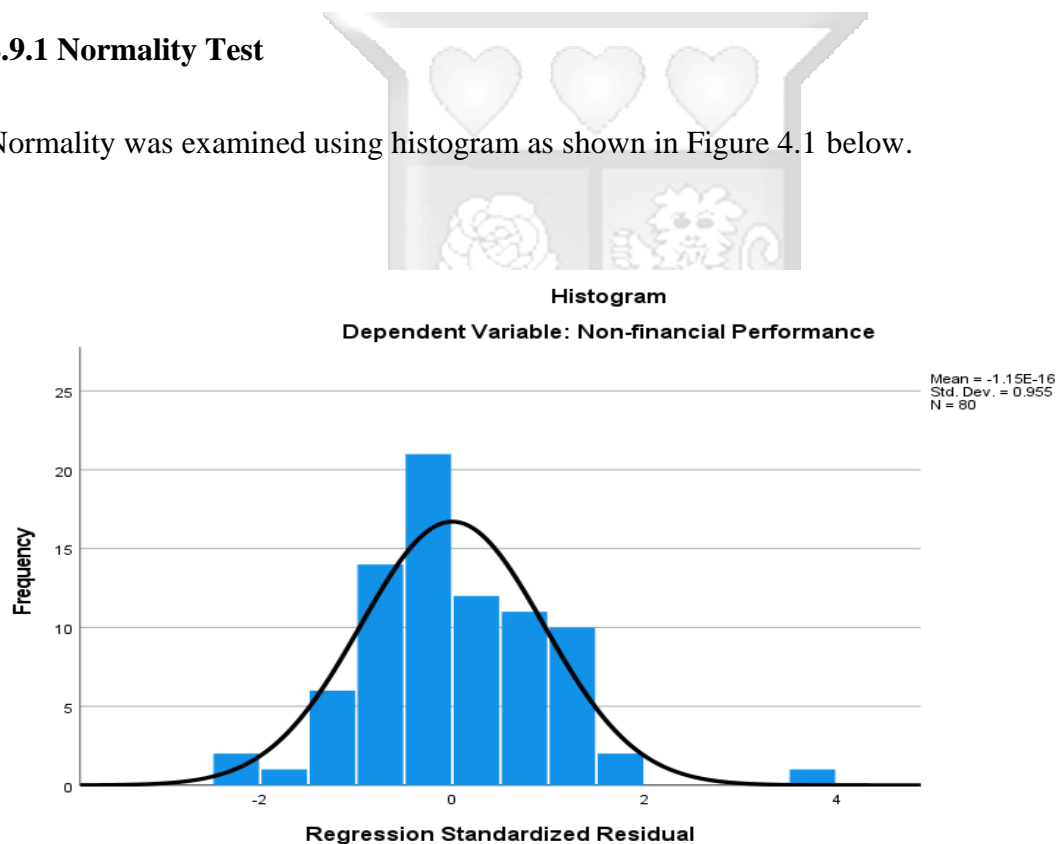
financial performance of family-owned businesses. In addition, there was a strong positive statistically significant effect of entrepreneurial risk-taking behaviour on the non-financial performance of family-owned enterprises ( $\rho = 0.710$ ,  $p$  value  $< 0.05$ ). Business decision-making had a positive statistically significant effect on the non-financial performance of family-owned businesses ( $\rho = 0.709$ ,  $p$  value  $< 0.05$ ).

#### 4.9 Regression Diagnostic Tests

Regression modelling is based on several assumptions that include normality of the error term, heteroskedasticity, and multicollinearity. Graphical and statistical approaches were applied to carry out diagnostic tests.

##### 4.9.1 Normality Test

Normality was examined using histogram as shown in Figure 4.1 below.



**Figure 4.1: Normality test**

The pictorial presentation in Figure 4.1 above depicts that the error term was normally distributed with a mean of 0 and a standard deviation of 1. Thus, there was no need to carry out data transformation before modelling.

#### 4.9.2 Multicollinearity Test

A multicollinearity test is carried out to examine the level of association among independent variables.

**Table 4.12: Multicollinearity test**

	Collinearity Statistics	
	Tolerance	VIF
Gender	0.786	1.273
Age	0.841	1.19
Education Qualifications	0.565	1.77
CEO Tenure	0.85	1.177
CEO Family Membership	0.618	1.618
Entrepreneurial Risk-Taking Behaviour	0.368	2.717
Business Decision-making	0.374	2.677

Findings in Table 4.12 depict that entrepreneurial risk-taking behaviour has the highest variance inflation factor of 2.717 and business decision-making has 2.677. Since none of the VIFs was greater than 4 or the tolerance limits were less than 0.1, then there was no multicollinearity.

#### 4.9.3 Heteroskedasticity Test

Heteroskedasticity was carried out to examine the uniformity of variance among the error term.

**Table 4.13: Heteroskedasticity test**

F Statistics	Sig
2.53	0.526

Results in Table 4.13 above depict that there was not enough evidence to warrant the rejection of the null hypothesis since the p-value was greater than 0.05. Thus, it can be concluded that there was uniformity of variance of the error term.

#### 4.10 Regression Analysis

##### 4.10.1 Model Summary

The regression model summary in Table 4.14 presents the model explanatory power and R squared changes in respect to variables under examination.

**Table 4.14: Model Summary**

CEO	Model	R	R Square	Adjusted R Square	Std. Error of the	Change Statistics				
						R Square Change	F Change	df1	df2	Sig. F Change
Non-family CEO	1	.833a	0.70	0.64	0.70	0.70	13.19	5	29	0.00
	2	.933b	0.87	0.81	0.51	0.18	5.25	6	23	0.00
Family CEO	1	.867c	0.75	0.72	0.51	0.75	23.56	5	39	0.00
	2	.929d	0.86	0.82	0.41	0.11	4.54	6	33	0.00

a Predictors: (Constant), Entrepreneurial Risk-Taking Behaviour, CEO Tenure, Age, Education qualifications, Gender

b Predictors: (Constant), Entrepreneurial Risk-Taking Behaviour, CEO Tenure, Age, Education qualifications, Gender, ERTB\*Business Decision Making, CEO tenure\*Business Decision Making, Age\*Business Decision Making, Education qualifications\*Business Decision Making, Gender\*Business Decision Making, Business Decision Making

c Predictors: (Constant), Entrepreneurial Risk-Taking Behaviour, Age, CEO Tenure, Gender, Education qualifications

d Predictors: (Constant), Entrepreneurial Risk-Taking Behaviour, Age, CEO Tenure, Gender, Education qualifications, ERTB\*Business Decision Making, Age\*Business Decision Making, CEO tenure\*Business Decision Making, Education qualifications\*Business Decision Making, Gender\*Business Decision Making, Business Decision Making

The regression model summary in Table 4.14 depicts that in family businesses led by non-family CEOs, 70% of changes in non-financial performance were explained by gender, age, education qualifications, CEO tenure and entrepreneurial risk-taking behaviour. In model two 87% of changes in R squared was associated with CEO characteristics, entrepreneurial risk-taking, business decision making and moderated CEO characteristics and entrepreneurial risk-taking in family-owned businesses in Nairobi County.

On the other hand, in family businesses led by family CEOs, the regression summary shows that 72% of changes in non-financial performance were explained by gender, age, education qualifications, CEO tenure and entrepreneurial risk-taking behaviour. In model two 82% of changes in R square was associated with CEO characteristics, entrepreneurial risk-taking, business decision making and moderated CEO characteristics and entrepreneurial risk-taking behaviour while in model three, only 11% of changes in R square was attributed to business decision-making moderating effect in family-owned businesses.

#### 4.10.2 ANOVA

ANOVA presents the examination of model goodness of fit as presented in Table 4.15.

**Table 4.15: ANOVA**

CEO	Model		Sum of Squares	df	Mean Square	F	Sig.
Non-Family CEO	1	Regression	32.709	5	6.542	13.191	.000b
		Residual	14.382	29	0.496		
		Total	47.091	34			
	2	Regression	41.022	11	3.729	14.135	.000c
		Residual	6.068	23	0.264		
		Total	47.091	34			
Family CEO	1	Regression	30.535	5	6.107	23.558	.000d
		Residual	10.11	39	0.259		
		Total	40.645	44			
	2	Regression	35.109	11	3.192	19.026	.000e
		Residual	5.536	33	0.168		
		Total	40.645	44			

a Dependent Variable: Non-financial Performance

b Predictors: (Constant), Entrepreneurial Risk-Taking Behaviour, CEO Tenure, Age, Education qualifications, Gender

c Predictors: (Constant), Entrepreneurial Risk-Taking Behaviour, CEO Tenure, Age, Education qualifications, Gender, ERTB\*Business Decision Making, CEO tenure\*Business Decision Making, Age\*Business Decision Making, Education qualifications\*Business Decision Making, Gender\*Business Decision Making, Business Decision Making

d Predictors: (Constant), Entrepreneurial Risk-Taking Behaviour, Age, CEO Tenure, Gender, Education qualifications

e Predictors: (Constant), Entrepreneurial Risk-Taking Behaviour, Age, CEO Tenure, Gender, Education qualifications, ERTB\*Business Decision Making, Age\*Business Decision Making, CEO tenure\*Business Decision Making, Education qualifications\*Business Decision Making, Gender\*Business Decision Making, Business Decision Making

Analysis of variance in Table 4.15 depicts that the two models have F statistics with p-values less than 0.05. Thus, the adopting regression analysis was appropriate to examine CEO characteristics, entrepreneurial risk-taking behaviour, and business decision-making on non-financial performance.

#### 4.10.3 Regression Coefficients

Regression coefficients matrix presents the nature of the effect of the variables under examination on non-financial performance of family-owned enterprises.

**Table 4.16: Regression Coefficients (Non-Family CEO)**

CEO	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
Non-Family CEO	1	(Constant)	-1.03	1.08		-0.95	0.35
		Gender	0.26	0.39	0.08	0.67	0.51
		Age	-0.12	0.11	-0.12	-1.09	0.28
		Education qualifications	0.14	0.20	0.08	0.70	0.49
		CEO Tenure	0.24	0.12	0.22	1.96	0.05
		Entrepreneurial Risk-Taking Behaviour	0.96	0.13	0.83	7.44	0.00
	2	(Constant)	-0.80	0.97		-0.82	0.42
		Gender	0.82	0.53	0.25	1.57	0.13
		Age	-0.18	0.09	-0.18	-2.08	0.05
		Education qualifications	0.13	0.18	0.07	0.71	0.49
		CEO Tenure	-0.06	0.10	0.05	0.56	0.58
		Entrepreneurial Risk-Taking Behaviour	0.41	0.15	0.35	2.70	0.01
		Business Decision Making	3.25	1.39	2.88	2.34	0.03
		Gender*Business Decision Making	-0.89	0.71	-0.76	-1.26	0.22
		Age*Business Decision Making	-0.09	0.11	-0.29	-0.82	0.42
		Education qualifications*Business Decision Making	-0.28	0.20	-1.21	-1.42	0.17
		CEO tenure*Business Decision Making	-0.05	0.08	-0.09	-0.65	0.52
	ERTB*Business Decision Making	-0.38	0.15	-0.23	-2.53	0.02	

Regression coefficients in Table 4.16 above depict that for businesses led by non-family CEOs, there was a negative and not statistically significant effect of gender on non-financial performance. Age had a negative effect while education qualifications and CEO family membership had a positive and not statistically significant effect on the non-financial performance of family-owned enterprises. CEO tenure had a positive statistically significant

effect on non-financial performance in family-owned businesses. Results of the study depict that there was a positive statistically significant effect of CEO entrepreneurial risk-taking behaviour on the non-financial performance of family-owned businesses ( $\beta = 0.96$ , p-value < 0.05).

Examination of the moderating effect depicts that business decision-making has a positive statistically significant effect on non-financial performance ( $\beta = 3.25$ , p-value < 0.05). To further examine the moderating effect of business decision making, marginal contribution was examined in line with (Wairimu et al., 2019). Partial differential in respect to CEO characteristics and overall average of business decision making were as follows:

$$\frac{\partial \text{Non-financial performance}}{\partial \text{Gender}} = \beta_1 + \beta_7 Z = 0.82 - 0.89 * 3.96 = -2.7044$$

$$\frac{\partial \text{Non-financial performance}}{\partial \text{Age}} = \beta_2 + \beta_8 Z = -0.18 - 0.09 * 3.96 = -0.5364$$

$$\frac{\partial \text{Non-financial performance}}{\partial \text{Education qualifications}} = \beta_3 + \beta_9 Z = 0.13 - 0.28 * 3.96 = -0.9788$$

$$\frac{\partial \text{Non-financial performance}}{\partial \text{CEO tenure}} = \beta_4 + \beta_{10} Z = 0.06 - 0.38 * 3.96 = -1.4448$$

$$\frac{\partial \text{Non-financial performance}}{\partial \text{Entrepreneurial Risk Taking}} = \beta_5 + \beta_{11} Z = 0.41 - 0.38 * 3.96 = -1.0948$$

Comparative analysis between the moderated and non-moderated slope coefficients for business decision making depicts the moderating effect of it on CEO characteristics and entrepreneurial risk-taking ( $Y = -1.03 + 0.26 * X_1 - 0.12 * X_2 + 0.14 * X_3 + 0.24 * X_4 + 0.96 * X_5$ ). Since the marginal contribution while compared to the non-moderated coefficient differs, then there is a significant moderating effect of business decision-making on CEO characteristics and CEO entrepreneurial risk-taking.

**Table 4.17: Regression Coefficients (Family CEO)**

Family CEO	1	(Constant)	-0.07	0.26		-0.26	0.80
		Gender	0.01	0.21	0.00	0.05	0.96
		Age	-0.01	0.06	-0.02	-0.19	0.85
		Education qualifications	0.001	0.06	-0.01	-0.06	0.95
		CEO Tenure	0.03	0.07	0.04	0.48	0.64
		Entrepreneurial Risk-Taking Behaviour	0.83	0.09	0.86	9.39	0.00
	2	(Constant)	0.43	0.43		1.00	0.32
		Gender	-0.35	0.44	-0.15	-0.80	0.43
		Age	0.02	0.06	0.03	0.34	0.74
		Education qualifications	-0.07	0.07	-0.12	-0.91	0.37
		CEO Tenure	-0.01	0.08	-0.01	-0.06	0.95
		Entrepreneurial Risk-Taking Behaviour	0.41	0.12	0.42	3.45	0.00
		Business Decision Making	0.53	0.43	0.51	1.24	0.23
		Gender*Business Decision Making	0.31	0.41	0.25	0.75	0.46
		Age*Business Decision Making	-0.10	0.06	-0.28	-1.59	0.12
		Education qualifications*Business Decision Making	0.01	0.06	0.02	0.12	0.90
		CEO tenure*Business Decision Making	0.001	0.07	0.001	0.001	1.00
		ERTB*Business Decision Making	-0.15	0.13	-0.13	-1.15	0.26
	a Dependent Variable: Non-financial Performance						

Regression coefficients in Table 4.17 depict that for businesses led by family CEOs, there was a negative and not statistically significant effect of gender, CEO tenure and education qualifications on non-financial performance. Age had a positive not statistically significant effect on non-financial performance in family-owned enterprises. Results of the study depict that there was a positive statistically significant effect of CEO entrepreneurial risk-taking behaviour on the non-financial performance of family-owned enterprises ( $\beta = 0.41$ ,  $p$ -value < 0.05).

Examination of the moderating effect depicts that business decision-making has a positive statistically significant effect on non-financial performance ( $\beta = 0.53$ ,  $p$ -value < 0.05). To further examine moderating effect of business decision making marginal contribution was examined in line with (Wairimu et al., 2019). Partial differential in respect to CEO characteristics and overall average of business decision making as follows.

$$\frac{\partial \text{Non-financial performance}}{\partial \text{Gender}} = \beta_1 + \beta_7 Z = -0.35 + 0.31 * 3.98 = 0.8838$$

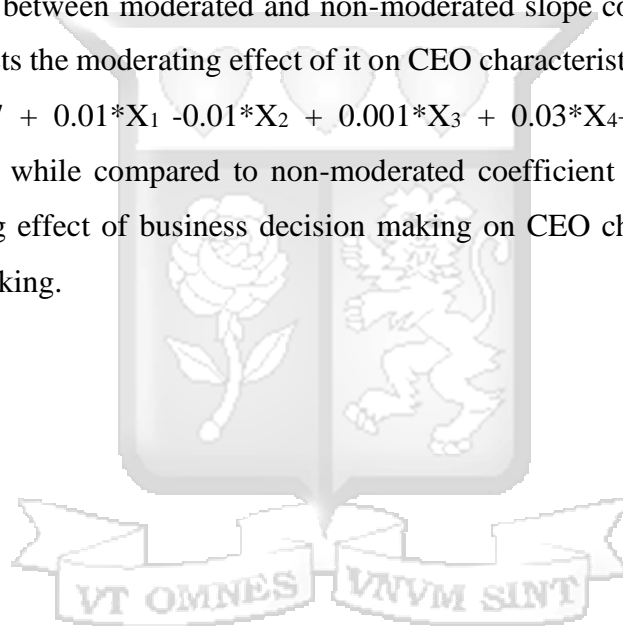
$$\frac{\partial \text{Non-financial performance}}{\partial \text{Age}} = \beta_2 + \beta_8 Z = 0.02 - 0.10 * 3.98 = -0.378$$

$$\frac{\partial \text{Non-financial performance}}{\partial \text{Education qualifications}} = \beta_3 + \beta_9 Z = -0.07 + 0.01 * 3.98 = -0.0302$$

$$\frac{\partial \text{Non-financial performance}}{\partial \text{CEO tenure}} = \beta_4 + \beta_{10} Z = -0.01 + 0.001 * 3.98 = -0.00602$$

$$\frac{\partial \text{Non-financial performance}}{\partial \text{Entrepreneurial Risk Taking}} = \beta_5 + \beta_{11} Z = 0.53 - 0.15 * 3.98 = -0.067$$

Comparative analysis between moderated and non-moderated slope coefficients for business decision making depicts the moderating effect of it on CEO characteristics and entrepreneurial risk-taking ( $Y = -0.07 + 0.01 * X_1 - 0.01 * X_2 + 0.001 * X_3 + 0.03 * X_4 + 0.83 * X_5$ ). Since the marginal contribution while compared to non-moderated coefficient differs then there is a significant moderating effect of business decision making on CEO characteristics and CEO entrepreneurial risk-taking.



## **CHAPTER FIVE: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

The current chapter discusses the findings of the study as guided by the objectives, from which conclusions and recommendations are made.

### **5.2 Discussions**

#### **5.2.1 CEO Characteristics and Entrepreneurial Risk-Taking Behaviour**

The first objective of the study sought to compare how the characteristics of family and non-family CEOs influenced entrepreneurial risk-taking behaviour in family-owned businesses. Findings from both descriptive and inferential analysis showed that the variables under study such as age, gender, educational qualifications, etc. had varying impacts on risk-taking behaviour. Results showed that there was an inverse and not statistically significant effect of age and education qualifications on the non-financial performance of family-owned businesses. Further, there was a positive and not statistically significant effect of CEO tenure on the non-financial performance of family-owned businesses. These study findings indicate that family CEOs tend to stay longer at the helm of family-owned businesses compared to their non-family CEO counterparts. The findings concur with the results of a study done by Gomez-Mejia et al. (2007) that found that family CEOs, due to the value they place on socio-emotional wealth, may place it before other priorities to serve the interests of the family firm such as control and continuity.

The findings of the study are in concurrence with Wang and Poutziouris (2010) who revealed that owner-manager's age is negatively connected to risk-taking, implying that younger CEOs were more likely to take risks compared to their older counterparts. Yeoh and Hooy (2020) argued that family CEOs who were approaching retirement seemed to be risk-takers, perhaps with the desire to create a legacy for their firms while middle-aged CEOs may have more experience and be more willing to take risks to grow the business. Further, Sun, et al. (2023) revealed that non-family CEOs with professional and technical experience were positively correlated with family firms' innovation, while those politically connected had a negative correlation with innovation. Therefore, there is need for consideration of a mixed composition of skills so as to optimize non-financial performance of family-owned enterprises.

Further, results revealed that majority of the CEOs were male. These findings concur with those of Kagume (2022) who found that there was a lack of gender parity in the management of most firms in Kenya owing to disproportionate career progression between men and women. There was also an inverse and not statistically significant effect of age and education qualifications on the non-financial performance of family-owned businesses for both family and non-family CEOs. Notably, the kinship of the CEO did not affect innovation levels and therefore it can be deduced that CEOs are driven by the same interests. There is no significant difference in innovation levels between family and non-family CEOs.

The study concurs with the Upper Echelons Theory that states that the characteristics of the CEO such as their age, gender and education levels affect how they interpret situations around them, therefore influencing their risk-taking behaviour.

### **5.2.2 CEO Entrepreneurial Risk-Taking Behaviour and Firm Non- Financial Performance**

The second objective sought to assess how CEO entrepreneurial risk-taking behaviour impacted non-financial performance of family-owned businesses. It revealed that both family and non-family CEOs either strongly agreed or agreed that they engaged in entrepreneurial risk-taking. The results indicated that both family and non-family CEOs strongly agreed that they sought debt financing for new ventures and only a few allocated the organization's financial resources into new products with no supporting evidence. This suggests that CEOs are risk-seekers and these findings concur with those of Ellouze and Mnasri (2019) who found that risk-taking is necessary for business growth and long-term success, despite the kinship of the CEO.

The study found that when it comes to social risk-taking, family CEOs tended to pursue business opportunities whose certainty is unclear compared to their non-family CEO counterparts who reported to do so moderately. From the findings, it can be deduced that family CEOs were not pursuing investment opportunities which were uncomfortable, unclear and questioned by others. This is in line with supporting literature that states that for organizations to be high-achieving, it is imperative that managers set not just high organizational goals, but also develop action plans (Gagné, 2018; Edmondson, 2018). This is in line with agency theory

which states that both principals and agents alike are self-interested individuals who aim to maximize their utility (Jensen & Meckling, 1976). These differences in social risk-taking behaviour of family and non-family CEOs could be explained by socio-emotional wealth's role in family-owned businesses (Hernández-Linares et al., 2019). Family CEOs, in a bid to preserve their socio-emotional wealth, may choose to undertake risks that would enhance their social status because they are predominantly occupied with serving the interests of the family such as the need to preserve the family name (Hernández-Linares et al., 2019).

When it comes to non-financial performance, the results indicate that both family and non-family CEOs had changed outdated products and processes, enhanced the quality of products and services, improved production process and efficiency, enhanced production capacity and services, reduced production costs per unit and enhanced health and safety of their production process. This contrasts with results from studies such as Mishra and McConaughy (1999) as well as that by Huybrechts et al. (2012) which found that due to the fear of loss of control, family CEOs are likely to be more risk averse compared to non-family CEOs and this impacts on all dimensions of firm performance including the non-financial aspects such as innovation levels. Similarly, studies such as that by Kraiczy et al. (2015) used a sample of 114 German small and medium enterprises to examine the correlation between firm ownership at the top management, CEO risk-taking and firm innovativeness and noted that the behaviour of the CEO determines firm innovativeness (and thus growth and performance). They concluded that the way a firm is organized impacts the behaviour of executives and in this case, impacts their performance. It was also found that both types of CEOs strongly agree that their new products are outcomes of innovation and that new product development are outcomes of research and development. Therefore, family-owned businesses should embrace research and development in order to gain competitive advantages.

Similarly, both family and non-family CEOs reported that they strongly agreed that they branded their products so that they could attract and retain customers and that branding their products was crucial for business success. Both family and non-family CEOs had also increased their range of products and services. Findings showed that both family and non-family CEOs reported that they strongly agree they brand their products so that they attract and retain customers and that branding their products is crucial for business success. Similarly, both types of CEOs strongly agree that branded products in their business line are deemed to be superior. In addition, both family and non-family CEOs reported that branding is in response

to clients' expectations and that it enables them to create memories of their customers' purchasing procedure. These finding concurs with the observation by Memili et al. (2010) who revealed that family CEOs who would be careful about brand image of their family-owned businesses, and would even minimize risks so as not to affect this image. There is no significant difference in brand image between family and non-family CEOs.

In tandem with Naldi et al. (2007) risk-taking by CEOs in family-owned firms is positively associated with innovation levels but negatively linked to firm performance. Family-owned enterprises CEO positively affected financial performance of their respective enterprises and there is need for consideration and adoption of risk-taking aspects that influences innovation and growth through product development in respective firms.

### **5.2.3 Moderating Effect of Business Decision Making**

The third objective of the study sought to examine the moderating effect of business decision-making on the effect of CEO characteristics and entrepreneurial risk-taking behaviour on the non-financial performance of family-owned businesses.

Family CEOs agreed that even though they should decide on their own, decisions ought to be based on information gathered from other people. The results revealed that both types of CEOs mostly relied on information from others to aid them in decision-making. Regression analysis indicated that business decision-making had a positive and statistically significant effect on the non-financial performance of family businesses. This is in line with Chung et al., (2021) and Avrichir et al., (2016) that found that the source of information that the CEO has access to, influenced their decision-making and subsequently affected business outcomes. It is thus important that CEOs' source of information is carefully considered.

## **5.3 Conclusions**

The study aimed to establish whether the kinship of the CEO in small and medium family-owned enterprises in Nairobi County impacted firm non-financial performance. From the findings, it can be concluded that CEO entrepreneurial risk-taking behaviour positively and significantly impacts the non-financial performance of family-owned small and medium businesses in Nairobi.

It was evident that both family CEOs and non-family CEOs exhibited risk-taking behaviour. This study concludes that risk-taking behaviour should be encouraged within family firms as it evidently yields positive performance outcomes, irrespective of the kinship of the CEO. The willingness of family and non-family CEO to undertake risks would foster business innovation, and growth in their organizations. CEO risk-taking may be the epitome of firm strategic agility, creativity, employee involvement and brand reputation. This study concludes that the kinship of the CEO (family versus non-family) did not affect the firm's non-financial performance.

## **5.4 Recommendations**

### **5.4.1 Practice Recommendations**

From the study findings, it is recommended that family businesses should not have a bias when hiring a CEO (family or non-family) as long as they are skilled and competent. It also recommends that CEOs (family and non-family alike) should not shy away from engaging in risk-taking (financial, intellectual, social and achievement risk-taking) to enhance business performance. This study adds to the existing body of knowledge on the impact of family and non-family CEOs risk-taking behaviour on the non-financial performance of family businesses. CEOs should be encouraged to decentralize decision making as it would aid in enhancing creativity and innovation throughout the organization and therefore improve performance. The CEO of family-owned enterprises must develop coherent decision-making process that should capture input of heterogenous stakeholders in decision making value chain. This would be possible through definition of responsibilities, decision making model and clarity of organization strategic goals. Family-owned enterprises should develop data collection and processing tools so that they can develop sensitivity approach for examination and interpretation of alternative options as well as enhancing quality of decisions made.

There is need for development and implementation of risk management framework that would guide in examination of potential risks and their severity in achievement of organization goals and objectives. Further, CEO should guide in development of different scenarios and contingency approaches that would guide in management and mitigation of unforeseen scenarios. This may cure risks associated with decisions that may injure odds of achieving desired organization objectives.

#### **5.4.2 Policy Recommendations**

Given the critical role that family-owned SMEs play in Kenya, it is recommended that policymakers create an enabling business environment for SMEs to operate so as to encourage entrepreneurship which subsequently contributes to the economic growth of the country.

#### **5.5 Limitations of the Study**

The results of this study should be interpreted and understood within the confines of the following limitations. First, this study was limited to family firms located in Nairobi County. As such, the study is not a representation of what could be happening in other firms outside of Nairobi County.

Secondly, the study was reliant on the respondents' definition of what a family business is, and on an economic survey of small and medium enterprises and it was carried out in the past to estimate the target population, since there is no clear register of family businesses in Nairobi. Lastly, the sample size determination had a margin of error of 10 percent thus there is need for subsequent studies to consider 5%. The study relied on self-reported primary data for comparative analysis, and therefore there is need for subsequent studies to consider secondary data for longitudinal analysis.

#### **5.6 Suggestions for Further Studies**

As this study was quantitative, future studies could adopt a qualitative approach to gain more insights into the entrepreneurial risk-taking of both family and non-family CEOs in family-owned businesses. This study only focused on the family firms in Nairobi County. Therefore, future studies should consider focusing on family firms in other counties and establish how the risk-taking behaviour of family and non-family CEO impacts performance. Since this study focused on small and medium enterprises, a comparative study ought to be done on large enterprises in different counties in Kenya. The sample size used was 99. There is a need to increase the sample size to accommodate larger enterprises as well so as to derive more accurate and comprehensive conclusions. Future studies should also investigate the role of contingency factors in the risk-taking and firm performance relationship under the contingency models of entrepreneurship such as resource endowment or organizational structures. The role that socio-emotional wealth plays in family firms and the age of the firms ought to be explored

further. Lastly, there is also a need for future studies to conduct research on business-related skills of the CEOs such as knowledge of risk management.



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## APPENDICES

### Appendix I: Ethical Approval



24<sup>th</sup> May 2023

Ms Kosgey Sharon,  
kosgey.sharon@strathmore.edu

Dear Ms Kosgey,

**REF: Proposal: SU-ISERC1773/23 "CEO Entrepreneurial Risk-Taking Behavior and Non-Financial Performance of Family-Owned Businesses in Nairobi, Kenya"**

We acknowledge receipt of your request regarding the referenced study, which was accompanied by the following:

1. Cover Letter
2. Approved Proposal/Protocol
3. Study tools
4. Current approval letter
5. Progress report
6. CVs

The Strathmore University Institutional Ethics Review Committee has reviewed and approved the request for an extension for "*CEO Entrepreneurial Risk-Taking Behavior and Non-Financial Performance of Family-Owned Businesses in Nairobi, Kenya*" **SU-ISERC1708/23**.

Your application reference number is **SU-ISERC1773/23**. The approved extension is effective on **24<sup>th</sup> May 2023** and will automatically expire on **23<sup>rd</sup> May 2024**.

If the study extends beyond the stated period, you are required to seek another extension approval from the Ethics Committee prior to its expiry. You are required to submit any proposed changes to this protocol to SU-ISERC for review and approval prior to their implementation.

Before commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke/> and obtain other clearances needed





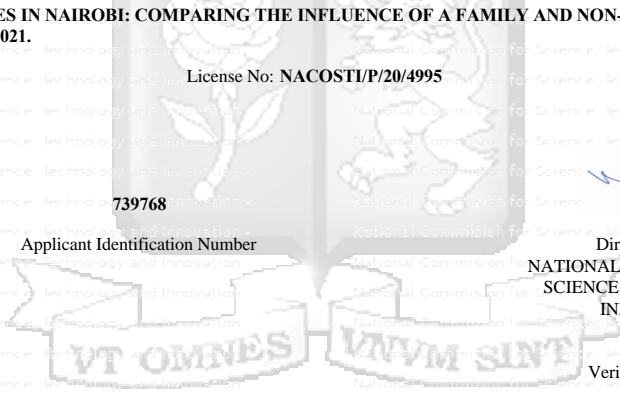

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Ambrose Rachier".

for: **Mr Ambrose Rachier,**  
**Chairperson; SU-ISERC**



## Appendix II: NACOSTI Research License

 <b>REPUBLIC OF KENYA</b>	 <b>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY &amp; INNOVATION</b>
Ref No: <b>739768</b>	Date of Issue: <b>15/May/2020</b>
<b>RESEARCH LICENSE</b>	
	
<b>This is to Certify that Ms.. Sharon Kosgey of Strathmore University, has been licensed to conduct research in Nairobi on the topic: CEO ENTREPRENEURIAL RISK TAKING BEHAVIOR AND PERFORMANCE OF FAMILY-OWNED SMALL AND MEDIUM ENTERPRISES IN NAIROBI: COMPARING THE INFLUENCE OF A FAMILY AND NON-FAMILY CEO for the period ending : 15/May/2021.</b>	
License No: <b>NACOSTI/P/20/4995</b>	
<b>739768</b>	
Applicant Identification Number	Director General <b>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY &amp; INNOVATION</b>
	
Verification QR Code	
	
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### Appendix III: Questionnaire

The purpose of this questionnaire is to investigate CEOs' entrepreneurial risk-taking behaviour and the performance of family-owned businesses in Kenya. The information collected in this questionnaire will be used for the intended purpose and the responses given will be confidential. You have been selected to participate in this research. Please respond to each question thoughtfully and honestly. Do not write your name or the name of your organization anywhere on this questionnaire.

Instructions: Choose the correct response by placing a tick (✓) in the boxes given.

#### Section A: CEO Characteristics

1. What is your gender?

- Male
- Female

2. What is your age bracket?

- 25 years and below
- 26-35 years
- 36-45 years
- 46-55 years
- Above 55 years

3. What is your highest level of education?

- No formal education
- Primary
- Secondary Diploma
- Post-graduate diploma
- Bachelor's Degree
- Master's Degree
- PhD

4. How long have you been the CEO of your organization?

- Below five years
- 6-10 years
- 11-15 years
- 16-20 years
- Above 21 years

5. Are you a member of the family?

- Yes
- No

**Section B: Entrepreneurial Risk-Taking Behaviour**

<i>To what extent do you agree with the following statements on CEO characteristics and firm non-financial performance in family firms? (NB:1- Not at all; 2-Rarely; 3-Moderately; 4-Often and 5-Always)</i>					
	1	2	3	4	5
<b>Financial Risk-Taking</b>					
6. I allocate organization resources into new product development with no supporting evidence					
7. I seek debt financing for new ventures					
8. I invest business surplus into diversified products					
9. I invest business surplus into new markets					
10. I incur organization resources without consideration of budgetary allocations					
11. I undertake only those assignments which are remunerated on commission basis					
12. I invest business surplus in speculative investment opportunities					
13. I invest business profit in government securities					
14. I invest in uncertain projects, but with potential of great returns					
<b>Intellectual Risk-Taking</b>					
15. I pursue new and discomfoting business ideas					
16. I pursue business opportunities whose certainty is unclear					
17. I question investment opportunities by others and myself					
<b>Social Risk-taking</b>					
18. I always defend and unpopular opinion that I believe in					
19. I always listen to investment advisory that attract limited attention					
20. I argue with investment team in public to support my options					
21. I attend investment forums that are different from others					
22. I stand up for other dissenting opinions even if they are minority					
23. I spent time with investment mentors who are not liked by many					
<b>Achievement Risk-Taking</b>					
24. I have a strong need to be successful in running the business					
25. I actively participate in programs to hone my management skills					
26. I am responsible for the decisions I make					
27. I am willing to compete with other CEOs					
28. I effectively manage my time between business management and pursuance of personal activities					
29. I am open to competition with other CEOs in similar business activities					
30. To optimize my achievements, I always seek support from subordinate staff					

31. I take responsibility for all outcomes that we achieve in the business enterprise					
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**Section C: Business Decision - Making**

To what extent do you agree with the following statements on business decision making in family firms? (NB:1- Strongly Disagree; 2-Disagree; 3-Undecided; 4-Agree and 5-Strongly Agree)					
	1	2	3	4	5
<b>Own Information</b>					
32. When making decisions, I am not influenced by external information sources					
33. Whenever I refrain from reliance on external sources of information, decisions made are appropriate					
34. My decisions should always be limited to information at my discretion					
35. Since I am responsible, then all decisions should be based on my knowledge					
36. Even if I have to consult prior to making decisions, the decisions ought to be anchored on my information					
37. My decisions are correct and followers abide by them even when made on my knowledge alone					
38. As a CEO even when I consult, I make decisions based on my knowledge					
39. Even I make formal consultations, all decisions are based on my knowledge					
<b>Others' Information</b>					
40. My decision making is effective provided I seek additional information from others					
41. Even though my decision making should be independent, it should be based on information acquired from others					
42. Though my decision making is on personal judgement, there is need for consultation with others					
43. Effective and corrective decisions are made whenever I decide on my own though I listen from other people					
44. Even though I should decide on my own, the decision ought to be based on information gathered from other people					
<b>Cooperative Decision Making</b>					
45. My decisions should be joint of information gathered from other people					
46. My decisions should not be individualistic though anchored on information sourced from others					
47. Joint decision making is a prerequisite for administrative actions					
48. As a CEO, to be effective I am always considerate of mutual decision making and considerate of information sourced from others					

**Section D: Non-Financial Performance**

<i>Please indicate the degree to which you agree with the following factors as a description of performance in your family firm (NB:1- Strongly Disagree; 2-Disagree; 3-Uncecided; 4-Agree and 5-Strongly Agree)</i>					
	1	2	3	4	5
<b>Innovation</b>					
49. We have changed outdated products and process					
50. We have enhanced the quality of our products and services					
51. We have improved our production process and efficiency					
52. We have enhanced production capacity and services					
53. We have reduced production costs per unit					
54. We have enhanced health and safety of our production process					
<b>Brand Image</b>					
55. We brand our products so that we may attract and retain customers					
56. Branding our products is crucial for our business success					
57. In our business line, enterprises that have branded their products are deemed to have superior products					
58. When pricing our products, brand is crucial					
59. Our branded products are deemed to be of superior quality					
60. Branding is in our response to our clients' expectations					
61. Branding enables us to create memories of our customers purchasing procedure					
<b>Growth</b>					
62. We have increased our range of product and services					
63. Our new products are outcomes of innovation					
64. Our new product development are outcomes of research and development					
65. Our new products are of superior quality					
66. Our new products have strong value					
67. Our new are products exciting					
68. We have ventured into new markets					

**THE END**

## Appendix IV: Consent Form

### Appendix IV: Participant's Consent Form

#### Consent Form

##### TITLE OF STUDY

CEO ENTREPRENEURIAL RISK-TAKING BEHAVIOUR AND NON-FINANCIAL PERFORMANCE OF FAMILY-OWNED BUSINESSES IN NAIROBI, KENYA: COMPARING THE INFLUENCE OF A FAMILY AND NON-FAMILY CEO

##### PRINCIPAL INVESTIGATOR

Sharon Jeruto Kosgey  
Strathmore University Business School  
Tel: + 254 783 500 777  
Email: [kosgey.sharon@strathmore.edu](mailto:kosgey.sharon@strathmore.edu)

##### PURPOSE OF STUDY

The purpose of this study is to investigate CEOs entrepreneurial risk-taking behaviour with respect to non-financial performance of family-owned businesses.

##### ELIGIBILITY FOR THE STUDY

Only CEOs of family-owned businesses in Nairobi are eligible to take part in this study.

##### STUDY PROCEDURES

The study will involve distributing questionnaires to study respondents. After the respondent has filled them, the researcher will pick up the completed questionnaires.

##### RISKS

There are no risks associated with this study. You may decline to answer any or all questions and you may terminate your involvement in this study at any time if you so choose.

##### BENEFITS

There will be no direct benefit to you for your participation in this study.

##### CONFIDENTIALITY

For the purposes of this research study, your comments will be anonymous.

##### COMPENSATION

There is no compensation for participating in this study.

##### CONTACT INFORMATION

If you have questions at any time about this study, you may contact the researcher (whose contact information is provided in the introductory part of this consent). Alternatively, you may contact the researcher's institution:

Strathmore University Business School

P.O. Box 59857 – 00200, Nairobi, Kenya  
Tel: +254 703 034 414 / +254 703 034 000/200/300 or (+254) (0) 730 734000/200/300

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**CONSENT**

I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this study.

Participant's signature: \_\_\_\_\_ Date \_\_\_\_\_

Investigator's signature: \_\_\_\_\_ Date \_\_\_\_\_

