Leveraging ESG to drive age diversity in board leadership - a case of JSE top 50 mining companies

Masego Penelope Lekomanyane

378600

masego.lekomanyane@students.wits.ac.za

A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management in the field Energy Leadership

Johannesburg, 2025

ABSTRACT

Managing sustainability by companies involves considering the Environmental, Social, and Governance (ESG) aspects and measuring their impact. In this study, the focus on Governance (“G”) in ESG was evaluated, as there is evidence in the literature that shows a biased focus on the Environmental and Social aspects (the “E” and “S”) of ESG, with the governance aspect often being overlooked.

In 2022, the average age of directors on JSE Top 40 boards was reported as 56.5 years, compared to 56.8 years in 2021 and 57.4 years in 2020. This research examined age diversity in the board leadership of JSE Top-listed mining companies. The study analysed the composition and age diversity of boards with a focus on the governance "G" aspect of ESG. A qualitative methodology was employed to collect data primarily from board members who hold board seats in JSE-listed mining companies. The study also conducted semi-structured interviews with individuals affected by board leadership, including members of executive committees and board members of financial institutions listed on the JSE, as investors have adopted ESG as one of their funding requirements. Furthermore, the study conducted interviews with relevant stakeholders, including recruitment representatives from boards and associations such as the Directors Association of South Africa (DASA) and the National Youth Development Agency (NYDA), which represents the interests of young people in South Africa.

The findings demonstrate that departing from homogeneous board structures to allow for age diversity is beneficial to firms, as this aspect introduces various expertise and viewpoints that can enhance the decision-making process and are crucial in an increasingly multicultural society. Moreover, the study found that board membership inclusion in South Africa was mainly driven by networking. As such, the reliance on closed networks and a preference for a select group of individuals creates a restrictive ecosystem for board leadership. This results in the same individuals rotating in and out of multiple board positions simultaneously, thereby perpetuating the exclusion of young professionals from board leadership.

While study participants tended to value experience in board member selection, there was consensus that networking was the primary driver of their board selection. The study observed that board members often began their leadership journeys in their mid-20s to early 30s, which subsequently positioned them for board recruitment based on their executive management experience.

Keywords- Leadership, sustainability, ESG, JSE, board leadership, age diversity, diversity, inclusion, governance.

DECLARATION

I, _Masego Lekomanyane___, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Management in the field Energy Leadership at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Name: Signature:

Signed at ……………………………………………………

On the …………………………….. day of ………………………… 20…..

DECLARATION OF PUBLICATION

Following the examination by the University of the Witwatersrand, this research paper will be submitted to a suitable peer-review publishing institution for journal publication.

DEDICATION

This research study is dedicated to all the leaders in business that lift others as they rise.

ACKNOWLEDGEMENTS

It is only through the grace and goodness of God that I have achieved this milestone.

To my supervisor Dr Stanley Semelane, thank you for your unwavering support, wisdom and guidance throughout my research study.

I sincerely thank all the board members who generously dedicated their time to share their invaluable insights. Your contribution to this study is deeply appreciated.

Thank you to the University of the Witwatersrand, specifically the Master of Management in Energy Leadership research panel members for further guidance in enriching my study.

To my dearest husband, I am deeply grateful for your unwavering patience and support throughout my research study. Your continuous reassurance encouraged me as I devoted countless hours of hard work to reaching the finish line.

To my loving parents and siblings, thank you for your care and interest in my study and for the continuous encouragement throughout.

And most importantly, to my baby girl, Ano. When I started the journey, you were not even born yet, and little did I know that you would be my greatest motivation throughout the research study. I hope that one day, years later, you will read this paper and truly feel inspired.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS and ABBREVIATIONS

B-BBEE	Broad-Based Black Economic Empowerment
CA	Charted Accountant
CEO	Chief Executive Director
CFO	Chief Financial Officer
CSIR	Council of Scientific & Industrial Research
CSR	Corporate Social Responsibility
C-Suite	Chief Suite
EEO	Equal Employment Opportunity
ESG	Environment Social Governance
ET	Energy Transition
Gen X	Generation X
Gen Y	Generation Y
Gen Z	Generation Z
GHG	Greenhouse Gas
HR	Human Resources
IAA	International Actuarial Association
IFRS	International Financial Reporting Standards
IPCC	Intergovernmental Panel on Climate Change
ISSB	International Sustainability Standards Board
JSE	Johannesburg Stock Exchange

NGO	Non- Governmental Organisation
NPC	Non-Profit Companies
NYDA	National Youth Development Agency
MOI	Memorandum of Incorporation
PGC	Post-Graduate Committee
RE	Renewable Energy
RO	Research Objective
RQ	Research Question
SA	South Africa
SDG	Sustainable Development Goal
SOE	State Owned Entity
UET	Upper-Echelon Theory
UK	United Kingdom
USA	United States of America
WEF	World Economic Forum

CHAPTER 1.INTRODUCTION

1.1 Introduction

This chapter aims to outline the context and importance of age diversity in board leadership, leveraging on Environmental, Social, and Governance (ESG) principles in the South African context. Furthermore, this chapter outlines the study’s purpose, which relates to the research problem and questions. Moreover, the significance of the study is outlined, along with its delimitations or boundaries and the definitions of key terms. The chapter concludes by discussing the study's assumptions and outlining the research layout.

1.2 Purpose of the study

This research study aims to investigate how ESG requirements can promote age diversity in the board leadership of Johannesburg Stock Exchange (JSE)- listed companies in the mining sector. The study will examine the governance aspect of ESG to establish the inclusion of young people as directors of boards and assess the relevance of diversity, in terms of age, on boards in helping enable the Energy Transition (ET) in South Africa (SA). Furthermore, this study will investigate how the inclusion of young generations on boards can influence sustainability and the success of innovation in terms of combating climate change.

According to Rusadi and Zen (2023), a strategy to enhance board performance is through board diversity, which can enable innovation, underpin decision-making, and expand human and social capital. Age diversity is critical to driving the success of boards, as it may become clear that competency is not solely driven by age and experience.

This qualitative study aims to evaluate board structures and explore potential opportunities for young people to be included on the boards of publicly listed top mining companies on the JSE.

According to Ismail and Latiff (2019), board diversity attributes refer to age, gender, board composition, educational background, skills, and reputation management that drive an organisation's sustainability practice. Therefore, the inclusion of young people in board leadership is significant, as it reflects the coexistence of different generational gaps and personal values. *"Every director of different age groups can embrace and appreciate different experiences, cultural norms, habits, and personal character that could influence the decision-making process*" (Ismail & Latiff, 2019). This means that there is a role for younger generations to contribute towards shaping the sustainability endeavours of the future.

1.3 Context of the study

Energy plays a major role in many global economies and is essential for daily human activities (Alsaba et al. 2023). As it currently stands, the world is focused on finding solutions to combat the climate change predicament and moving towards an era of net-zero emissions (AbouSeada and Hatem, 2022). The drive to decarbonise carbon-intensive industries, such as the mining sector, has become imperative to mitigate climate change and reduce GHG (Greenhouse Gas) emissions (International Actuarial Association, 2018). As a result, industries will require a large transposition in investments from non-renewable resources to "cleaner" alternative resources, and in the last few years, this dynamic has drawn some surveillance toward ESG aspects in terms of sustainable development.

In South Africa, the mining industry has played a crucial role in the country's economy, driving industrialisation as well as generating major revenue from exports and contributing to employment. In recent years, the mining sector has contributed approximately 6-7% to the country's GDP and has been a major influencer of the export markets through various minerals and resources, including gold, platinum, coal, and iron ore (Minerals Council South Africa, 2023). Furthermore, since the early 1990s, the mining industry has contributed to South Africa's socio-political and economic growth, addressing issues related to employment, inequality, and economic independence that persist today. The country's platinum industry has become the largest national mining sector in terms of employment and sales (Capps, 2012). The sector is governed by the King IV Code of Corporate Governance and the Mining Charter, which emphasise accountability, transformation, and stakeholder inclusivity (Rossouw, 2017).

The mining sector is under constant scrutiny in terms of environmental, socio-economic conditions and the way the businesses involved conduct their operations. In the research conducted by Dube and Maroun (2017), it was documented that mining companies in South Africa propelled their Corporate Social Responsibility (CSR) disclosures as a way to manage stakeholder concerns in terms of social justice. Therefore, according to Rodrigues and Mendes (2018), in quoting Edwards, et al. (2007), there have been extensive debates on whether mining firms, specifically blue-chip mining companies are focused on financial profits while abandoning environmental and social matters. There is a higher responsibility required from multinationals to focus on such matters. However, there is a limited focus on age diversity, particularly in board leadership.

Furthermore, the mining sector has extensive exposure due to its social, economic, and environmental impacts resulting from mining exploitation activities. It is a strategic industry, playing a major role in multiple economies, and is essential in driving impact within families and society as a whole. The repercussions of mining activities impact not only the environment but also societal bodies; therefore, directors of involved companies face immense pressure in considering management strategies and prioritising social responsibility to a high degree.

It is therefore imperative that industry companies show care for the well-being of the current and future generations (Rodrigues and Mendes, 2018). Furthermore, as confirmed by Rodrigues and Mendes (2018), social responsibility and governance are crucial in the mining and resource sector; however, there is a notable lack of research on the mining sector, particularly regarding the serious issues related to stakeholder involvement and sustainability within the sector.

According to Zumente and Bistrova (2021), due to the recent shift toward sustainable development, the company vision and mission statements of corporations have varied in the last few years. Previously, the focus was on profit maximisation; however, this focus has recently been repositioned to sustainable value creation, which involves intangible aspects such as reputation, corporate culture, and stakeholder loyalty. The interest of the public has also shifted from viewing companies exclusively as participants in the financial markets to seeing them as players that drive the welfare of societies and the environment at large. Public corporations, including mining companies, are now focused on reflecting the need to act sustainably and demonstrate long-term value preservation (Zumente & Bistrova, 2021). Sutiono (2020) states that a firm's investment in sustainability is key to its long-term success in terms of performance. Managing sustainability by companies, including those in the mining industry, involves considering ESG aspects and measuring their impact.

Regarding the governance aspect of ESG, factors such as the composition and diversity of boards have been researched to show that departing from homogenous board structures to allow for diversity is more beneficial to firms. Diversity introduces various expertise and viewpoints, which can enhance the decision-making process and are crucial in an increasingly multicultural society. Furthermore, more diverse boards will consider various perspectives when assessing the company's environmental and social risks (Sutiono, 2020).

According to Galucia and Morrow-Howell (2023), age in relation to identity is a factor that is often not prioritised in diversity, equity, and inclusion initiatives. Instead, other diversity identities, such as gender and race, usually take precedence. Moreover, the median age of directors on boards is relatively high, as seen in Table 1, resulting in homogeneous structures that are biased towards those with experience. Researchers and regulators have focused their studies and policies on gender and ethnic diversity, while other forms of diversity, such as age, are often overlooked. Age diversity has the potential to positively impact how boards function and succeed; however, there is no evidence showing that regulations or governance addressing age have had a positive impact. Approximately 90% of board members of Standard and Poor's 500 (S&P 500) consider generational diversity vital, whilst only 6% of the S&P 500 companies are composed of directors under the age of 50 years, where the rest of the directors are older and more experienced (Janahi et al., 2023).

Furthermore, a study by Janahi et al. (2023) suggests that intergenerational boards have a high correlation with high-quality and effective reporting, as well as more successful strategies in monitoring management decision-making processes. Additionally, since age-diversified boards consist of individuals with varying experience and knowledge, collaboration emerges, which improves the calibre of discussions held in boardrooms. Moreover, a study by Mothe and Nguyen-Thi (2021) showed that the result of age diversity on innovation was primarily dependent on the age consistency of board members within a board, suggesting that there was a positive connection where the distribution pattern was more heterogeneous than where polarised age groups made up the majority of the board. Furthermore, a study by Hamberg (2024) demonstrated that age diversity has a positive overall impact on a company's ESG rating, suggesting that sustainability within firms can be driven by age diversity.

Age diversity in boards refers to the presence of differing generational gaps, where each age group member can accept and welcome the unique experiences, norms, habits, and characteristics that may impact the decision-making process (Ismail & Latiff, 2019).

According to Moraka (2023), women hold only 8% of board positions in the top 100 international companies. Although these statistics in JSE-listed mining companies are healthier, the mining sector has not yet undergone a transformation in terms of female appointments to boards, as development initiatives and retention plans to promote sustainability among women directors are lacking. This data, as documented in Table 1, shows that the development and inclusion of younger people in boards is just as poor, if not worse, than the industry's efforts to improve gender diversity.

By 2020, investment funding for ESG had become conventional, and several authorities had begun discussions on binding ESG disclosures and regulations for corporates (World Economic Forum (WEF), 2022). Whilst there has been progress and focus on environmental factors and social indicators, there has been limited focus on governance (the "G" in ESG). This is supported by Senadheera et al. (2022), who highlight the significance of ESG investing and reveal that studies show less well-defined metrics for governance compared to the environmental and social pillars of ESG. As underscored by Hussain (2018), corporate governance is often viewed in a fragmented manner in ESG evaluations, where only one dimension of sustainability, typically social or environmental, is explored.

Furthermore, Janahi et al. (2023) emphasised that the focus is currently on gender and ethnicity in terms of diversity, and other types of diversity, such as age, are often overlooked. They found that managerial decision-making is more effective and operative where age-diverse boards exist. Although age diversity can significantly contribute to a corporation's board of directors, there is no indication that there are any regulations or governance that address the importance of having diversified structures from an age perspective. In their study, Halcro et al. (2021), analyse the impact of a board's performance by reviewing 76 companies listed on the Financial Times Stock Exchange 100 in 2010 to 2015, a period that followed the great recession in 2008, and proposed that the board composition of companies may have influenced the great financial crisis which indicated that boards that take into account societal factors such as diversity, resulting in strong corporate governance, can perform better.

According to Heidrick & Struggles (2023), the average age of incoming directors on JSE Top 40 boards in 2022 was reported as 56.5 years, a slight decrease from 56.8 years in 2021 and 57.4 years in 2020. Table 1, adapted from ListCorp (2025), illustrates the top mining sector companies listed on the JSE and the average age groups of their board leadership. Furthermore, Table 1 also demonstrates the age spans of board directors, as well as the composition of board directors under forty (40) years of age and those over the common retirement age of sixty (60) years, within each company. The average age of board leadership in JSE-listed mining companies reveals a significant exclusion of younger age groups from the board of directors. This study aims to address this issue, as the potential benefits associated with including younger people have been outlined.

Table 1: JSE listed Mining board members' average age

Position in JSE	Company	Average Board member age	Age span of board members	Board members under 40 (%)	Board members Over 60 (%)
1	BHP Group Limited	60.80	54-67	0%	60%
2	Glencore plc	66.00	48-77	0%	88%
3	Anglo American plc	59.60	45-69	0%	60%
4	Gold Fields Limited	59.56	47-68	0%	56%
5	Anglogold Ashanti	61.60	46-68	0%	80%
6	Anglo American Platinum Ltd / Valterra Platimum	54.90	40-73	8%	46%
7	Harmony Gold Mining Company	59.10	41-74	0%	58%
8	Impala Platinum Holdings Limited	57.80	42-66	0%	46%
9	South32 Limited	64.50	52-72	0%	80%
10	Sibanye Stillwater Limited	64.40	50-72	0%	83%
11	Kumba Iron Ore	54.80	43-64	0%	40%
13	Northam Platinum Limited	61.80	43-78	0%	70%
14	Northam Platinum Holdings Limited	61.80	43-78	0%	70%
15	Sasol Limited	57.10	47-65	0%	58%
16	Exxaro Resources Limited	56.90	40-69	6%	31%
17	Pan African Resources Plc	58.86	42-75	0%	57%
18	African Rainbow Minerals	63.07	40-83	7%	73%
19	DRD Gold Limited	57.88	42-79	0%	50%
23	Thungela Resources Limited	56.63	47-62	0%	38%
26	Tharisa plc	59.60	41-86	0%	50%
29	Merafe Resources Limited	53.70	36-70	20%	40%
30	Gemfields Group Limited	51.00	43-57	0%	0%
31	Jubilee Metals Group Plc	66.00	54-76	0%	67%
32	ArcelorMittal South Africa Limited	61.56	50-72	0%	67%
33	Orion Minerals Limited	66.25	65-69	0%	100%
37	Wesizwe Platinum Limited	67.00	55-76	0%	67%

Position in JSE	Company	Average Board member age	Age span of board members	Board members under 40 (%)	Board members Over 60 (%)
39	Eastern Platinum Limited	54.25	43-64	0%	25%
43	Kibo Energy PLC	54.67	43-61	0%	67%
44	Randgold And Exploration Company	67.75	53-75	0%	75%

Adopted from: ListCorp (2025)

As indicated in Table 1, a large percentage of listed mining boards comprises board members in their later years. A larger percentage of board member appointments are made by companies with an average age of older than 60 years, where only three companies show appointments of board members 40 years of age or younger.

1.4 Research Objectives

With reference to Table 1, this research is undertaken with the aim of exploring opportunities for age diversity in the board structures of JSE-listed mining companies, as it is suggested that there is a lack of inclusion and participation of young people on boards.

The research problem, therefore, will focus on the following research question: Can ESG drive age diversity in the board leadership of JSE-listed mining companies?

The objectives of the study are obtained from the research problem and are as follows:

1.4.1. The aim of the research study:

The aim of this research study is to assess how ESG can drive age diversity in the board leadership of JSE-listed mining companies.

1.4.2. The secondary research objectives:

The research objectives have been derived from the aim of the research study and are as follows:

1.5.1.1. To understand the procedure for identifying and recruiting board members.

1.5.1.2. To assess diversity principles that can drive the inclusion of young people in board leadership.

1.5.1.3. To understand the role that ESG can play in incorporating (including) young people into board leadership.

1.5.1.4. To propose a mechanism for the inclusion of young people in board leadership.

To unpack the adopted research objectives, the following research questions were utilised:

i. What is the procedure used to identify and recruit board members, and does this procedure align with age diversity?

ii. How can the inclusion of young people be accelerated in mining boards?

iii. What role can ESG play in driving the inclusion of young people in boards (governance and age diversity)?

iv. What mechanisms and policies can be adopted to ensure the inclusion of young people on boards?

1.5 Significance of the study

Currently, the existing literature on governance and ESG in terms of diversity primarily focuses on the inclusion of female and other minority groups in leadership. Whilst there is a wide range of literature that promotes discussions pertaining to gender and ethnical diversity, research on age diversity, specifically concerning the inclusion of younger generations on corporate boards, is lacking (Ismail & Latiff, 2019).

In the South African mining sector, particularly, transformation is essential to address social issues. There are insufficient studies undertaken to address how ESG frames and strategies can be leveraged to activate the representation of intergenerational leadership at the board level. This study will address this limitation by analysing how top JSE-listed companies within the mining sector can rely upon ESG principles to elevate age diversity and broaden the discourse pertaining to governance beyond only gender and race.

As a result of age diversity, this study will benefit public companies that are spearheading the mitigation of climate change, aiming to achieve a diverse board membership structure. In addressing the climate change problem and delivering an energy transition that incorporates ESG principles, the study endeavours to ensure that age diversity in leadership is part of the transition processes.

In leveraging the requirements set out by the ESG frameworks, diversifying board structures will be a critical enabler for further innovation and creativity through age diversity. This means that having a broader generational representation among board members is likely to provide richer data sources and enable diverse reasoning and judgment in the decision-making process. Furthermore, the adoption of younger generations into board leadership will foster awareness and consideration of diverse stakeholder interests when formulating business strategies and corporate policies (Ismail & Latiff, 2019).

This study aims to assess the narrative that board members must be senior and seasoned leaders in their field of work. Moreover, Generation Y (Gen Y) constitutes a larger proportion of the world's economy, and it is therefore essential to ensure that they also participate in the decision-making process within organisations. Younger generations are agile and innovative, likely to take business risks that will yield better results for company performance and transformational in the way that they lead, making it worthwhile for companies to consider their entrance into board positions (Onorato et al., 2018).

Diversity in organisations results in an increased depth of experience and perspectives, allowing for a better ability to relate to and connect with various stakeholders. A company that elevates diversity values its people. Differing experiences and perspectives can encourage innovation, which will eventually lead to an improved competitive edge for an organisation (Ramotowski, 2024). Additionally, where the enhancement of diversity is a driver, positive change is achieved, new opportunities are created, inclusive and appropriate decisions are made, attracting and retaining talented and extraordinary people is enhanced, transformation is maximised, and creativity, as well as increased market share, is advanced (Ramotowski, 2024).

Based on the above, this study will contribute in both theoretical and practical ways. Theoretically, it will expand the governance debates by emphasising an extension of diversity that is currently neglected. Furthermore, the study will provide insights to the mining sector on potential regulatory compliance, stakeholder expectations, and potential innovation resulting from age diversity and the inclusion of intergenerational groups in board leadership.

1.6 Delimitations of the study

According to Goes (2017), the delimitations of a study refer to the intentional inclusion and exclusion decisions made in a research study, which are precise selections by the researcher of what to include as an area of interest and what to exclude.

The aim of this research study is to determine whether JSE-listed mining companies can leverage ESG principles to drive age diversity on boards of directors. Therefore, this study is limited to publicly listed South African mining companies, as shown in Table 1.

This research is limited to the energy sector within the context of the mining industry. Specifically, the scope is limited to mining-related companies listed on the JSE. To provide focus, the study does not extend to other sectors within the broader energy landscape, such as renewable energy or the oil and gas sector. The study reviews mining corporations, as they represent the largest and most prominent actors within the South African mining industry. These companies have high investor interest and are subject to more stringent governance and reporting procedures and requirements, making them more suitable for the study to analyse how they can leverage ESG principles to drive age diversity in management. Only large firms were selected for the study, as they typically influence industry benchmarks, contribute to policy-making processes, and have a higher chance of being held to higher standards by investors, policymakers, and the general public. Furthermore, other aspects of the ESG framework, such as Environmental (E) and Social (S), are not within the scope of this research.

One of the aspects that Governance under ESG focuses on is board composition, and the diversity of boards forms part of this. This study will focus on diversity, specifically age diversity.

1.7 Definition of terms

Age Diversity	As defined by Kunze (2013), age diversity refers to the combination of age distributions among groups of people, such as employees, managers, and others, and often describes the composition of specific groups within an organisation (Mande, 2019). In the context of this study, corporate governance age diversity is defined as the representation of board members from varying generational groups within mining company boards, aiming to achieve balanced boards comprising older and younger generations to facilitate successful decision-making that will positively influence firm performance (Byron & Post, 2015).
Post-war generation	Slagsvold and Hansen (2021), defines post-war generation (also referred to as baby boomers) as persons that were born post the World War II between the years 1946 and 1964.
Board Diversity	According to Carter et al. (2003), board diversity can be defined as the heterogeneity in the way boards are structured, where board members are different in terms of age, gender, race, backgrounds, and skills. This diversity is viewed as an enabler for the board's effective decision- making and performance (Adams & Ferreira, 2009).
Diversity	Diversity means the representation of various groups of people who are unalike within the social system. Diversity can include

	for variances in race, age, gender, ethnicity, disability, and sexual orientation and religion (Shen et al., 2010).
Inclusion	Inclusion refers to the conscious exercise of embracing and accommodating groups of persons that are generally prejudiced against owing to their cultural backgrounds, race, religion, gender, age, sexual orientation, or identity to allow for diversity and representation (Jagoo, 2024)
ESG	According to Pollman (2022), ESG stands for Environment, Social and Governance which refers to three predominant factors that measures the sustainability and ethical impact a company has in regard to investment.
Energy Transition	According to Sovacool (2016), the energy transition means the substantial structural change in the energy systems that will necessitate the move from non-renewable energy sources to RE sources for energy production and consumption. This energy transition is aimed at resolving the impacts of climate change and reducing carbon and GHG emissions.
Innovation	Innovation is the institution of new products, processes and services into a market aiming at contributing to economic growth and achieving competitive advantage (Sahin, 2006).
JSE Listed	JSE stands for the Johannesburg Stock Exchange and the JSE Listed mean the companies that are listed on the JSE on the basis of market capitalisation. These top listed companies are viewed as leaders in their relevant industries and play a major role in the economy of SA (JSE, 2022).
Generation X (Gen X)	Gen X are persons born in the years 1965 to 1980. This group of persons is classified by its independence, resourcefulness,

	and sceptical persona, having been born and raised in an era of major social change. Gen X are technologically savvy but still embrace human traditions (Chemeli et al., 2021).
Generation Z (Gen Z)	Gen Z are persons that were born in the mid-1990s to the early 2010s. This group of persons is classified by its ability to familiarise with technology, all kinds of social mediums, and digital communication (Schroth, 2019).
Generation Y (Gen Y)	Gen Y are also referred to Millennials, are persons born in years 1981 to 1996. This age group is classified by its ability to adapt to new technologies, diversity and the value for social responsibility (Dimock, 2019).
Veteran	Veterans are persons born before 1946 and are also referred to as the silent generation. This generation is known as hardworking, disciplined, and conservative, having been raised during or just after the Great Depression and World War II (Zemke et al., 2013).
Young Generations/ Young People	According to Yamane and Kaneko (2021), defines young generations or young people as a cohort of people born as Generation Ys and Generation Z. “The younger generation will be the central working force in society and is expected to make real efforts to create a sustainable future and likely play a substantial role in achieving the Sustainable Development Goals (SDGs)” (Yamane & Kaneko, 2021).

1.8 Assumptions

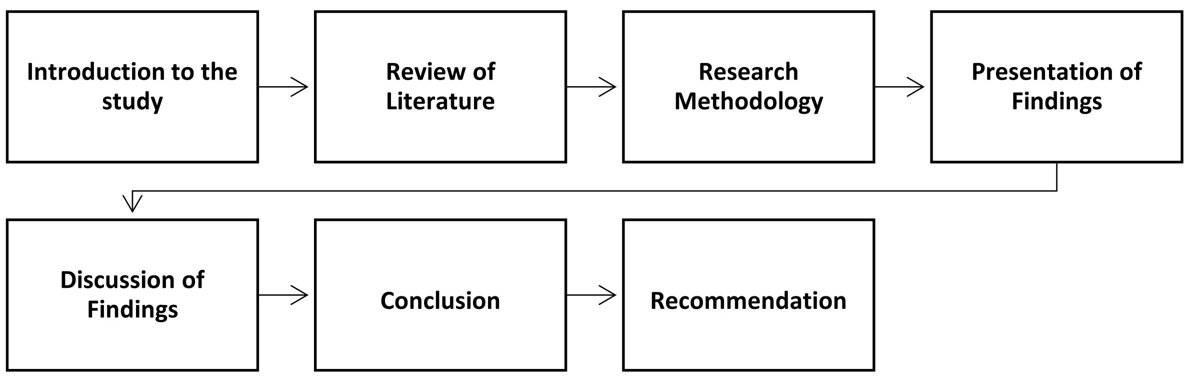
This study is based on the following assumptions:

i. The people partaking in this research will avail themselves and are prepared to participate in the interviews.
ii. The people partaking in this research will act honestly in providing accurate answers to the interviews.

1.9 Research Structure

The research process that is undertaken is depicted in Figure 1.

Figure 1: The research study



Source: Author

CHAPTER 2. LITERATURE REVIEW

2.1 Introduction

This literature review aims to provide a deeper understanding of existing research relevant to this study, with reference to the background of the concept of age diversity and its respective theories. This review provides an overview of Environmental, Social, and Governance (ESG) principles, with a specific focus on the Governance element of ESG. Furthermore, this chapter will interrogate the processes for board placements and the acceleration of young people in leadership positions.

2.1.1 ESG Theory and Application

According to Collevecchio et al. (2024), the world has evolved such that companies are now required, by society, to manage their business in an ethical manner that goes beyond the traditional sole focus on profit accumulation. Furthermore, "the contemporary business landscape is witnessing a pivotal shift towards sustainable practices and organisations are undergoing pressure to adopt environmentally and socially responsible behaviours in order to cater to the diverse needs and expectations of various stakeholders, including investors, employees, customers, and regulators" (Collevecchio et al., 2024), citing Broman & Robèrt, 2017; Centobelli et al., 2020; Porter and Kramer, 2011; Stål et al., 2023).

ESG is a phenomenon concerned with matters related to environmental, social, and corporate governance. Policies and procedures for ESG document a firm's impact on the environment and society, as well as the various stakeholders and the strategies pertaining to governance. These policies also take into consideration the potential risks and opportunities relating to ESG (Stedman, 2023). This ESG trend has encouraged the evolution of expectations regarding social responsibility in communities, prompting business leaders to offer a wide range of voluntary services to people and societies (Morrison, 2021).

2.2 ESG Context

2.2.1 ESG Reporting and Sustainable Development

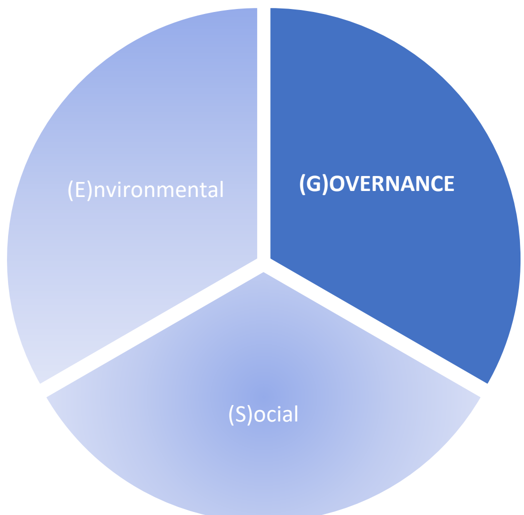
ESG standards are concerned with measuring sustainable development and the impact that organisations have on environmental, social, and corporate governance matters that extend beyond financial results. In some countries, ESG standards and reporting are mandatory. However, in other countries, ESG requirements arise from the expectations of stakeholders, such as investors and the general public, who apply pressure due to heightened concerns about sustainability (Hujdur & Kostić, 2023). This growing concern among investor groups to incorporate ESG factors into investment decisions has prompted regulators to mandate sustainability disclosures in the annual reports of publicly listed companies in countries such as the United Kingdom (UK) (Ismail & Latiff, 2019). Although ESG measurement is not a compulsory practice, an increasing number of firms have opted to annually disclose their ESG achievements in their financial reports or on a separate sustainability report. Additionally, this notion of ESG is popular among young investors, as they are aware and sensitised to ESG matters (Seth et al., 2021).

According to the Johannesburg Stock Exchange (JSE) (2022), properly disclosing sustainability compliance can have a valuable impact on reporting businesses, to the extent that the reporting process is effective and of good quality. The following are identified by the JSE as reasons for companies to invest in the reporting of sustainability:

- *Driving the access to capital*: showcasing risks and opportunities relating to sustainability can lead to successful capital security
- *Enhancing profitability and growth*: enabling innovation and competitiveness by prioritising the understanding of stakeholder requirements and expectations. Furthermore, organisations are able to reinforce leadership (management and board);
- *Improving compliance and risk management*: through addressing sustainability disclosure regulations to help organisations to remain ahead; and

Driving reputation and stakeholder management: managing stakeholder perceptions and making certain that stakeholders have the correct information to confidently make informed decisions about the company's value add.

Figure 2: The ESG framework - emphasis on Governance



Source: Author

2.2.2 ESG- Environment

This component, as illustrated in Figure 2, focuses on the conservation of natural resources worldwide and examines whether firms are adopting methods that will reduce their carbon footprint in operations. Environmental concerns include factors such as water and air pollution, loss of biodiversity, climate change mitigation, waste management, and resource scarcity, among others (Seth et al., 2021). According to Wang (2024), investors and the general public are likely to support businesses that are dedicated to addressing the effects of climate change and driving action. The Environmental component of ESG focuses on brand and image; however, it is more concerned with environmental responsibility and sustainable development. The image of being environmentally friendly as a company improves social recognition by enhancing reputation, meeting public demands, preventing expenditure on environmental law infringements, attracting sustainable investments, and ultimately strengthening corporate performance (Wang, 2024).

2.2.3 ESG- Social

The Social component of ESG, as indicated in Figure 2, focuses primarily on people, as they are central to all firms. Firms that are socially aware consider the importance of the growth and development of their people and the communities in which they operate. Furthermore, Social focuses on the relationships that firms have with their stakeholders, such as clients and business partners. Social aspects also encompass a scope beyond a company's business activities, which can include client relationships, equality and diversity, human rights, employee feedback, community upliftment, and labour requirements (Seth et al., 2021). The social aspect of ESG exists to address a firm's involvement with society, as social responsibility is a key factor in attracting potential investments (Wang, 2024).

2.2.4 ESG- Governance

Although the "G" in ESG is only a third of the ESG framework, it is fundamental to the survival of the "S" and "E" aspects. Governance, as seen in Figure 2, focuses on the practices within an organisation, how the companies are operated, and how the board drives change. Governance involves aspects related to transparency and ethical behaviour by companies. Furthermore, Governance pivots on the composition and structure of boards, auditing structures, bribery and corruption policies, executive and management compensation, whistleblowing practices, and political affiliations (Seth et al., 2021). According to Wang (2024), ESG governance encompasses a firm's internal structures, the decision-making process, and team organisation. Where good governance practices, operational efficiency, functional and diverse working environments exist, stimulated teams thrive. Additionally, positive governance enhances transparency, disclosure, risk mitigation, and stable share prices, ultimately leading to improved corporate performance (Wang, 2024).

2.3 Age Diversity

Diversity within groups of individuals means heterogeneity or a balanced mix of backgrounds. Diversity is a term often used to describe the balance of differences in attributes among a group of people (Ferrero-Ferrero et al., 2016). Furthermore, age as an attribute remains one of the most notable demographic variables in analysing board diversity in corporates, as it can adversely affect director perspectives, decision-making, and management styles. In comparison to other diversity matters related to gender and race, age reveals how differing generations allow for risks, innovation, and governance strategies, highlighting a dynamic dimension in understanding how boards relate and function, and adjust during contemporary challenges (Gardiner, E., 2024).

According to Kang et al. (2007), the drive to elevate intergenerational diversity within company boards is vital to promote differences in perspectives and decision-making for succession and sustainability within firm leadership. As stated by Ferrero-Ferrero et al. (2016), a gap exists in research that allows for age diversity, as opposed to the extensive research that exists on gender and age, indicating a need to explore and discover new ways of undertaking corporate governance through the study of age diversity. In citing Houle (1990), Ferrero-Ferrero et al. (2016) argue that boards composed of diverse age groups can create a more optimised and balanced team. Older generations contribute their wealth of knowledge, experience, and networks; middle-aged leaders bring executive capability; while younger board members are given the opportunity to learn and grow in business acumen.

According to Ferrero-Ferrero et al. (2016), a large number of multinational firms have evaluated their corporate governance practices to enhance the effectiveness of their business activities. Through this evaluation, it was established that the selection of board member candidates appears to result in a limited representation of people, leading to a lack of diverse views within boards and, consequently, challenging decision-making processes. Furthermore, it is also noteworthy that boards that include similar groups of people can bring about complacency and resistance to changing business strategies.

Age diversity is categorised based on several characteristics, including generational groups such as veteran members, post-war generation, and Generation X or Y (Ismail &

Latiff, 2019). Furthermore, Ferrero-Ferrero et al. (2016) established that the characteristics of board directors reflect the time period during which they were born or raised. Veterans, for example, are often seen as diligent and conservative in matters of societal welfare. They are also recognised for their strong moral values and supportive nature (Hafsi & Turgut, 2013). However, the post-war generation, conversely, is perceived as rebellious and radical regarding social changes, such as civil rights, gender equality, and the women's movement. Gen X, in contrast, is viewed as adaptable to technological advancements and modern lifestyles, including environmental issues.

As referenced by Gardiner (2024), boards across the globe are currently set up in such a way that they are formed by experts aged between 50 and 70 years. This prompts researchers to turn their attention to how younger and seasoned board members engage in their functions as directors. Incorporating age-diverse people into its board can propel a company to expand its resources and retain knowledge and skills within the business, even in the future, to benefit its performance. When a group of board members has different backgrounds, networks, and knowledge, they are better equipped to solve issues as a result of the diversity. A shortcoming of diverse groups is that they are more challenging to manage due to differing expectations and differences. However, the benefit is that the company can comprehensively benefit in terms of team performance, resulting from the varying talents and progressions of the members.

According to Vetchagool (2025), a disparaging issue that companies face in terms of corporate governance is board composition. A board is more optimised and functional when its members have diverse backgrounds. As it stands, there are no established rules or governance that emphasise the value of age diversity on boards, despite its potential influence. Vetchagool (2025) continues to confirm that recent studies indicate an extensive number of board of directors agree that age diversity is the most important type of diversity, exceeding other types of diversity, such as those relating to gender and race. Therefore, outlining the impact of age diversity within board member groups is crucial since there is an upward trend in elevating age-diversified board compositions (Gardiner, 2024). As such, the study conducted by Vetchagool (2025) revealed that varying age groups within company boards can positively affect a company’s market value, as well as its intellectual capital, and, as a result, amplify its operational efficiency through reliance on diverse experiences and capabilities. While age diversity does not immediately promise board performance, it can lead to diverse views and ideas, provide suitable representation of stakeholders, minimise groupthink, and enable innovation. Considering an age-diverse board can influence its success and effectiveness, therefore, a positive balance of professionals within boards integrates the required skills and expertise to produce thriving companies (Vetchagool, 2025).

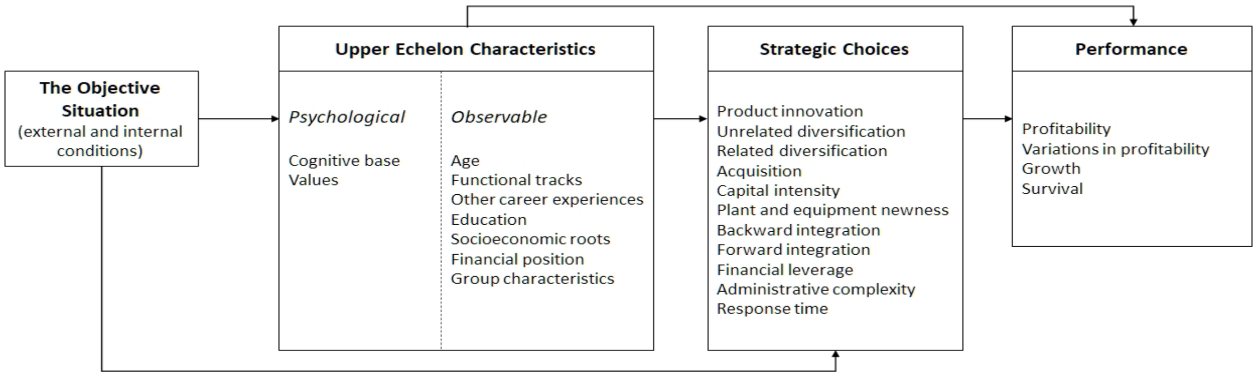
The following sections address two theories that can be studied to understand age diversity in the context of ESG and its impacts.

2.3.1 Upper Echelons Theory (UET)

The performance of a company can be closely linked to ESG, and studies have shown that ESG performance has a positive overall impact on a company’s financial performance and a reduction in risks (Montenegro, 2023). According to Peng and Chandarasupsang (2023), a theory related to ESG is the upper echelons theory (UET), which proposes that the views and values of leadership teams can influence a business's behaviour regarding corporate social responsibility.

In 1984, Hambrick and Mason proposed the Upper-Echelon Theory (UET), as indicated in Figure 3, which argues that an institution is a reflection of its leadership and that the leader’s characteristics, such as age, career backgrounds, educational backgrounds, and socioeconomic backgrounds, can be relied upon to determine the institution’s outcomes (Wangombe et al., 2013). Furthermore, the UET suggests that when a decision-making process is complex, the personal characteristics of those decision-makers, such as age, skills, and tenure, are crucial and affect their decisions on strategies and operations, in turn impacting the performance of a firm (Ting et al., 2015). According to Hambrick and Mason (1984), as cited by Ting et al. (2015), leaders who are older tend to be less aggressive and less inclined to take risks than younger generation leaders. (Ting et al., 2015) cite Serfling (2014), who states that companies with younger generation leaders have been proven to be more determined to invest and benefit from larger growth opportunities.

Figure 3: The UET model



Source: Ting et al. (2015)

According to Farndale et al. (2015), age diversity patterns in many developed countries are changing. In today's workforce, four generations can be identified: veterans, post-war generations, Generation X, and Generation Y, each exhibiting distinct and unique qualities, as noted by Lyons & Kuron (2014). As stated by Kulik et al. (2014), in developed economies such as the UK and the USA, the number of citizens over retirement age is increasing, while the birth rate is decreasing. This trend is impacting the workplace as more citizens are opting to stay in employment, and governments are increasing the official retirement age to remove the burden of pension funding from the state.

According to Creary et al. (2019), a study by the Harvard Business Review revealed that many boards had made progress in addressing gender diversity in leadership; however, they had not advanced in other areas of diversity, such as race, culture, and age. Therefore, having a broader generational representation among board members provides richer information resources and enhances intellectual reasoning in the decision-making process. Consequently, board members will be more aware of the interests of diverse stakeholders when formulating business strategies and corporate policies (Ismail & Latiff, 2019).

Research therefore shows that diversified groups of people delegated to lead companies in the form of boards are able to make optimised decisions than those belonging to similar groups (Hambrick and Mason 1984). Corporations are therefore enabled to acquire and maintain a competitive advantage due to diversified leadership, even in the context of age diversity (Vetchagool, 2025).

2.3.1 Resource Dependence Theory (RDT)

The Resource Dependency Theory (RDT), introduced by Pfeffer and Salancik (1978), is one of the key theories related to age diversity. This theory suggests that a company's human resources can be strategically managed to achieve high performance and gain a competitive advantage (Vetchagool, 2025).

Age diversity contributes to this by bringing varied perspectives and specialised knowledge to the board. These differences can help the board acquire valuable resources that enhance company performance and value. Gardiner (2024) supports this view. He notes that generationally diverse boards are better positioned to attract individuals with exceptional knowledge and skills, which can drive company success.

Currently, most board members are between the ages of 50 and 70. However, younger generations tend to be more engaged with sustainable development and Corporate Social Responsibility (CSR). Their involvement can strengthen the company's resource base by introducing fresh networks and forward-looking priorities.

2.4 Critical Literature Review

The key role of a board of directors is to monitor and provide guidance, as well as counsel, and a board's capacity for this is dependent on its demographic characteristics (Tuggle et al., 2010). Although the inclusion of young people in board leadership is significant, as it expresses the coexistence of different or diverse groups of leaders in organisations, there can be advantages and disadvantages to such an approach (Ismail & Latiff, 2019; Tuggle et al., 2010). This critical literature will evaluate the strengths and weaknesses that accompany diverse groups of people in board and leadership teams.

According to Zhu et al. (2014), board members of prestige firms have historically been known to be homogeneous in structure, reflecting a group of individuals who have qualifications from reputable and elite institutions, share identical social backgrounds, and have previously been appointed as executives of 'blue chip' companies. Furthermore, the traction of board diversity is sometimes negatively affected by "*a major social barrier where existing directors tend to favour new directors who are similar to them on major demographic characteristics*" (Zhu et al., 2014). Thus, research has shown that diverse groups of individuals face significant social barriers to board membership (Zhu et al., 2014).

According to Tuggle et al. (2010), the more heterogeneous the demographic characteristics of boards, the more diverse the data sources and views. Furthermore, creativity and innovation are driven by this heterogeneity. However, at times, heterogeneity in boards can create fault lines that potentially affect important processes, such as communication, collaboration, and trust. As cited by Tuggle et al. (2010), "*that diversity on demographic characteristics implies diversity on underlying attributes such as task-related KSA [knowledge, skills, and abilities]; values, beliefs, and attitudes; and personality*" (Webber & Donahue, 2001).

The qualities of board members are vital in framing matters; however, it is the diversity or similarity of these qualities of board members that will determine how well they work together as a team (Tuggle et al., 2010). Homogeneity in boards can lead to a predilection for maintaining the status quo. This can result in great consensus or groupthink among board members, who may be reluctant to initiate new concepts and intolerant of accepting new information and knowledge. However, the advantage of homogeneous board structures is that they can facilitate comfort and reassurance among similar board members. This can result in mutual trust at a faster pace than in heterogeneous structures (Tuggle et al., 2010). Heterogeneity, on the other hand, steers a more comprehensive set of views and positions for decision-making processes. Diversity drives the disparity of information and views, therefore resulting in innovative and creative discussions. However, it is likely that heterogeneous board members will encounter conflict and differences of opinion, thereby impeding successful decision-making processes (Tuggle et al., 2010). Furthermore, according to Zhu et al. (2014), diverse groups of leaders who form part of the minority on boards may face challenges in influencing management on certain decision-making processes, such as those pertaining to corporate strategy. Although there is an optimistic correlation between diversity and firm performance, bleak results can emerge from diversity in teams where conflict, poor team collaboration, and solidarity are negatively impacted. Thus, diversity in boards can result in process delays due to poor communication and the failure to agree among board members, as many researchers have connected diversity to conflict. It is therefore essential to consider that diversity in boards can negatively impact the speed of decision-making processes, the quality of such decisions, and the collaboration among board members (Miller & del Carmen Triana, 2009).

According to Rhode and Packel (2014), multiple barriers exist to achieving diversity on boards. One is that underrepresentation in boards is often a causal effect of underrepresentation at the executive level, because the common path to board membership is generally through experience as an executive, such as a Chief Executive Officer (CEO). A survey that was conducted by a National Association of Corporate Directors showed that experience as a CEO was a key driver in the recruitment of board of directors. This renders the selection criteria for board member appointments limiting as the talents of minority groups are underutilised (Rhode & Packel, 2014), Additionally, another impediment to diversity in boards is “in-group bias”. This is where board members resonate with those individuals that are similar to them in characteristics such as age, ethnicity, race, or gender, resulting in subjective selection criterion in terms of board appointments. Furthermore, another shortfall of diversity in boards is when the majority of a group is homogeneous, resulting in tokenism, where the appointment of a minority may not notably improve decision-making, as minority board members may experience social isolation. Tokenism presents a challenge to minority groups being considered on equal footing with other majority board members. Furthermore, these minority groups may encounter difficulty in influencing decisions and feel left out due to social isolation, as the true decision-making of boards often occurs outside of official meetings in informal settings (Rhode & Packel, 2014).

In terms of the critical review of the ESG model and its functionality, Hartzmark and Sussman (2019) found that some investors held the view that directing resources to sustainable development initiatives was expensive, thereby contradicting the primary objective of profit maximisation. However, some investors maintained that environmental and social responsibility should be considered as part of a company’s value maximisation.

As stated by Rajgopal (2022), some critiques of ESG relate to ESG scoring, in that it tends to be biased and subjective, as scores are more dependent on the achievement of the environmental aspect of ESG. Furthermore, as stated by DasGupta (2022), when organisations pursue ESG-related activities that are seen as socially responsible, their spending may sometimes be influenced by leadership's personal agendas aimed at gaining public approval and recognition. This motivation, rather than being rooted in selfless intent, can ultimately diminish the firm's value and financial performance.

2.5 The procedure to identify, recruit and inclusion of young leaders in board leadership

Today, business plays a crucial role in addressing the world's pressing issues, such as climate change; therefore, there is a need for innovation and agility to effectively solve these problems. The current older leadership structures can hinder this agility and innovation; thus, it is imperative for businesses to prioritise intergenerational leadership to unlock opportunities and enhance their competitive advantage (Boulenger et al., 2023).

Generation Y (Gen Y) is able to adapt to fast-paced, advanced technologies, as well as access and distribute data quickly, compared to older generations. As a result, numerous studies have addressed the concern regarding their potential to successfully undertake leadership roles in the organisations they are part of (Onorato et al., 2018). Gen Ys are known to be self-assured, positive, and assertive, and have a strong sense of self-esteem compared to previous generations (Guha, 2010; Kowske et al., 2010, as cited by Onorato et al., 2018). Additionally, Onorato et al. (2018) continue to state that research indicates the Gen Y generation is charismatic, extroverted, and social, thus demonstrating transformational and transactional leadership styles more frequently than older generations. These leadership styles are valuable to Gen Y and can aid in the decision-making process in tumultuous environments. Furthermore, since Gen Y views themselves as future leaders, they admire charismatic leaders and appreciate transformational leadership more. According to Delgado et al. (2020), institutions are undergoing changes due to sustainable requirements, industrialisation, accelerated digital transformation, and geopolitical uncertainty, among others. Gen Ys are known for flourishing in ever-changing environments as they are easily adaptable and will therefore be valuable to companies facing challenges in terms of change. Furthermore, Gen Ys have been exposed to technology in one way or another throughout their lives and are therefore able to adapt to the demands of device use, social media, and the internet, delivering efficient access to information. Organisations can therefore benefit from leaders who succeed in adapting to change, are motivated, and inspiring.

In a study by Onorato et al. (2018), the leadership styles of Gen Y were compared to those of previous generations, with results showing that younger generations demonstrate transformational leadership qualities, particularly when compared to age groups above 50 years old. Additionally, in terms of effective and strategic leadership, Gen Y members recorded higher scores than older generations. Gen Ys are forming part of the wider workforce in organisations, and although their capabilities as leaders are under scrutiny and prejudice, it has been proven that Gen Ys demonstrate favourable qualities that enable them to pivot and qualify as leaders and decision-makers. Although the older age group is known for its competence and success in leadership positions, it demonstrates a more transactional style of leadership, which may not be as constructive in the current time (Onorato et al., 2018).

In a study by Delgado et al. (2020), it was found that older generations, such as Gen X and the post-war generation, do not have faith in the leadership of Gen Ys due to their inexperience; however, they agreed that Gen Ys are excellent at building relations and thriving in team environments. Furthermore, the study indicated that Gen Ys have the capability to become effective leaders, provided that they receive executive mentorship, participate in leadership conferences and other related events, and shadow multiple job functions in leadership. Additionally, Gen Ys have the potential to be effective leaders if they are open to receiving feedback, improving their communication styles, connecting with their respective team members, and seeking relevant training, mentorship, and coaching.

In today’s times, Gen Y plays a vital role in economies, as individuals in their 30s and 40s are a growing majority. It is therefore safe to presume that a larger group of future leaders falls within the Gen Y age group (Karima, 2023).

A study by Karima (2023) summarises that the development and acceleration of Gen Ys into leadership positions can be influenced by the following:

- Continuous development and having a growth mentality;
- Welcoming feedback and having a desire to consistently learn;
- Ambition throughout all phases of life. Practicing leadership at a young age, even in school can contribute to leaders developing leadership skills;
- Leadership experience opportunities and support from superiors; and
- Reliance on role models of leadership through mentoring and coaching.

As seen in history, discrimination against particular racial and ethnic groups, genders, age groups and disabled persons is common and there are no laws that give defence for this discrimination in the US. Employees belonging to identity groups that have been discriminated against such as women, African people, groups of people belonging to the pride communities, those with disabilities, people of older or younger age groups, and those described as religious minorities and foreigners, have been excluded from esteemed opportunities in jobs, promotions, decision making processes and Human Resources (HR) investments (Shore et al., 2018). The expressions ‘inclusion’ and ‘diversity’ are often used interchangeably. According to McKinsey & Company (2022), diversity is concerned with ‘who’ is represented in teams whilst inclusion is concerned with how the staff encounters the workplace and how the company embraces, welcomes and accepts all kinds of employees and allows them to participate in making a meaningful contribution to the organisation.

According to Shore et al., (2018), in defining inclusion, inclusive institutions are those where individuals of all identities and characteristics are able to fully be themselves and contribute to the overall collective as appreciated and complete members. As noted by Jones et al. (2016), exclusion can negatively impact on the physical and psychological health of people regardless of if it occurs overtly, which is an act that involves prejudice or as a subtle and ambiguous form of discrimination. Overt types of discrimination can be resolved through a legal process; however, subtle forms are less likely to be addressed as legitimate or hold weight to be resolved (Shore et al., 2018). According to Holvino et al. (2004), as cited by Shore et al. (2018), although global laws have centred attention on reducing discrimination against marginalised social categories, it is still unclear as to whether institutions are proactively constructing inclusive environments. As a result, inclusion in working conditions has attracted increasing attention through scholar and business-related literature to ensure the upliftment of employee experiences (Shore et al., 2018).

Organisations have recently increased their focus on diversity and inclusion as a result of the growth of women, people of different backgrounds and various generations participating in corporate activities (Garg & Sangwan, 2021). For this reason, diversity is no longer a choice but a critical business factor. As confirmed in a study by Miller et al. (2002), as cited by Garg & Sangwan (2021), there has been a change in discourse from "managing diversity to leveraging diversity" since organisations must rather embrace opportunities that will capitalise on diversity. Shore et al. (2018), states that opportunities to include marginalised identity groups in organisations to allow for conditions where they can fully contribute is crucial. These opportunities are important in helping organisations perform optimally. When an organisation is not committed in the inclusion of diverse groups of people, it will lose valuable employees identifying as minorities (Hom et al., 2008, as cited by Shore et al., 2018). As the world evolves, diverse groups can introduce varying perspectives and experiences that can advance organisations and communities. According to Shore et al. (2018), a fundamental issue in literature on diversity and inclusion is to emphasise the role of HR practices in forming inclusion for employees. The recruitment and advancement of women, African people, and other minority groups shows potential however these practices are not sufficient if people from historically excluded groups are unable or disempowered to be themselves when conveying their perspectives and belonging.

As mentioned by Wangombe et al. (2013), human capital is a critical component in any firm and is therefore, imperative for any organisation to employ the right people with suitable academic, social and professional skills. For this to be achieved, the organisation must ensure to never restrict itself to a certain group of individuals by employing a combination of people from varying socio-cultural and political backgrounds which include differing religions, ethnicity, gender, sexual orientation, age, and race. In such entities, diversity management is pivotal and includes the process of building and maintaining favourable environments where varying characteristics of individuals exist and are valued (Wangombe et al., 2013). Globalisation has taken over the world and demands more interaction between people belonging to diverse cultures, values and backgrounds than before. Societies are no longer isolated, and people belong to global economies where rivalry comes from all over the world. For this reason, private, governmental and non-profit companies must welcome diversity to allow for change and innovation (Wangombe et al., 2013).

Diversity should not be viewed as an initiative, rather a central goal and process. A firm must ensure the effective management and utilisation of diversity in the work environment. This should form part of the culture of the firm and is a recurring process that identifies talents and competencies in a diverse group of people (Wangombe et al., 2013).

The performance of a company can be closely linked to ESG, and studies have proved that ESG performance has an overall positive impact on a company's financial performance and a reduction of risks (Montenegro 2023). According to Peng and Chandarasupsang (2023), a theory that can be related to ESG is the upper echelons theory (UET), which proposes that the views and values of the leadership teams can affect the behaviour of a business when it comes to corporate social responsibility.

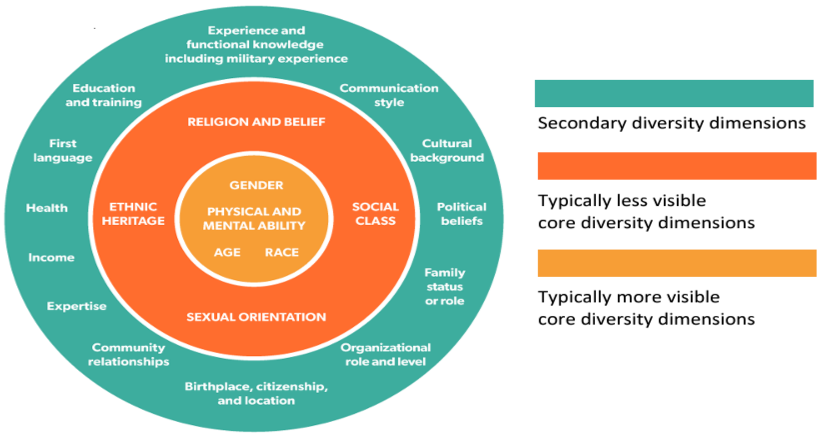
According to Farndale et al., (2015), in many developed countries, age diversity patterns are changing. In today's workforce, four generations can be identified, namely veterans, post-war generations or generation X and Ys which all show different and special qualities as mentioned by Lyons & Kuron (2014). As stated by Kulik et al. (2014), in developed economies such as the UK and USA, citizens over the retirement age are increasing in number whilst the birth rate is decreasing. This trend is impacting the workplace as more citizens are opting to stay in employment as governments are increasing the official retirement age in order to remove the burden of pension funding by the state.

According Creary et al., (2019), a study by the Harvard Business Review revealed that many boards had progressed in addressing gender diversity for leadership however had not advanced the same in other areas of diversity such as race, culture, and age. Therefore, having a broader generational representation among board members provides richer information resources and enhances intellectual reasoning in the decision-making process. Consequently, board members will be more aware of the interests of diverse stakeholders when formulating business strategies and corporate policies (Ismail & Latiff, 2019).

2.6 The role that ESG can play in incorporating young people into board leadership

Alawadi et al. (2023) state that board diversity can be classified into two forms of diversity: observable, which focuses on noticeable characteristics of board leadership, such as age or gender, and less observable, which is mainly concerned with factors such as educational and professional background. According to Hallam et al. (2018), diversity should be viewed as more than just physical differences or a token exercise where people of different backgrounds are appointed merely as a tick-box exercise; it should encompass many other aspects that are much deeper than the visual representation of diversity. In developing the “diversity wheel”, Hallam et al. (2018) indicate the other aspects relating to diversity, as demonstrated under Figure 4.

Figure 4: Value diversity- the diversity wheel



Source: Hallam et al. (2018)

In a study by Alawadi et al. (2023), the importance of discussing ESG in relation to board diversity was highlighted. ESG, a concept that entails three central aspects that define sustainability and social responsibilities of firms, where environmental (E) is concerned with the impact that the organisation has on the natural environment (in citing Rau and Yu, 2023), social (S) is focused with the management of relationships with people and communities (in citing Henisz et al., 2019) and governance pertains to a firm's leadership, internal protocols and owner's rights (in citing Low, 2022). ESG has gained traction in business and studies such as that of Harjoto and Wang (2020), which investigate the correlation between ESG performance of organisations with the diversity of their boards by proving that boards that are diverse and inclusive can enable good environmental oversight, social responsibility, and ethical governance (Alawadi et al.,2023).

Leaders from diverse groups introduce varying experiences and opinions, resulting in the increased probability of having onboarding ESG-relevant social networks to enhance ESG initiatives. Furthermore, the structure and composition of a board critically form part of corporate governance because the board of directors is accountable for setting the precedent for the social representation in organisations (Alawadi et al., 2023). Therefore, by including diverse groups of people in board members, organisations can drive the correct direction for addressing the intricacies of ESG, as diverse individuals can offer a wide range of ideas and opinions regarding aspects related to environmental impacts, societal responsibility, and governance protocols (Alawadi et al., 2023). For example, according to Yaseen et al. (2019), as cited in Alawadi et al. (2023), age diversity in board leadership can have a positive impact on a firm's social performance.

In conclusion to the study by Alawadi et al. (2023), it was confirmed by many respondents that diversity in boards, such as age diversity, can provide an organisation with broader resources to achieve its ESG requirements and ambitions.

2.7 Conclusion of Literature Review

Chapter 2 reviewed the evolution of ESG reporting and its importance in the current era, as well as how the framework can drive the inclusion of young people in leadership positions. Environmental concerns encompass a range of factors, including pollution of water and air, loss of biodiversity, climate change mitigation, waste management, and resource scarcity, among others. Social under ESG focuses on people and the elements of social responsibility that firms must consider. Governance aspects, which concern how a company is operated and managed, were elevated in Chapter 2 by examining a list of factors that affect governance. Additionally, the chapter discussed the dynamics related to inclusion and diversity, providing a summary of the UET, which examines the correlation between leadership and the characteristics of leaders, including age, career, and educational background. Additionally, this chapter provides a brief summary of the RDT, which suggests that a company’s human resources can benefit it in a way that results in a competitive edge.

Table 2 demonstrates the research objectives and the respective hypotheses.

Table 2: Consistency table- research objectives and hypotheses

RO #	State Research Question or Objective	Hyp #	State Hypothesis
1	To understand the procedure for identifying and recruiting board members	1	The recruitment of board members typically requires networking. Younger people have likely built a meaningful rapport and reputation owing to their experience and are therefore at a disadvantage when compared to seasoned professionals. The reliance on networks for recruitment into board positions has the potential to counter age diversity in boards.
2	To assess diversity principles that can drive the inclusion of young people in board leadership.	2	Older leadership structures tend to be less agile and innovative.
3	To understand the role that ESG can play in incorporating (including) young people into board leadership	3	Diversity should be viewed as more than physical differences or a token exercise where people from differing groups are appointed merely as a tick-box exercise; it should encompass many other aspects that are much deeper than the visual representation of diversity.

RO #	State Research Question or Objective	Hyp #	State Hypothesis
4	To propose a mechanism for the inclusion of young people in board leadership.	4	To enable diversity within boards, creating strategies for recruiting diverse groups, particularly young people in leadership, is vital. Providing the relevant training to recruitment service providers to empower them to become experts in the field of diversity, particularly in board leadership.

CHAPTER 3.RESEARCH METHODOLOGY

3.1. Introduction

This research study aims to explore how top-listed public companies can leverage ESG principles, specifically those relating to corporate governance, to drive age diversity in their board leadership. In the literature review, the study examined the context of ESG, with particular emphasis on governance principles, the procedures for identifying, recruiting, and including young leaders in board leadership, and the role that ESG can play in incorporating the participation of young people into board leadership.

The study's primary aim is to determine how JSE- listed mining companies can leverage ESG principles to drive age diversity. The secondary objectives of this study that were adopted from the aforementioned primary aim are reintroduced as follows:

i. To understand the procedure for identifying and recruiting board members;
ii. To assess diversity principles that drive the inclusion of young people in board leadership;
iii. To understand the role that ESG plays in incorporating (including) young people into board leadership; and
iv. To propose a mechanism for young people's inclusion in board leadership.

A literature review was conducted to address the research. Chapter 3 outlines the research methodology, explaining the research approach and design. Furthermore, this chapter describes the data collection methods, the population and sample, the research instrument, the procedure for data collection, as well as the data analysis and interpretation process followed in this study.

3.2. Research approach

According to Grover (2015), a research approach refers to the strategy and process to follow in research, which includes the actions to be taken, starting with the comprehensive hypotheses, the methods and measures for data collection, as well as the examination and interpretation thereof.

This research study relied on a qualitative research approach. According to Tenny, Brannan et al. (2017), a qualitative research approach collects the experiences, views, and behaviours of participants. This type of research approach addresses the 'how' and 'why' questions instead of the 'how many' questions. A qualitative approach can be undertaken alone or in conjunction with quantitative research as a mixed-methods approach. Furthermore, a qualitative approach rationalises processes and patterns of participant behaviour that cannot be easily quantified otherwise (Tenny et al., 2017). Research does show that perceptions and lived experiences are not mutually unrelated. As referenced in Creswell (2018), qualitative research is also concerned with understanding how participants view their situations to form perceptions. Furthermore, "*qualitative research gathers participants' experiences, perceptions, and behaviour*" (Tenny et al., 2017)

Qualitative research is "*a systematic inquiry into social phenomena in natural settings*", such as how participants view their lives, how they behave, how institutions operate and function, and how engagements impact relationships (Teherani et al., 2015). In a qualitative study, the researcher analyses how and why certain situations and events happen and what the situations mean to the participants being studied. Thus, a qualitative research approach was deemed appropriate for this study to examine participants' experiences, views, and the environments in which they operate, such as the boards and committees for which they are accountable.

In qualitative research, perceptions are not theoretical opinions, and the responses of the participants are reflections that have been shaped by their lived context and experiences, such as a board member's experience in observing how board members are approached and appointed, how inclusion is addressed in board compositions, and what is required to be suitable for board member positions in the mining sector.

3.3. Research design

In qualitative research, perceptions are not merely theoretical opinions. Instead, participants' responses are shaped by their lived experiences and context such as a board member's observations on how appointments are made, how inclusion is handled in board compositions, and what qualifications are considered suitable for board roles in the mining sector.

A research design is defined as a process framework that a researcher endorses to obtain answers. A research design is objective, accurate, and defines the analysis that will be carried out to arrive at the appropriate results. The quality of the research design is dependent on the researcher's ability to obtain suitable answers (Khanday & Khanam, 2019). Furthermore, according to Asenahabi (2019), a research design serves as a roadmap established by a researcher before collecting data, in order to validate the research objectives or questions. The research design exists to interpret a research problem and translate it into data that requires evaluation, thereby answering the research questions or addressing the research objectives.

As stated by Akhtar (2016), a research design can be carried out in phases, as shown in Figure 5.

Figure 5: Research design

Source: Author

Akhtar (2016) continues to classify research design into three (3) main types, namely: exploratory, descriptive, and experimental. This study employed an exploratory research design, consisting of qualitative interviews. An exploratory research design is one in which the researcher is unfamiliar with the research problem and has little to no prior knowledge of the issue. Furthermore, the exploratory research design aims to generate new ideas, enhance the researcher's knowledge of the problem, facilitate the definitive development of the problem, collate information to clarify unclear concepts, and establish the feasibility of the study (Swaraj, 2019).

According to Yin (1994), as cited by Swaraj (2019), the exploratory research design is flexible. Where a problem is wide and unspecific, the research can rely on exploratory research as an initial step. Furthermore, an exploratory research design can be beneficial in that it provides a researcher with a good understanding of a situation or area, helps them identify new concepts or knowledge, collects explanations, excludes irrelevant ideas, and shapes hypotheses. The advantages identified by Mack (2005) for exploratory qualitative research include its impact and notability to the participating parties, its unforeseen nature for the researcher, and its inherent richness and descriptive quality.

As stated by Swaraj (2019), exploratory research designs have limitations. Firstly, an exploratory research design yields qualitative data, and the understanding of such data can be subjective and biased, resulting in inconclusive answers derived from the data. Secondly, the sample size in an exploratory research design is often small, and thus, the results may be unreliable.

The exploratory research design was employed since age diversity in board leadership of listed companies, particularly in reference to ESG principles, is an under-researched topic in South Africa. The average age of the board leaders of the JSE-listed mining companies demonstrated that there are fewer young people involved in the boards (see Table 1). Therefore, through this exploratory study, the basis to amend the status quo in board leadership will be explored.

3.4. Data collection methods

The methods of collecting data are essential, as the way information is collected and used, as well as the explanations derived from that process, are important. Interviews are methods where information is collected from participants on a one-to-one basis.

Interviews are often recorded and may be formal (structured) or informal (unstructured) and are conducted in a way that emulates a survey or can incorporate a set of open-ended questions that invite participants to freely express their own opinions. During these interviews, researchers are required to listen attentively and probe to further enrich their data collection. Furthermore, the data that results from interviews usually produces themes and theoretical models. Additionally, interviews provide in-depth, richer information than surveys; however, they are more cumbersome in that more time and resources are required to conduct interviews successfully and analyse the responses (Paradis et al., 2016).

According to Knott et al. (2022), interviews are adaptable methods of qualitative research that researchers rely on to collect data. Interviews allow participants to elaborate, verbatim, on how they view and understand the environments they form part of. This study employed semi-structured or semi-formal interviews as a means of collecting data. The aim was to engage individuals in the business sector who are directly affected by the board leadership of corporates in South Africa. These interviews were held virtually via teleconference technology to accommodate those who were unable to participate in a face-to-face interaction. Table 3 presents a detailed profile of the respondents who participated in the interviews.

Table 3: Profile of respondents

Description of respondent	**Number to be sampled**
Representatives in JSE-listed mining companies	10
Representatives in Youth Agencies	1
Directors Associations	1
Financial Sector representatives in the Top 50	2
TOTAL number of respondents	**14**

This research conducted interviews with 14 participants. According to Hennink and Kaiser (2022), research that utilised empirical data achieved saturation through a range of 9-17 interviews with homogeneous population groups. Furthermore, approximately 5 to 25 participants are recommended as adequate for phenomenological research (Sarfo, 2021).

3.5. Population and sample

According to Willie (2023), a population is a comprehensive group of people or components that share similar or common characteristics and form the focus of the research evaluation. A target population, however, is a specific subset within the entire population that will be the primary focus of the study. Here, the population group is narrowed to the individuals or components that meet a specific criterion.

The population in this study comprises JSE-listed mining companies that are publicly traded, as shown in Table 1. Furthermore, the population also included financial institutions, such as banks, which are also listed on the JSE.

Prior to data collection, the study was open to the application of snowball sampling, where participants in the interviews could suggest names of one or more potential participants to participate in the interview (Kirchherr & Charles, 2018). Although the study primarily used purposive sampling, selecting participants based on their relevance to the study, such as board members of JSE-listed companies, financial institutions, and organisations involved in board appointments and youth development, supplemental snowball sampling was also applied. In this approach, existing participants recommended other potential respondents who met the criteria outlined in the population sections below.

Initially, a list of the JSE-listed mining companies, as listed in Table 1, was compiled, indicating all relevant board members. The board members were contacted through the internet and LinkedIn search, and thereafter, those who gave consent to participate were interviewed. Snowball sampling was employed, where one participant offered to search within their network to assist with data collection through the same semi-structured interview. Through this recommendation, participant 10 (as referenced in CHAPTER 4) gave consent and thereafter participated in the interview. Whilst this may not relate to a snowballing chain, it indicates how referrals provided by existing participants supplemented the approach to purposive sampling.

3.5.1. Population

Data was collected through interviews with a targeted population. This included individuals affected by board leadership, such as executive committee members and board members of JSE- listed mining companies. It also included executive management and board members of state-owned entities (SOEs) who influence policy-making decisions. Additionally, board members and executives from financial institutions listed in the JSE were interviewed, given the role banks and investors play in ESG reporting requirements for public companies.

The study also involved interviews with other stakeholders. These included recruitment representatives from board membership associations such as the Directors Association of South Africa (DASA) and the Institute of Directors SA (IoDSA), which are responsible for developing, accelerating, and placing board members in South Africa. Furthermore, board members from the National Youth Development Agency (NYDA), who represent youth development in South Africa, were also interviewed. Sample and sampling method

According to Elmusharaf (2012), there are three common types of sampling, namely: convenience sampling, theoretical sampling, and purposive sampling. Convenience sampling is said to be the most popular form of qualitative sampling and applies when participants partake in a study due to the premise that they are 'conveniently' accessible in terms of location, time, and availability. This study made use of purposive sampling, which involves sampling where participants are invited to participate as a result of specific criteria aligned to a research objective; therefore, the participants have the necessary status or expertise that will be able to present, to the researcher, the data that they require (Lopez & Whitehead, 2013). Theoretical sampling involves a process where a theory is created through the gathering of data that the researcher will analyse and then determine which additional data to collect and find to refine the theory progressively (Elmusharaf, 2012).

According to Sarfo (2021), phenomenological research involves the inclusion of various individuals who have had encounters or experiences with a particular phenomenon, such as the research topic. According to Hennink and Kaiser (2022), research that utilised empirical data achieved saturation through a range of 9-17 interviews with homogeneous population groups. Furthermore, approximately 5 to 25 participants are recommended as adequate for phenomenological research (Sarfo, 2021). In this study, 14 participants were interviewed from JSE-listed companies in the mining sector, the financial sector, and government institutions, as well as associations that exist to develop board directors. These participants only include members of the board of directors and/or members of the executive committees. The participants from the director development institutes will be limited to individuals who have had experience with the successful recruitment and placement of board members into board positions.

3.6. The research instrument

As described by Sathiyaseelan (2015), to gather data, a researcher relies on a tool called the research instrument. Furthermore, according to Zohrabi (2013), research instruments for qualitative studies can take various forms, including questionnaires, interviews, and classroom observations. The research instrument used in this study was a semi-structured interview guide. Appendix A was created to include the interview questions, as well as a cover letter to the potential participant, which advises on the research topic, participant rights, and the researcher's intentions for the collected data.

3.7. Procedure for data collection

Interview participants were targeted through electronic means, such as emails or messaging, by first providing a background on the research and its significance. Upon approval, virtual one-hour interview engagements were scheduled in advance. Furthermore, some members of the executive management committees and members of the board were accessed through referrals. The meeting request enclosed an interview guide, along with a consent form that outlines the rights of the respondents and obtains their approval for the recording of the interview, allowing the respondent an opportunity to prepare for the interview.

As revealed by Easwaramoorthy and Zarinpoush (2006), the following are the steps to follow in undertaking an interview:

- Identify your objectives or questions by defining what is required to be attained and the information that is required;
- Select the interview type appropriately which could be structured, semi-structured or unstructured;
- Choose the relevant participants of the interview by defining the characteristics and number of participants;
- Determine how the interviews will be carried out, whether virtual or face-to-face and recorded;
- Determine how respondents will be contacted or recruited;
- Determine how the engagements will be recorded, whether this will be through written notes or voice recording;
- Compile a list of questions and ensure they are synchronising with the type of interview selected.

3.8. Data analysis and interpretation

This research study employed thematic analysis methods to analyse the data from the qualitative interviews. According to Dawadi (2020), this is a qualitative research analysis where researchers will rely on systems to evaluate the data. The thematic analysis seeks to identify themes through a rigorous process of interpreting and reinterpreting the recorded data. The use of thematic methods of analysis is because this method is concerned with the broad understanding of the respondents' views and experiences. "*Consequently, thematic analysis can reveal intricate layers of meaning, providing a detailed and nuanced interpretation of the data*" (Atlas.ti, 2024).

3.9. Limitations of the study

According to Alex (2023), the limitations of a study are restrictions that affect the viability of the data. Furthermore, limitations are potential flaws in research that are not attributable to the researcher. These limitations arise from factors such as the selected research design and may impact the study's design, the data collected, as well as the findings and, ultimately, the conclusion (Theofanidis & Fountouki, 2018).

Since the selected targeted population sample included members of executive management committees and board members of listed companies, it was assumed that not all participants approached to participate would be available for interviews due to time constraints and/or confidentiality. This resulted in a reduction in sample size, which may have affected the validity of the results. When teleconference interviews are conducted, there may be challenges with connectivity due to load shedding.

3.10. Trustworthiness

The level of trustworthiness of a qualitative research study can be determined by the degree of "credibility, transferability, dependability, and conformability of research design, process, and action" (Kakar et al., 2023). Furthermore, trustworthiness poses the question of whether the findings and data can be relied upon (Korstjens & Moser, 2018).

3.10.1. Transferability

Transferability is concerned with the extent to which the data and findings of the qualitative study can be assigned to "*other contexts, settings or respondents*" (Korstjens & Moser, 2018). Since this study largely focuses on inclusion and diversity, its results may be relevant and transferable to other studies that discuss broader topics related to diversity, such as gender, ethnicity, culture, and disabilities, to name a few.

3.10.2. Credibility

Credibility refers to the assurance that the findings can be put to the test of honesty and accuracy. Credibility examines whether the research study's results are reasonable, as collected from the participants' original submissions and accurately understood by the researcher (Korstjens & Moser, 2018). In the study, the respondents were recorded using voice recording, and all responses were interpreted verbatim to minimise the risk of inaccurate depiction.

3.10.3. Dependability

Dependability refers to the consistency of results over time, posing the question of whether the results of the research study would be equal and identical if it were to be conducted on multiple occasions (Korstjens & Moser, 2018). To achieve this, the questions will be reviewed to a high level of confidence to reduce ambiguity, and participants' responses will be recorded to ensure accurate interpretation thereof.

3.10.4. Confirmability

According to Nowell et al. (2017) and Korstjens and Moser (2018), confirmability is the extent to which the results can be confirmed should other researchers carry out similar research and is focused on the development of the researcher’s understanding, which is obtained from the data, anticipating that the researcher will illustrate how they arrived at the conclusion. Furthermore, “confirmability is achieved when credibility, transferability, and dependability are all established” (Guba and Lincoln, 1989 as cited by Nowell et al., 2017). To ensure the confirmability of the study, complete records, interview notes, meeting schedules, and minutes, as well as all other relevant documentation, will be retained for a specified period to maintain an audit trail.

3.11. Ethical considerations

According to Mirza et al. (2023), citing Mack (2005), the well-being of people when conducting research must be prioritised over the actual research. Furthermore, George (2023) identifies the following as essential ethical considerations that every researcher must be aware of:

- Using another person’s work and presenting it as one’s own work without acknowledging the original author is plagiarism and should be avoided at all times;

- A researcher must be ethical in that they avoid the fabrication and falsification of information such as research data and be honest in the conducting of the research processes;
- When submitting a research report, it is important to acknowledge and disclose all potential or existing conflicts of interest; and
- Ensure that all approvals such as ethical approvals, informed consent, privacy, and confidentiality matters are provided prior to the commencement of the research.

This study ensures the privacy of all participants and guarantees that respondents are not coerced into participating in the study. All participants were required to provide written consent (through a written response or signature of a consent form) and were not compelled to reveal their identity where they did not wish to do so. The participants were encouraged to withdraw from the research study at any time if necessary. Once the Post-Graduate Committee (PGC) had approved the research proposal, the study required ethical clearance from the University of the Witwatersrand prior to data collection. Table 4 presents a consistency table, outlining the research study's research objectives, their respective hypotheses, and the details related to data collection and analysis.

Table 4: Consistency table

RO #	State Research Question or Objective	Hyp #	State Hypothesis	Data collection detail	Data analysis method
1	To understand the procedure for identifying and recruiting board members	1	The recruitment of board members typically requires networking. Younger people have likely built a meaningful rapport and reputation owing to their experience and are therefore at a disadvantage when compared to seasoned professionals. The reliance on networks for recruitment into board positions has the potential to counter age diversity in boards.	Interview guide questions	Thematic analysis

RO #	State Research Question or Objective	Hyp #	State Hypothesis	Data collection detail	Data analysis method
2	To assess diversity principles that can drive the inclusion of young people in board leadership.	2	Older leadership structures tend to be less agile and innovative.	Interview guide questions	Thematic analysis
3	To understand the role that ESG can play in incorporating (including) young people into board leadership	3	Diversity should be viewed as more than physical differences or a token exercise where people from differing groups are appointed merely as a tick-box exercise; it should encompass many other aspects that are much deeper than the visual representation of diversity.	Interview guide questions	Thematic analysis
4	To propose a mechanism for the inclusion of young people in board leadership	4	To enable diversity within boards, creating strategies for recruiting diverse groups, particularly young people in leadership, is vital.	Interview guide questions	Thematic analysis

RO #	State Research Question or Objective	Hyp #	State Hypothesis	Data collection detail	Data analysis method
			Providing the relevant training to recruitment service providers to empower them to become experts in the field of diversity, particularly in board leadership.		

CHAPTER 4.FINDINGS AND DISCUSSION

4.1. Introduction

As outlined in CHAPTER 1, the aim of the study was to investigate how Environmental, Social, and Governance (ESG) requirements can drive age diversity in the board leadership of Johannesburg Stock Exchange (JSE) listed companies, using the mining sector as a case study. The study aims to evaluate board structures and explore the potential opportunities for young people, as defined in CHAPTER 1, to be included on the boards of publicly listed mining companies on the JSE. As mentioned by Ismail and Latiff (2019), directors of different ages bring varied experiences and characteristics to board discussions, which can enhance decision-making processes. This highlights the importance of including younger, skilled individuals on boards to help shape sustainability plans for a better future in the mining industry.

This chapter will illustrate the perspectives of the research study's interview participants in terms of the following:

- Their views on the procedures of board leadership recruitment;
- Their thoughts on the principles relating to diversity and ESG governance; and
- Their views on the possible mechanisms for the inclusion and acceleration of young people on boards to align with age diversity in the JSE- listed mining companies.

The research study's findings were collected through semi-structured online interviews designed to address the research objectives outlined in CHAPTER 1. Fourteen (14) participants, from various JSE-listed company boards and other institutions concerned with the development of board directors and the youth in South Africa, were interviewed to share their perceptions. The data collected from the interviews were reviewed using a computerised analysis software for qualitative studies called Atlas.ti, where coding and grouping were utilised to collate themes that addressed the research objectives. The data collection results are presented in this chapter without partiality.

4.2. Demographic profile of respondents

The interviews were conducted to engage board members with extensive board director experience in the mining, governance, and finance industries, where the majority of the participants currently held one or more board positions on JSE-listed companies, as illustrated in Figure 6. On average, the participating board directors interviewed showcased more than 13 years of experience in board leadership, which enriched the reliability of the research study's data collection. Each interview lasted between 45 and 60 minutes, presenting sufficient time for the participants to provide detailed responses relating to their experiences and perspectives on the subject matter. The average age of the participants interviewed was 55 years old. Table 5 illustrates the demographic profiles of all the participants. In keeping with the commitment made to the participants, anonymity has been maintained, and they are therefore identified as Participant 1 through Participant 14.

Table 5: List of Participants

NO.	PARTICIPANT PROFILE	AGE	YEARS IN BOARD LEADERSHIP	GENDER	PRIMARY PROFESSION	DOMINANT EXPERIENCE
1	P1	63	30	Male	Retired. Entrepreneur	Mining (Engineer)
2	P2	43	12	Male	Full time corporate executive	Mining (CA)
3	P3	33	5	Female	Government official	Education (academia)
4	P4	67	8	Female	Retired. Entrepreneur	Mining (CA)
5	P5	67	26	Male	Retired. Entrepreneur	Mining (Investments)
6	P6	60	10	Female	Retired. Entrepreneur	Environmental, Marketing, HR
7	P7	46	11	Female	Retired CA. Entrepreneur	Mining & Finance (CA)
8	P8	38	8	Male	Entrepreneur	Governance, Education

NO.	PARTICIPANT PROFILE	AGE	YEARS IN BOARD LEADERSHIP	GENDER	PRIMARY PROFESSION	DOMINANT EXPERIENCE
9	P9	59	28	Male	Retired. Entrepreneur	Mining & Investments
10	P10	42	5	Female	Retired CA. Entrepreneur	Mining & Finance (CA)
11	P11	57	1	Female	Retired. Entrepreneur	ESG & Sustainability
12	P12	67	26	Male	Retired. Entrepreneur	Mining (Investments)
13	P13	67	8	Female	Retired. Entrepreneur	Finance (CA)
14	P14	67	26	Male	Retired. Entrepreneur	Mining (Investments)

Source: Author

It is essential to note that all participants currently hold board leadership roles in the aforementioned industries, with two participants concurrently holding two or three board positions in the mining industry. Due to the profiles and schedules of the participants, a number of participants rejected the request to participate in the research study interview because of time constraints, and four participants withdrew from the interviews.

Figure 6: List of companies represented by interview participants

Source: Author

4.3. Codes and main themes from the data

As drawn from the data analysis software tool utilised, 10 themes were developed, with 16 associated codes linked to the data. Table 6 presents the themes and their corresponding codes. Based on the output from the software used, seven themes were identified, each associated with 47 codes that emerged from the data, as listed in Table 6.

Table 6: Summary list of themes and associated codes

Code Group No	Code group/Theme	Associated codes
RO 1	**Recruitment into board positions**	1. Personal experience in their recruitment
		2. Reasons for appointment
		3. Trajectory of leadership
		4. Current procedure for board recruitment
	Boardroom status quo	5. Dynamics of a board
		6. Self- Confidence
	Board readiness	7. Appropriate age for board leadership
	Board leadership bias	8. Possibility for young people on boards
RO 2	**Diversity within boards**	9. Diversity in boards
	Advantages of young board leaders	10. Advantages of young people on boards
		11. Shortcomings of seasoned people on boards
	Shortcomings of young board leaders	12. Benefits of older/ seasoned people on boards
		13. Disadvantages of young people on boards
RO 3	**Influence of ESG Governance for board inclusion**	14. Influence of ESG Governance for board inclusion

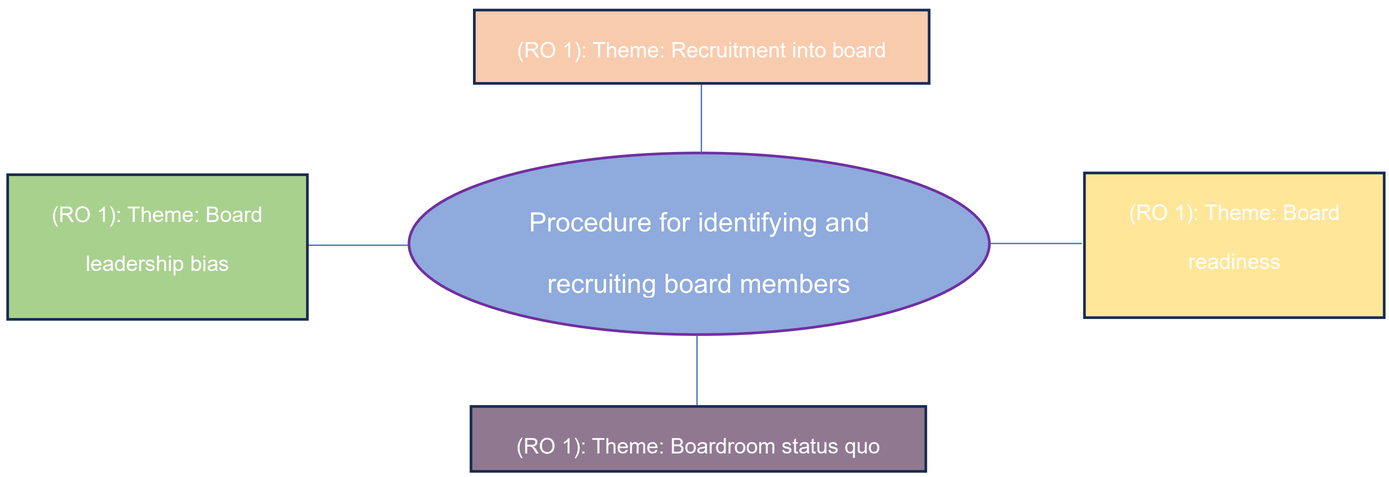
Code Group No	Code group/Theme	Associated codes
	Innovation in boards for the future	15. Innovation in boards for the future
RO 4	**Mechanisms for including young people in boards**	16. Mechanisms for including young people on boards

4.4. Research Findings

4.4.1. Objective 1: To understand the procedure for identifying and recruiting board members

This objective was referenced to understand how the participants were recruited into board leadership positions and to further understand whether the process of board member recruitment in the South African context was aligned with age diversity. The participants were asked about their perspectives on board dynamics and the characteristics required to serve on boards. Furthermore, various questions were asked with the aim of determining board readiness and understanding whether there was a bias towards young people in board recruitment, in favour of seasoned professionals in the market, and the reasons thereof.

Figure 7: Themes associated with research objective 1



Source: Author

4.4.1.1. Theme 1: Boardroom Status Quo

Table 7: Theme 1 - Boardroom status quo

Theme: Boardroom status quo	Quotation
Dynamics of a board	*"The effectiveness of the board is actually determined by answering if you have sufficient skills to execute the responsibilities of that specific board and therefore, you'll see on most of the companies there will be a skills …"- 4/14* *"You have to have something that you bring to the table…otherwise senior experienced board members will not listen."- 4/14* *"I think at board level relationship and culture is very important"- 7/14* *"By the time you're ready, they say no sorry, you must come out because, now you're no longer independent. "- 7/14*

Theme: Boardroom status quo	Quotation
	“We do not have a pipeline of leaders… get the same people serving on these boards because there was no plan… so we are lacking a proactive approach to it”- 8/10 *“Age diversity is a function of experience” -9/10* *“There is the prep that goes into it. I mean, I spend more than a day, probably a day or day and a half preparing for board meetings because, you got to read your board docs. If your board doc is there, you've got to read it. So, the time constraints also become very, very difficult.”- 10/14* *“The effectiveness of the board is more important and quite often I think if you would put the wrong person to the shareholders, the shareholders have got a big role to play. They want their interest to be protected, and it can't be one skill to the detriment of the whole, because they invest in the company as a whole. And they are fickle people, they are into results.”- 13/14*
Self Confidence	*“I think my experience has shown me over the years that if you play small as a board member and don't speak when it's in your area of expertise that your role in the board becomes very diminished quite quickly because people just don't hear you, so you have to have a certain level of self-confidence”-2/14* *“I might be wrong, I don't think a lot of people, especially black people are not confident, so I may have it [leadership] in me, but I was never encouraged, or I didn't know that I have it in me. And in that case, then you could say somebody pushed me to come out.”-7/14* *“They may have the brains, but don't have the confidence and [as] they lead, they lead and become confident because they believe they have something that they can contribute.”-9/14*

Source: Author

As depicted in Table 7, the interviews revealed that there are dynamics to a board that only people exposed to boards will understand. Several key elements contribute to the effectiveness of a board, including the skills and abilities of board members to fulfil specific responsibilities in accordance with shareholder expectations.

According to Farag & Mallin (2017), although the abilities of the board of directors' range, corporations are likely to always recruit outstanding and talented directors who have a pertinent skill set when hiring from a pool of available individuals, to ensure that the objectives and visions of stakeholders are achieved. This is consistent with what Melville & Merendino (2018) mentioned, as cited in CHAPTER 2, that board members must possess the skills to direct management effectively and derive value for the company's shareholders.

Furthermore, the data also indicated that a board member's ability to perform optimally is dependent on their level of self-confidence. As indicated in Table 7, participants confirmed that a level of self-assurance is necessary to contribute meaningfully to discussions and decision-making processes in the boardroom. To a large extent, this confidence is driven by an individual's competence and belief in their own skills. As mentioned by Karlsen et al. (2014), to make a meaningful contribution to a non-executive board of directors, one must be self-confident enough to encourage executive management to excel in the business's operations. This is further supported by Richardson (2016), who states that self-confidence can only be achieved through experience, growth, and maturity. If a person lacks self-confidence, then it would be difficult for them to trust their own judgment, decision-making, and problem-solving capabilities.

4.4.1.2. *Theme 2: Recruitment into board positions*

Table 8: Theme 2 - Recruitment into board positions

Theme: Recruitment into board positions	**Quotation**
Personal experience in their recruitment	*"It was part of my talent development to sit on some of the boards to get exposure to what it's like to sit on a board"- 2/14* *"I started with these smaller companies that were, you know, 100% owned subsidiary"- 2/14* *"I had to write a motivation as to what to do then had to be interviewed by head-hunters. And then my second run was a presentation and interview to the board itself or selected members of the board, especially the Audit Committee chairperson of the board, the CEO and a few others and you to make a presentation on you know what you would do in the role and what you think, and you can add to it. And then the third round was a dinner, then with the CEO itself and to discuss the role in the future and to make sure that you're aligned not only just, I would say align, but that you can engage with each other in a respectful way"-2/14* *"They appointed me by virtue of me having been a member of Council and understanding the vision that they would have had for the investment."-3/14* *"The one appointment was through a search firm… another appointment, the CEO wanted me to be a director and nominated me"- 6/14* *"Through referrals… people that know about you. They ask if you have capacity and do their own internal work"-7/14* *"All of them is through networks… none of them were through an application"-10/14*

Theme: Recruitment into board positions	Quotation
	“As a board member, I have been part of a structured process where we formally approached a recruitment organisation to ask if they could help us. That was the only time. That was the one instance, and that being said, the candidate we ended up going with actually was familiar to the board. So, in essence, you would probably have got into that person whether you use the recruitment or not. But all my positions were through within my networking, yeah.”- 10/14 *“I got the third one I had informed head-hunters that was looking for boards. And so, they passed on my name to the companies looking for board members. I think you hear quite a lot about the fact that, name each other like you are my friend, you need a new board member.”- 11/14* *“One of the people they had previously appointed had retired or resigned, so they asked me to take that role.”- 12/14* *“They wanted somebody had good leadership experience at a C-Suite level as sort of MD and sort of executive director and somebody who had listed company experience. So those are factors that counted more in my favour and outweighed the fact that I'm an old white man”-14/14*
Reasons for appointment	*“Because you are the Managing Director or General Manager”- 1/14* *“So, it was a brand-new company. Old assets and new company. So, they're needed to look around for directors and Mr Y, because he was going to be the CEO, he was making his recommendations, but Mr X who was the chairman of the board he approached me because he knew me from a mutual company”- 5/14*

Theme: Recruitment into board positions	Quotation
	"Be good at what you do in your field. Number 2, obviously when you get the board member role you got to thrive, right because your fellow board members will speak on your behalf and open doors for you in other spaces that you're not. That's that."- 8/14 *"We are getting better at not choosing people based on gender or race, but more based on the [their] knowledge"- 10/14*
Trajectory of leadership	*"First leadership position I was in my late 20s"- 1/14*
Current procedure for board recruitment	*"Board members do not get appointed by the board. Board members get appointed by the shareholders at the next AGM a name is put forward to the shareholders so that the shareholders can decide so board members do not afford board members or boards do not afford more boards or Management do not support appointment of boards. It happens from other shareholders. In the AGM, they actually appoint directors."- 13/14* *"Gone from infamous sort of old boys club"- 1/14* *"A formal process with a formal external service provider, you know, running 10 names down to three names to interviews to selections, it's become very formalised board selection."-1/14* *"Professional agencies…head-hunters"-1/14.* *"Get a brief from preferring the chairperson plus this CEO. I prefer both because then then it's a lot tighter. I get a brief in terms of what they are looking for the skill and then the diversity is my second question. Right. And then I go look for people that may meet the requirements and then interview them then put them to the client, they will choose 3 or 4 of people to interview, then they will choose the best person they want out of that. Then it*

Theme: Recruitment into board positions	**Quotation**
	goes for approval to the board and then the person joins the board."-6/14 *"Structured [process] would be where a nominations committee of a JSE company like Sasol, so it will have a board, and that board has got committees. One of them is the nominations committee. They will go out and put an advert or head hunt people and call you specifically and say, look, can you come for an interview. Are you interested? Then they would interview maybe 3-4 people or five people. Then they'll, kind of cut that down to maybe 2 or so people, which they'll notify them to say you have made the cut to the next phase. The next phase then will be a vetting processes where companies like Directors Association vets a potential director that includes, they go to CIPC to check if the person is delinquent or disqualified. Depending on the client, they check their credit score. Some clients are very particular to check background, criminal record. Once you pass that phase then now, you're really the last phase where the nominations committee will then nominate the individual to the shareholders of which the shareholders vote at election." -8/14* *"They won't advertise it because they know certain people and know the criteria they are looking for"- 8/14* *"Unstructured [process] is where someone is called about an opportunity and asked if they are interested. It's very peer-to-peer and very relationship dependent, this is not so much in the JSE listed companies but mid- size and small companies. It's about who you know."- 8/10* *"So, we would put out a brief of what is required, what skill set we need within the board, we would then in that instance, we approached a recruitment company. They shortlisted a couple of candidates and then it also would*

Theme: Recruitment into board positions	**Quotation**
	depend into what position that person would fill, whether it's the social ethics or audit committee or risk committee. You would then invite sort of the chair of the board, the Chair of the committee, the Subcommittee and maybe the CEO type of thing and then you would have interviews and then remember in terms of most board positions are filled at the AGM level so then that would then be put to the AGM but I mean it's a recommendation so very seldom do they not go through."- 10/14

Source: Author

Since there is limited literature on the exact processes for board member recruitment in South Africa, participants were asked about their own experiences in assuming board member roles in the respective companies they represent. Participants were also asked about the typical procedures for recruiting board members in JSE-listed companies. According to Clune et al. (2014), in a nominating committee of the board structure, the arbitrary approach to appointing board members should include the use of decision tools and other mechanisms to identify and appoint new directors. Usually, appointments within organisations are undertaken through a conventional process that entails coherent decision-making, where impartial criteria are applied to detailed competence and a description of the vacancy. Human resources within the organisation are usually the custodians of formal hiring processes; however, the presumption that a similar fair and formal process is followed in the appointment of board positions is not always true (Jepsen & Varhegyi, 2017). The unstructured approach would follow a less formal application (Clune et al., 2014).

The responses to questions posed to the participants regarding the recruitment processes for board roles revealed that most board positions were historically filled through referrals, networks, and by virtue of candidates having led organisations of significant magnitude in the past and throughout their careers as chief suite (C-suite) executives. In recent years, however, the process has taken a more structured direction, with head-hunters, search firms, and recruitment agencies becoming increasingly engaged in recruitment services that involve sourcing potential board members from the broader market.

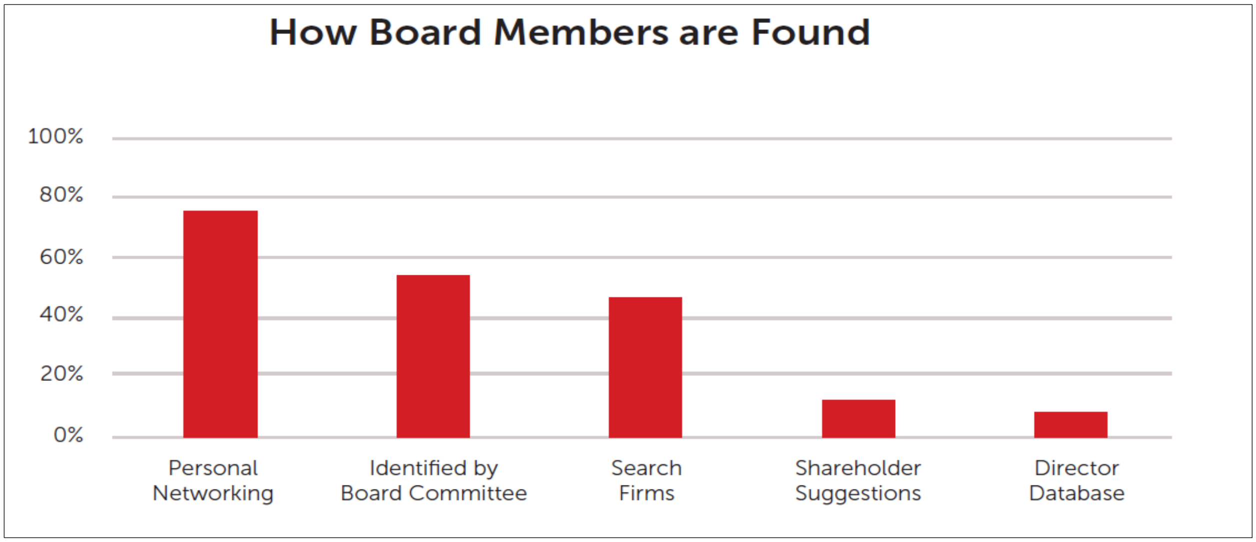
Furthermore, to determine if there is a correlation between a person's recruitment to board leadership roles and their trajectory in leadership early in their career, participants were asked to report when they first assumed a leadership role. The trend, as stated in Table 8, reveals that board members typically filled their first leadership role in their careers as early as their mid-20s to early 30s, and in most cases, they were head-hunted into board leadership roles due to their previous experience in executive management roles.

It was also revealed that the recruitment of a board member is often dependent on the people an individual knows in the industry, in other words, networks. According to O'Leary and Sample (2021), ploughing a reliable and compelling professional network provides advantages. Most board vacancies are not accessible to the public, resulting in a candidate's reliance on referrals and their own network base. Therefore, it is vital that a network includes high profile executives and board members that operate in the specific industries and have the power to place individuals in board positions. This is supported by Lalanne (2021), who found that directors with strong networks and connections are 14% more likely to be appointed to board positions by current board members who share an employment history with them, compared to those new to the market without any alliances.

Furthermore, since members of the board belong to an elite business system, reciprocity often occurs, where one director returns favours and exchanges seats in board leadership through recommendations, further closing the networks. "*Therefore, having information on the joint history of directors, i.e., their social ties, is crucial to help discriminate between information and favours in the use of job referrals*" (Lalanne, 2021).

As indicated in Figure 8, networking is the leading course of action for potential members to be appointed to corporate boards (O'Leary Sample, 2021).

Figure 8: Recruitment of board members



Source: O’Leary & Sample (2021)

4.4.1.3. Theme 3: Board Readiness

Table 9: Theme 3 - Board Readiness

Theme: Board Readiness	**Quotation**
Appropriate age for board leadership	*“There must be enough smart 35- to 40-year-old S [South] Africans to not have a single board say we cannot find somebody who can add value to our board. I would never accept it. I would not accept it”- 1/14* *“I think over 30 should be fine”- 2/14. “I think someone in their late 30s”-5/14.* *“It will not be an age thing... It has to do experience. It's got to do as what do you bring that is needed out there and there's nothing that says you only get that with age.”- 4/14*

Theme: Board Readiness	Quotation
	"Board leadership can happen around for the age of 40 and I'm to taking the general rule that says you start working at the age of 21."-9/14 *"I would say you are probably best suited from 37."- 9/14* *"Anyone above 35, I would say should have built enough experience but younger than that, except if you have a super skilled young person who is extremely knowledgeable of the domain and that domain is important for the company, for example an AI expert then yeah, why not?"- 11/14*
Possibility for young people on boards	*"I do think that there are many people who from 35 onward, they're sort of technical expertise and wisdom that, you know, can contribute it at board level."-1/14* *"Recruit a younger layer for succession planning" – 3/14* *"The issue would be sufficient skills to match more than one skill on the skills matrix would be the requirement and quite often that is, is a bit of a problem for a young person."- 4/14* *"Yes they [young people] should be [recruited to boards] provided they have adequate experience by the age"- 5/14* *"If you have the right experience that the board needs and executives need. Yeah. And people must be able to learn from you. So, for me, everything begins the skill."- 6/14* *"Purely, because diversity is always a good thing, and you need to upskill people"- 7/14* *"There is that reservation, but I think there is definitely a role young people, I mean, there's new thinking, right? And sometimes age doesn't necessarily mean value."- 7/14*

Theme: Board Readiness	Quotation
	"So, I then say no younger people should or would not be as successful in contribution on a JSE board, but on a mid-size board on a small board and I said there is a board for them." 8/14 *"There is a role for a person to lead irrespective of age"- 9/14* *"Yeah, most CEOs get into CEO roles in this country when they're about 40ish. So why couldn't you also be a good board members previously."- 12/14* *"Anybody 40 and below is young board member and we find them in certain in certain aspects, you find them in ESG because it's a newer field and the younger people feel more towards that, but they bring the more emotive side, not necessarily the deep knowledge of what ESG means which is a bit of a drawback and then you will find them in IT but you can't be 40 and an expert in finance.."- 13/14* *"Yeah, there is a role, but the key is if I was to rank the criteria, that age would come lower down in the order of priority in terms of diversity."- 14/14*

Source: Author

As indicated in Table 9, some participants supported the idea of younger people participating in boards, and others advised that it is not about age, but rather skill and expertise. If a person shows the qualities and has built sufficient skills, regardless of their age, then there is a place for them on boards.

Although the consensus was that the appropriate age to join boards of listed companies was late 30s and older, the sentiment was that skills and capabilities would be required to supplement the decision to appoint young people to boards. According to Mariano and Matthee, JSE Top 40 executive ages span anywhere from 36 and older, and therefore raises the question: since most people are appointed into executive positions early in their careers, why not do the same with board members?

According to Farag and Mallin (2017), the time spent by directors on a specific company's board and other boards within an industry will result in more experience and stronger, better networks. The tenure of a director leads to their experience on boards and enhances their understanding of corporate cultures and dynamics. Longer-tenured boards of directors reflect a stronger reputation, credibility, and better marketability, and cultivate favourable relationships and networks within their industries. However, tenured directors, as opposed to new directors, are less comfortable implementing changes since they favour stability and are less inclined to make strategic decisions (Farag & Mallin, 2017). Furthermore, since a board comprising longer-tenured directors can result in entrenched board processes, the resulting implications will affect corporate governance and decisions related to capital structures, remuneration policies, and ultimately the company's performance (Farag & Mallin, 2017).

4.1.1.4. Theme 4: Board Leadership Bias

Table 10: Theme 4 - Board Leadership Bias

Theme: Board Leadership Bias	**Quotation**
Bias in joining boards	*"Yes, unfortunately… There is a built-in discrimination against people who are building"- 1/14* *"I'm probably about two years away from reaching the end of my term at Company A, I'm pretty sure if they spec my replacement, they're not going to put age to it, but by specifying my replacement, they are very likely to find a 50-year-old person if they're lucky or a 55 year old person, not a 35 year old for the incumbency, then guess what, they are going to look a lot like me, they may not be white, but he's going to be a male."- 1/14*

Theme: Board Leadership Bias	Quotation
	“I think it is just a sort of the deeply entrenched board members are older people because supposedly that comes with wisdom and experience.”- 1/14 *“So maybe in the mining and the more resource heavy petrochemical space, there's probably more of a bias for more seasoned people. But I would say in the technology space, healthcare, those type of things, they're probably more likely to recruit younger… in terms of regionality that I think South Africa is probably a little bit more conservative”- 2/14* *“For listed companies, there is a lot of risk, fiduciary risk that board members take”-2/14* *“It's definitely unconscious bias because we all do it and it's because of the people that come into our mind. So, you will not think about someone you don't know, or you’ve never met… the bias is because of the rounds that they have made in the system.”-3/14* *“I think people are weary about having young people within these positions because we're already thinking these ones will come with energy, new ideas, they are going to oppose us for being complacent”- 3/14* *“They believe that you would have made enough rounds to have a connect social capital and for you to be an immediate asset”- 3/14* *“It’s a hard industry; mining is not for ‘sissies’”. - 4/14* *“I don't think it's a bias. I just think it is the fact that experience is inverse of youth. Experience is a big factor. It's a correlated factor. It's not the cause; it's not a bias because bias says that you deliberately chose not to find young as opposed to what you deliberately chose was to find people with experience. And it wasn't that you were trying to cut out young people. It's just that for the*

Theme: Board Leadership Bias	Quotation
	interests of the company you were looking for experience and that by implication, meant on average, older."- 5/14 *"There is. What we suffer from in this country is ageism in leadership structures, people feel that you have to be a certain age to earn certain stripes, which is not necessarily true."- 7/14* *"Definitely a bias because of this ageism thing I'm talking about, and some boards are not thinking about succession within a board… And remember also in South Africa it takes you long to understand the basics. By the time you're ready, they say no sorry, you must come out because, now you're no longer independent."-7/14* *"So, I think the preference then they go to your network, it's who you know, so it's closed to a network of people. Bias, being we don't want outsiders. So, if you're not in the circle then you're not…So one of the most difficult things at that level is to break in to get that first one in is... that bias then becomes that a lot of selections are done within the fraternity and not outside."- 8/14* *"Investors are saying we want people that we can trust to be able to protect our interests, especially in publicly listed entities… so there is a bias and it's for the right reasons"- 9/14* *"Why they bias? I think it's just a comfort thing, at least if something had to go wrong, I could say he had 20 years' experience. He would have known. I it's more of a security thing to make sure that."- 10/14* *"If you think about it, it used to be a close club…same bias that you have, but also a lot of the people who become board members were C-suite executives before that right to prove themselves, which also is why there's not that many young people because it takes years before you get to C-Suite level and because the majority*

Theme: Board Leadership Bias	Quotation
	of the C-Suite were all male, over 50 who are the same people who become board members"-11/14 *"It's an evolution that needs to happen because it's the same with women."- 10/14* *"So, there is definitely a bias towards younger, but the market hasn't supplied that sufficiently yet, but that's going to change, but just give it time and that will change"- 13/14*
Limitations to participation or inclusion of young people	*"Ticking 200 boxes with 10 people, you get forced to look for people who tick many boxes… I think the reality of if you got many, many, many boxes to tick. Then you are more likely to find a 60-year-old who ticks a few more boxes than a 40-year-old… So, in this process of ticking so many boxes, I don't think many boards put age up high."-1/14* *"There are many competing interests when it comes to young people, especially ones you know that are building their careers or busy to perform at a high level. It is not so simple to get permission to sit on a second board. Yes, self-development, but you know you're getting paid a couple of million rands to perform in this team so there are lots of competing factors and it's not a simple thing"-1/14* *"One of the perverse negative incentives is you do train a young director… don't think that head-hunters prioritise age"-1/14* *"Sasol (example) senior technical person is not going come and sit on the Implats (example) board if he or she still dreams to become the next chief executive, you know… this sounds like there are lots of 35-year-olds, but the 35-year-old that is busy building their corporate*

Theme: Board Leadership Bias	Quotation
	careers aren't looking for non-executive board positions."- 1/14 *"It probably comes down to experience… And so, companies want people who have experience, I think it gives your board a bit more credibility to be honest if you've got people who've been in previous executive type roles in other companies who could bring that experience to it. "- 2/14* *"[If] those that are in charge do not see the need for young people to be included, then they won't be included. So, for me, it's just about the deliberateness of those who are in these positions of power to understand that there is a need for young people to be included"- 3/14* *"So, we're not starting from scratch to explain basics to you and now we're in a strategic level. So, when we enter into a meeting, we're not expecting that you are going to every two minutes, you are going to stop and say guys can you please tell me what ESG is. I can imagine how frustrated it would be in the environment, if you are hiring me and you're saying I'm an executive and when you are doing your presentations, then there's Kyoto protocols. You see then I said no, wait, what is a Kyoto Protocol?"- 3/14* *"I can honestly say to you that on a listed company you cannot have a full-time job and sit on a board and another board… It's just impossible to do that because board weeks are intense and nobody who's got a full-time job would have that time available to do that."-4/14* *"It is very difficult to match skills matrix"- 4/14* *"Companies do not ask for it…the job specification that they're working probably doesn't even talk to age, but it says that this person needs to have X years' experience*

Theme: Board Leadership Bias	Quotation
	on a board or Y years' experience in the industry, that assumes you know this person's age will be higher"- 5/14 *"Skills and sizes of boards and shareholders are pushing for smaller and smaller boards. So, if this if the board is small and you don't have all the skills you want, you're not going to get someone who doesn't have the skill."- 6/14* *"It's the issue of ageism on the on the older people's side that they believe you're probably too young and also with people think you need so many years' experience in the mining space to qualify to be in a mining board and that's forgetting that there's more to the business of mining than just being able to mine the commodity"- 7/14* *"So, there's limited participation because people probably block you from it and also, we are not too bold in going for what we want."-7/14* *"The rationale around that, globally is that the older you are, the more experienced you have gained over the years, and you have a mature head on your shoulder. You're able to make sound decisions that are not influenced by emotion. The first thing we look for as a board member is your expertise… Have they achieved that yet? You know, you got to think of the shareholders or investors and if they are comfortable with a bunch of 35- and 40-year-olds running a 60 billion Rand of assets."-8/14* *"The guys that are now there, they're not going to give it up. I mean, they're in the prime of their career at 57 years"- 8/14* *"People are still employed and therefore don't have the time to be able to dedicate that the required time on the boards… some people maybe it's too early in their careers to be able to contribute at a strategic level…*

Theme: Board Leadership Bias	Quotation
	some may contribute strategically but they are holding full time job [s]. "-9/14 *"Investors are saying we want people that we can trust to be able to protect our interests, especially in publicly listed entities."- 9/14* *"Unfortunate [ly] it's just an experienced thing that you only get with your time, you only get to sort of being part of the organisation, understanding the organisation It's not just the organisation, it's understanding how business operates, sort of broad space of how business operates."-10/14* *"The other big thing that you need to remember is a lot of the people at that age, very few are running their own business, most of them are employed and boards are very cautious of employing someone that is employed by someone else because of the time requirements as a board member"- 10/14* *"Think there isn't a pipeline of young individuals that the JSE could pick on."- 10/14* *"There could be young people who's got great experience but that doesn't make it onto the page. And we have to fix that"- 13/14* *"The people who will be replacing us will all be at least 10 or 15 years younger than us. But will they be 25 years younger than us? I doubt it."- 14/14*

Source: Author

As illustrated in Table 10, a theme that participants identified is the entrenched bias towards older individuals on boards, as they are often perceived to have more experience and knowledge in their specific industries.

Furthermore, there was an indication that complex industries such as mining tend to be more biased than other emerging industries, where younger people are more likely to influence. Since board membership carries fiduciary risk, JSE-listed companies' shareholders are more inclined to place seasoned individuals in board positions due to the notion that they are more knowledgeable about the dynamics of boards. Musson (2024) confirms that professionals who possess technical competence in their respective industries have a competitive advantage as their proficiency determines their credibility and provides value to the organisation, they form part of. However, Richardson et al. (2016) oppose this notion by maintaining that technical knowledge can be overvalued at times and that the optimal performance of board directors cannot always be determined by what an individual knows but by how they work and think. Despite a bias in favour of seasoned professionals, there is hope that a change will occur as soon as the market provides a pipeline of young and skilled leaders.

Another reason highlighted was that unconscious bias emanates from networks and familiarity. Shareholders, who are responsible for appointing board members, want to see capable people whom they know and trust holding the positions. Fellow board members are also inclined to nominate individuals with whom they can relate.

Furthermore, the preference for appointing seasoned individuals to boards stems from the reality that, beyond their extensive experience, they can immediately contribute effectively to their roles ('hit the ground running'), having previously navigated similar responsibilities. In contrast, younger board members often require time to acclimate to the demands of the position. However, due to the stringent JSE regulations that impose tenure limits to safeguard director independence, they may be required to exit the board just as they gain full proficiency in their roles. In quoting the King IV Principle 12, "*governing body should establish arrangements for periodic, staggered rotation of its members so as to invigorate its capabilities by introducing members with new expertise and perspectives while retaining valuable knowledge, skills and experience and maintaining continuity*" (Natesan & du Plessis, 2018).

There was also consensus among the participants that the bias toward seasoned individuals is driven by the perception that younger professionals have limited time and capacity to serve on boards, as they are still actively building their careers in full-time employment or business. The older counterparts are typically retired and therefore more readily available to fulfil board responsibilities.

Furthermore, participants revealed that companies, shareholders, and investors are neither incentivised nor penalised to train and develop young people for board leadership roles. Therefore, there is a lack of priority in the appointment and inclusion of young people on boards. According to Lowan (2024), with the intense expectations and accountability associated with boards, the effectiveness and succession within boards are crucial for achieving sustained success.

The data collected revealed that while there are young business professionals across various industries who have successfully implemented strategic initiatives and delivered exceptional results, they may not be widely recognised or well-known within the sector. As a result, they are often overlooked for positions on publicly listed company boards, where directorships are typically dominated by a limited network of established individuals within closed circles.

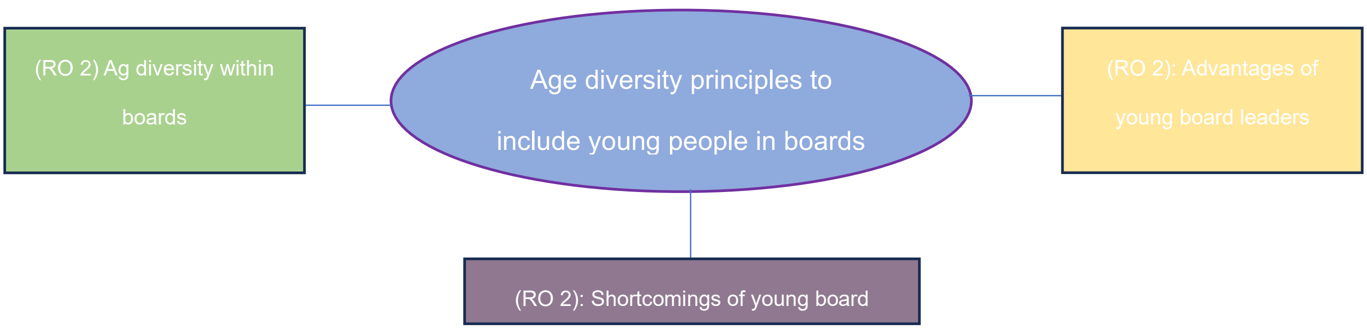
Although there are valid reasons for the preference toward seasoned board members in listed companies, the reliance on closed networks and a preference for a select group of individuals creates a restrictive ecosystem within the business industry. This often results in the same individuals rotating and holding multiple board positions simultaneously, limiting opportunities for young professionals to enter the market.

To assess whether participants would consider selecting board members to lead a listed organisation in the capacity of a board member, a valid pattern emerged where participants acknowledged their level of industry development as key. Therefore, participants chose to remain impartial, emphasising that the decision would be situational and influenced by various factors. Moreover, the principle of age diversity was acknowledged, underscoring the need for a balanced representation across generations.

4.4.2. Objective 2: To assess diversity principles that can drive the inclusion of young people in board leadership

The following section assessed diversity principles that could drive the inclusion of young people in board leadership. The research study participants were asked to share their thoughts and experiences regarding the dynamics of board leadership diversity, particularly in relation to age. Furthermore, to understand the intricacies of board diversity more specifically in terms of age, participants responded to questions aimed at reflecting on the benefits and shortcomings of including young people on boards, in contrast to seasoned professionals.

Figure 9: Themes associated with research objective 2



Source: Author

4.4.2.1. Theme 5: Age diversity within boards

Table 11: Theme 5 - Age diversity within boards

Theme: Diversity within boards	**Quotation**
Age diversity and inclusion in Boards	*"Yeah, to the extend it [process for recruitment] addresses race especially and gender a little bit more, but when it comes to Age? No, not at all. I don't think. I don't think head-hunters prioritise age."- 1/14*

Theme: Diversity within boards	Quotation
	“Ultimately you want to get to a place where there's consensus, but you want to make sure you’re not just hearing the same voices in the room the whole time you need to have different experiences.”- 2/14 *“The JSE is probably still a little bit old fashion from that point of view”- 2/14* *“It's trying to find that balance. I’d be worried, to be honest if Comp 1 ended up with 50% of people below 45. That's probably a bit too much at this stage. We probably need to find some type of middle ground somewhere else.”- 2/14* *“So, from a diversity point of view the first issue I think is the gender balance. The second issue is the racial composition in the South African context. The next issue goes down to industry or relevant experience… age will come lower down simply because experience and industry knowledge”- 5/14* *“We shouldn't hire young people for the sake of it… However we need to be mindful of discrimination and we trying to avoid this discriminations through all lenses of diversity be they race, be they gender, but also what you don't want is a board that's just full of 70 year olds, It's going to have to be a spread and that spread has got to bring something to the table.”-9/14* *“You going to recommend people in your network and people in your network, 9 out of 10 times look like you think like you, and so you never, unless you step outside that circle.”- 10/14*

Source: Author

Participants were asked whether the current processes for recruiting board leaders are inclusive and allow for age diversity. The thematic consensus, as indicated in Table 11, was that the recruiting process for board membership did not prioritise the inclusion of younger people and that gender and ethnicity take precedence from a diversity perspective in JSE-listed companies. Furthermore, board members are more likely to nominate individuals with similar characteristics to their own when openings for board positions are announced. “While gender, ethnicity, and geographical representation have rightfully garnered attention, there is an open question as to whether the transformative power of age diversity has been overlooked” (The KPMG Board Leadership Centre, 2024).

Moreover, there was also consensus that although experience is important and should take precedence over other requirements in terms of the selection criteria, it is also vital for boards to include people from diverse backgrounds to benefit from differing views, thereby enabling the success of board performance.

According to Fos et al. (2024), board diversity in a business context introduces a range of perspectives, experiences, and competencies. This diversity leads to more comprehensive discussions, fostering innovative thinking and helping to identify and resolve blind spots that may be overlooked by homogeneous groups. Furthermore, diversity within boards will enhance the organisation’s willingness and ability to consider and address the requirements brought about by stakeholders, such as employees, clients, and activists. Therefore, board diversity cannot be limited to race and gender alone. Age diversity has a contribution to make in board leadership. Additionally, diversity on boards can also help correct historical inequalities by promoting fair representation that includes young professionals. This is particularly imperative in the South African context, given that board members are influential and have a broad range of leadership impact (Fos et al., 2024).

4.4.2.2. Theme 6: Shortcomings of young board leaders

Table 12: Theme 6 - Shortcomings of young board

Theme: Shortcomings of young board leaders	Quotation
Benefits of older/ seasoned people on boards	*"Of course, you can have an older person around because [you] look of [for] the benefits of experience and wisdom and having been there. But we cannot be a gathering of old people."- 1/14* *"For me some of the stuff I'm experiencing for the first time so maybe your experience of it is somewhat different than they can just provide that perspective, which I think you only get with age."- 2/14* *"When they say everybody has a price, it's far more expensive to buy an old person than it is to buy a young person, so we need to be able to de-risk young people from vulnerability"- 3/14* *"I think from a skills and competence and a seasonal perspective because you know you're going to get someone who is going to come and hit the road running, they know what they're doing."- 8/14* *"But the beautiful thing with older people that they have time, and they'll tell you that they sit on two boards and the rest of the time they play golf"- 9/14* *"They bring a lot of perspective which you can't do if you are too young."- 11/14* *"You still need some skills, you still need people who bring something to the table, not just their imagination"- 11/14*
Disadvantages of young people on boards	*"I do think typically you would expect those people to still be in executive roles, in other words, in senior leadership roles in their own organisation, you know." 1/14*

Theme: Shortcomings of young board leaders	Quotation
	"New directors often feel like they must over contribute or look smarter than what they need to look, or, you know, interfere a bit more than what is necessary." 1/14 *"The lack of experience or young people or they think they may know everything that they don't."- 2/14* *"Maybe younger directors may have more of a bias to action and respond and be more reactive, where calm heads, which should prevail"- 2/14* *"Younger people are far more vulnerable in board positions… Your economic standing makes you vulnerable to people who are in the institution that may want to buy your favour. So, it makes you open to deception within the institution. It makes you open to corrupt activities because of your vulnerability."- 3/14* *"So, I think the biggest disadvantage is that ability to be heard because you come from a place where people respect you and you've proven yourself"- 4/14* *"I mean people who are 40, they will be full time employed in their own business or in another company somewhere else."- 5/14* *"The disadvantages are bringing on someone who doesn't know what talking about, not fair for them, it's not fair for the board."-6/14* *"The disadvantage is because you are young, you probably are not emotionally mature to deal with the dynamics. You are still learning, so some of the things you may not be well equipped to understand."- 7/14* *"The disadvantage is that they may sit there and not contribute meaningfully because of varying experiences. Young people may not have sufficient commercial*

Theme: Shortcomings of young board leaders	**Quotation**
	experience to bring, particularly if we bring them in too young."- 9/14 *"The JSC itself has insisted that board members serve for a maximum 10 years so you bring in a 38-year-old at the age of 48 they have to leave the board"-9/14* *"I would add no value, I'd be completely overwhelmed, I wouldn't be able to find my voice and I would be a tick box"-10/14* *"Disadvantage is not having enough knowledge to bring enough to the table because a typical board is 7 to 10 people, so you don't have that many people, so everyone has to bring something"- 11/14* *"Well, the disadvantage with younger people only is just less experienced. That's all. That's the only disadvantage. You know, so because experience is something about time and they just haven't had that much time that would be the only other disadvantage"- 12/14* *"The issue would be sufficient skills to match more than one skill on the skills matrix would be the requirement and quite often that is, is a bit of a problem for a young person… drawback would be that matching to various skills."- 13/14* *"You can't have somebody who has got one narrow skill and cannot help you with the rest of the work of the board."- 13/14* *"So, judgment and wisdom, there are plenty of smart young people, but they will be full time engaged in an executive role somewhere. So even if they wanted to, they may not be able to step up"-14/14*

Source: Author

Since research shows that boards of JSE-listed mining companies have a high average age range, the participants were asked to demonstrate the benefits they have experienced with seasoned people serving on boards. Furthermore, to support this, they were also asked to share what they viewed as the shortcomings of including younger people as board members in JSE-listed companies within the mining industry, as referenced in Table 12.

In terms of the benefits of having seasoned people serve as board members, participants highlighted that older individuals possess experience and wisdom; therefore, their perspectives on situations they may have witnessed before can be helpful in current scenarios. Furthermore, since seasoned people have progressed through the stages of board leadership development, they are less vulnerable to unethical or incorrect behaviours and practices (which can lawfully lead to delinquency) within the business and therefore can be difficult to be misled or deceived by their colleagues within the board or by the people that they lead.

Additionally, older individuals possess enriched experience and proficient skills that enable them to contribute constructively from the moment of their appointment. Their career-long exposure to complex corporate environments equips them with a deep understanding of governance, financial oversight, and industry dynamics. Since they are also familiar with boardroom dynamics and cadences, as well as how to engage stakeholders, they are able to seamlessly integrate into their leadership position, requiring minimal onboarding and adjustment. The capabilities they have developed from previous experiences in dealing with challenging situations enable them to provide instantaneous strategic guidance, while requiring little time to develop self-confidence in their work and operate optimally. Whilst younger board members bring fresh new perspectives and innovative edge to a board, they often require onboarding and training to navigate the dynamics of corporate governance. Furthermore, extensive time would be required to provide them with sufficient training and mentoring by fellow board members.

Additionally, since young directors have less experience, they may overcompensate for this lack of expertise in strategy by excessively getting involved in the operational matters of the business. To prove themselves, they may prioritise micromanaging areas that do not fall within their oversight responsibilities, which may lead to tension with fellow board members and executive management.

4.4.2.3. Theme 7: Advantages of young board leaders

Table 13: Theme 7 - Advantages of young board leaders

Theme: Advantages of young board leaders	**Quotation**
Advantages of young people on boards	*"So, I do think there is a fantastic contribution to be made when I sit on boards with young people, I truly enjoy it because obviously somebody 20 years younger than me lives a different life, you know, experience differently and brings a different perspective. But this applies to all diversity… diversity of thinking."-1/14* *"Young people are slightly more interested in, in ESG or slightly more committed to the long-term future of the planet, as you would expect. Now that is of course, fantastically healthy for a board to be challenged that way, yeah."-1/14* *"Diversity of experience"- 2/14* *"You can have more knowledge transfer for so some of the older board members retiring or leave."-2/14* *"For institutional planning for succession planning"-3/14, "continuity on a board"-4/14* *"You get an infusion of young people's ingenuity" -3/ 14* *"So, the good thing about young people is that they don't fear anything, so they're not fearful because life has not prohibited them, or they have not experienced life to an extent where they are very cautious"- 3/14* *"People in the younger generations are very concerned about issues of well-being"- 5/14*

Theme: Advantages of young board leaders	Quotation
	"I think there is definitely a role young people, I mean, there's new thinking, right? And sometimes age doesn't necessarily mean value."-7/14 *"Advantage is that they can bring fresh thinking and can challenge conventional thinking. They may be able to help with spotting future trends as they bring a different type of energy into the conversation."- 9/14* *"You need people with some experience, but some people telling them 'Hey, the fact has always been done that way it doesn't mean it's the right way to do it, because technology is evolving so the way we do things now can be different.'"-11/14* *"Older people become more risk averse, nothing says you should take risks that's moving to the detriment of everybody, but somebody seeing the future in the longer term and stuff like that might be an interesting addition, especially with the movement towards climate change, you need those ideas. You need to take those risks. I think a board that agrees the whole time is not optimal. It should have different opinions, and we should learn how to agree to disagree in a mature way"- 13/14*
Shortcomings of seasoned people on boards	*"Whether it's age or gender or work experience, because you don't want to have just an echo chamber the whole time in your board."-2/14* *"What a lot of boards, especially ones that sort of similar age, similar race, similar backgrounds are you fall into group think you don't think differently."-10/14* *"One thing you can pick up as a board member is who doesn't prepare for meeting. You can pick it up. Yeah, we all got our board pack with iPads, with tablets, whatever you want, open, but you can see when people don't prepare, and sometimes those people are the seasoned*

Theme: Advantages of young board leaders	Quotation
	people, and you also get an element of complacency. Because I've been part of the board for so long, I know what's going on. Actually, that's absolutely not the case so."- 10/14 *"There's a big risk if you only have people like this is that you end up to always do the same things so how do you get a competitive edge if everyone does the same thing, so that's why it's good to have a diverse board."-11/14* *"Older people don't always have the same amount of passion"-13/14*

Source: Author

To evaluate whether there is a benefit in including young people on boards to enhance age diversity, the participants were asked about their views on the reasons why young people would add value to board roles. To better support their reasoning, the participants were also asked to provide thoughts on some of the flaws that seasoned professionals reflect on when holding board positions.

Firstly, it was noted that age diversity can facilitate a diversity of thinking and experience. Young people tend to possess crisp thinking, particularly in terms of innovation and emerging concepts such as ESG, which support efforts to address climate change. Spearheading industries such as mining towards the application of sustainable ways of working is vital. It is important to note the upper echelons theory (UET) referenced under CHAPTER 2, which suggests that the views of the leadership teams can influence the performance of a business and explains that the characteristics of the top management of a corporation will play a role in facilitating strategic decisions (Bekos & Chari, 2023).

Furthermore, the lack of age diversity in boards can be detrimental to a corporation, as the outcome of having homogeneity in boards, as seen in CHAPTER 2, is that board members tend to conform to the norm and allow for the penetration of groupthink (Tuggle et al., 2010).

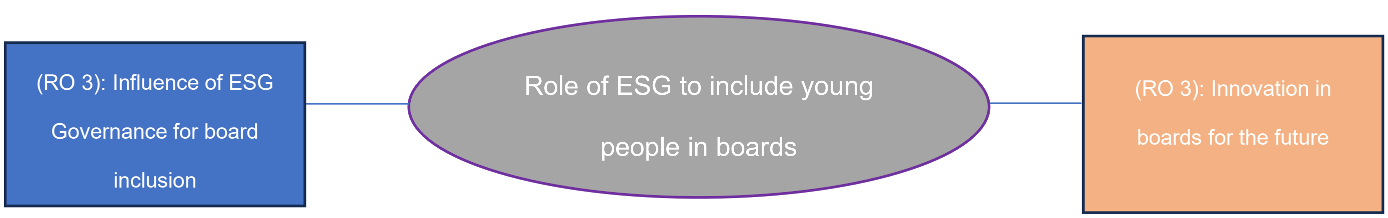
Participants of the study revealed that young people are able to challenge the conventional way of implementing strategies and operations in a business. Since seasoned professionals are experienced and well-acquainted with the dynamics of the board, they tend to be complacent in their approach to performing their duties, which can lead to ill-preparedness and ultimately impact the business's performance. Young people were said to be more energetic in their ways of performing and thinking.

Furthermore, since diverse thoughts and experiences are present, diversity in teams fosters dialogue that encourages innovative ways of working and instils a willingness in businesses to periodically adapt their decision-making processes, ultimately resulting in an enhanced competitive edge (Ramotowski, 2024).

4.4.3. Objective 3: To understand the role that ESG can play in incorporating (including) young people into board leadership

Objective 3 was to understand the role ESG Governance can play in driving the inclusion of young people on boards. The participants were required to provide their views on the influence that governance has on board composition to determine whether there would be an allowance for young people on boards. Furthermore, since ESG will play a significant role in driving climate change in many industries, including mining, the participants shared their thoughts on the perception that younger people are likely to drive innovation that will influence ESG principles and impact climate change in the future.

Figure 10: Themes associated with research objective 3



Source: Author

4.4.3.1. Theme 8: Influence of ESG Governance for board inclusion

Table 14: Theme 8 - Influence of ESG Governance for board inclusion

Theme: Influence of ESG Governance for board inclusion	Quotation
Role of ESG governance to include young people on boards	*"Young people are slightly more interested in, ESG or slightly more committed to the long-term future of the planet, as you would expect. Now that is of course, fantastically healthy for a board to be challenged that way"- 1/14* *"There is no stick to say you must have young people. The sticks are about race and about gender"-1/14* *"I do think as a board you'd really think if we want to run a company, you know, sustainably, it talks about long-term future. It talks about beyond the term of the current CEO. It talks, you know, beyond expecting life expectancy of the 63-year-old directors you know." 1/14* *"I honestly think it [governance] is too narrow. I think we've gone too far. I'm not anti-governance. I think governance as the criteria for selecting boards and you know board composition. But the time you've got 3 CAs as in your board to constitute an Audit committee You've got two or three people left to do everything else, for example. And I mean just illogical, isn't it?"-1/14* *"For instance, if you look at the board charter for each board that says they must take into ac-count diversity, and many do actually put the gender targets in their in their board charter. They put that if they said whatever it forces you to look. So sometimes it helps, particularly when the company does not appreciate diversity. What it is that it's good to have diversity targets, but that's how they're implemented."-6/14*

Theme: Influence of ESG Governance for board inclusion	**Quotation**
	"But at least with that type of institutionalisation, you are able to hold people accountable and you're able to call them out. So, I think there needs to be that policy shift in terms of how you include the most marginalised and the absolute majority, which is young people in terms of the cohort… let there be a quota that ensures some institutionalisation of the participation of young people."-3/14 *"So maybe traditional governance is limiting them [boards]. We paint within the lines we just colour within the lines, don't go over the lines."-4/14* *"It might, help for better decision making and also a responsiveness to changes and crises… so it can be a competitive advantage because you can be probably a bit more agile in a world that's changing all the time… I think you need to be transparent when you're on the whole governance thing what is your targeted composition, make a commitment to it…hold the board accountable for that."-2/14* *"There is a requirement and a commitment for appointments to be mindful of having a diversity policy and secondly, a process that moves you further towards that policy overtime… This country is much better at that because we actually have an active policy for it." 14/14* *"Governance for me. it's got to do with what is more sustained. How do you sustain yourself? You need to look out there and make sure that you are as successful or as challenged as what you are going to be 10 years from."-13/14* *"The custodian of governance should always influence composition, right. Because you're there to govern the company, so you need to make it diverse enough to bring*

Theme: Influence of ESG Governance for board inclusion	**Quotation**
	all those elements into you into the successful governance of that business."-7/14 *"Well, the board composition quite sometimes is a law. So, like in France, 40% diversity in boards, that a law. But quite often is dictated by investors, so investors will for listed company will have rules so if you don't follow that rule, well, some investors will just tell you we'll stop investing in you because that's requirement for us to invest."-11/14* *"So unfortunately, it's not law that you need to have, whether it's 10% of young people, unlike with women in gender parity is institutionalised, but even though it's institutionalised, they're still institutions where you've got full male boards, and nobody says anything about it"-3/14* *"So, none of the boards, all the white male board that has a 66-year age average, they've all met the requirements, the governance requirements. Governance doesn't go into, you need to look at age, race, skill. So, they've met the governance are measurement stick but the intent behind it, I think that's where we lose this when it gets back above."- 10/14*

Source: Author

As referenced under Table 14, the participants were asked to share their views on the governance requirements, specifically those relating to the inclusion of young people in board leadership positions. Stakeholders of companies, including customers, communities, employees, investors, and regulators, are increasingly demanding greater transparency from corporations and their boards regarding their impact on society and the environment. Furthermore, to ensure that sustainability is achieved within businesses, it is a requisite for companies to evaluate their board composition in terms of diversity and the board member profiles to guarantee that their boards possess suitable skills and sentiments that will guide the business to sustainable practices for a better future (Accountancy Europe, 2023).

Participants agreed that governance, to them, means that companies should prioritise sustainability and long-term thinking. Achieving this requires the involvement of diverse groups, including future generations who are most affected by current decisions that will shape the long-term trajectory of businesses. There was consensus that it is the responsibility of those who have the power to make decisions within organisations to ensure that future generations are equipped to continue the legacy.

Participants mentioned that board charters typically incorporate diversity principles for companies and that some listed companies take it a step further by including diversity targets, particularly for race and gender, to inform their recruitment decisions. Currently, the governing frameworks of public companies, predominantly outlined in board charters and Memoranda of Incorporation (MOIs), are frequently restrictive and do not allow for provisions that support an overarching approach to diversity, specifically in terms of age diversity. As a result, many organisations adopt a compliance-driven, 'tick-box' approach to diversity, rather than incorporating meaningful and sustainable practices. The current provisions fail to initiate mechanisms that ensure the inclusion of marginalised groups of people or establish fixed diversity quotas that enhance corporate responsibility and drive long-term change.

In South Africa, principle 7 of the 17 Principles of King IV specifies that "*the governing body should comprise the appropriate balance of knowledge, skills, experience, diversity and independence for it to discharge its governance role and responsibilities objectively and effectively*" (as cited by Van Vuuren, 2020). This may be insufficient, as it is not specific in terms of how exactly (in quotas) companies must allow for achieving diversity, leaving it to the board to rely on their own prerogative when making decisions related to diversity, creating multiple possibilities for using governance as a compliance exercise to tick boxes. Furthermore, other regulations in South Africa, such as the Broad-Based Black Economic Empowerment (B-BBEE), prioritise diversity from an ethnic and racial perspective in terms of management control and remain silent on age diversity.

Companies that demonstrate that they have gone a step further than governance in general by making clear and sufficient considerations for diversity can adopt a competitive edge because, from an ESG perspective, they will be viewed by society at large (including local or foreign investors, customers, and communities) as being sustainable and concerned about their future operations.

4.4.3.2. Theme 9: Innovation in Boards for the Future

Table 15: Theme 9 - Innovation in Boards for the Future

Theme: Innovation in Boards for the Future	Quotation
Innovation is linked to age	*"Will they [young people] drive innovation for sure? Umm, for sure, because they feel differently about the future. They look at the future in a different manner."- 4/14* *"The most innovative phase of people's lives generally is in the late 20s or the early 30s. So, there's something about a younger mind that is fresh and open, not set in old ways. And so yeah, younger minds do lead to better innovation"- 5/14* *"When you now are comfortable in a process, you don't really want to change it. So, the innovation we are seeing in boards is coming from the younger generation"- 8/14* *"I'm saying a lot of the innovation that we see has been driven by young people in executive roles. They can challenge ideas depending on the sector."- 9/14* *"Young people are more likely because, Innovation is more linked to emerging technologies, especially innovation in the 21st century."- 3/14*
Innovation is not linked to age	*"I don't think innovation or anything is that directly related to age… Younger people are more open to new ideas*

Theme: Innovation in Boards for the Future	Quotation
	than older people, so I would have to say yes, but in my unlived experiences but it's not a strong correlation"-1/14 *"The best agents of change or innovation drivers that I've seen have been, it's all the board members too, who have had roles in innovation, and I think that's where that experience comes as a board member"- 2/14* *"It always depends on the skill and innovation is a competency that a person has, not a competency. It's not a, it's not linked to age."-6/14* *"So, I think everybody's likely to drive innovation at both leadership level depending on what the topic is, and you know the notion that the younger you are, the more tech savvy you are is not necessarily true, right."- 7/14* *"No, I think innovation is not necessarily driven by your age, it's driven by the industry you come from. So, I don't think innovation is necessarily driven by young people. I think innovation is probably better understood and that it's an easier sell to a younger person than where it is to someone that's sort of older, but I don't think it necessarily driven. I think innovation is driven more by experience than, yeah, experience in what it is by age."- 10/14*

Source: Author

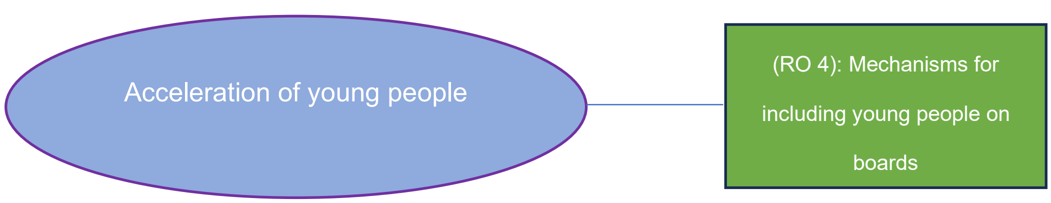
To interrogate the literature referenced in CHAPTER 2, which suggests that innovation and agility are attributed to younger generations, the participants were asked to share their views on whether they believed there was a correlation between age and innovation. There was evidence of a theme where participants agreed that younger people are likely to drive innovation in the environments in which they form part. However, it also became apparent that innovation is not necessarily driven by age or young people, but by situations and industry needs. Furthermore, even though younger people tend to be more tech savvy, it does not result in innovation being preserved solely by them. The findings, therefore, show that everyone is innovative, depending on the situation.

According to Hou (2024), what truly drives innovation within profit-based companies is competition. Competition forces organisations to strive for excellence by thinking divergently, generating new ideas, and creatively developing solutions within the industries they operate in. As a board of directors, it is vital to understand the market and its key players; experience counts when contributing to a competitive edge. As stated by Wadhwa (2012), there is no requirement for age to innovate, and both young and old can contribute to innovative solutions. Younger generations influence technological developments more easily, which is a skill vital to expanding the value of businesses in the future. However, older generations help drive cross-disciplinary innovative solutions due to their extensive experience in various industries.

4.4.4. Objective 4: To propose a mechanism for the inclusion of young people in board leadership

Participants were asked how the average age, as referenced in Table 1, of JSE-listed mining companies could be improved, where they realised the need for this, and provided some suggestions on mechanisms to accelerate the board member careers of young people by including them as board members of a publicly listed company.

Figure 11: Themes associated with research objective 4



Source: Author

4.4.4.1. Theme 10: Acceleration of young people

Table 16: Theme 10 - Acceleration of young people

Theme: Acceleration of young people	Quotation
Mechanisms for including young people on boards	*"So, dovetailing boards is really important and bringing that age down would help."- 13/14* *"And I do think the correct place to get your first board leadership exposure is obviously in the company you work"- 1/14* *"A practice that I was briefly exposed to, which unfortunately has died out, was the concept of an alternate director. So, a director would be able to nominate somebody you know as an alternate and that often was somebody 20 years younger, you know, either in a mentoring relationship"- 1/14* *"Earlier give people exposure earlier on to safer boards like the ones that are 100% owned by Comp 1 just to give you that breadth and then overtime you get to grow the scale and the size and the complexity of the board positions, but don't rush it."- 2/14* *"Joining as a secretary or help to coordinate NGOs (non-governmental organisation) are great for that exposure"- 2/14* *"I mean the same way we would have been firm about gender parity. Let's be firm about intergenerational inclusivity. Have young people in these spaces so that they're able to learn they're able to grow and harness and make meaningful contributions."- 3/14* *"To get invited to a meeting… I have no doubt that exposure to board committee meetings for younger people is not this exclusive club, just to see how things are being done. I mean, how, how do you constitute a meeting? Every chair has got its own unique way of*

Theme: Acceleration of young people	Quotation
	dealing with conflicts of interest, this constituting the meeting. How do you handle difficult situations?"-4/14 *"I look at how many entrepreneurs they are, they must be leaders and business leaders. Where are they?"- 4/14* *"Include younger people on subsidiary boards… organisations have lots of unlisted subsidiaries… to improve the diversity? And secondly, I think that's good for their general leadership experience"- 12/14* *"I think the mechanism is lobbying. It takes leadership from the top. So, in terms of unlisted subsidiary companies, the people who decide that are the CEO and the CFO. So, getting them to appreciate the power and importance of age diversity"- 5/14* *"Getting people who are the chairpersons, either of the company or nomination and Governance Committee to consider age as a factor of higher importance than just all of the others you know. So, it's about going to whoever draws up the score cards when you're doing an interview"- 5/14* *"Junior boards become an easier way for one to accelerate."-6/14* *"There are a lot of courses right on governance, on board preparation of meeting, on JSE rules. You know, just immerse yourself in the world outside of your technical competency because it requires more than just what you know"-7/14* *"So, there's a massive market opportunities in the small business sector, mid-sized businesses, Trusts, body corporates, organisations, NPO's they're all there. Hmm. Which I think where young people should be looking at, especially if they're starting out. Then after three years, four years, five years, you build your brand, you build*

Theme: Acceleration of young people	Quotation
	your name and then you can start transitioning to looking for something that's more."- 8/14 *"Advisory board programme"- 8/14* *"Some corporates are trying out what is called millennial boards which is kind of like a shadow board. Let's have a millennial board of people under the age of 30 or 35 outside of the actual board and they shadow the main board in terms of training in terms of succession planning just to see how things work."-8/14* *"One of the ways of accelerating board experience is to identify the rising stars within organisation and give them opportunity to serve on small boards. We've seen the organisations, like Sasol, has got many subsidiaries and companies that are operating there so if there's a superstar who is a leader because what you want inside the board is also people that have shown progress in their careers, but you want to give them that extra bandwidth."-9/14* *"I think it starts off at the employer's position because I'm not going to put someone on my board that has no connection to the company, and this is where boards internally need to start grooming."-10/14* *"NPCs or NGOs don't have the capacity so what happens is you as a board member now become management and you become involved in the running of the business, so then it's so hard."-10/14* *"To become shadow of the executive committee but also of the board."- 11/14* *"If you look at France, it used to be only men, and then they passed a law which makes it compulsory to have 40% diversity on boards and today I think in France the rate is like 43% of Women as Board members."-11/14*

(Source: Author)

As referenced in Table 16, the participants were asked to identify what they perceive as mechanisms to include young people on boards and accelerate their participation. There were extensive ideas provided, and the prevailing mechanism suggested was that it would start with organisations that employ younger and talented people, developing them to hold board positions.

According to Donohue (2023), a subsidiary is an entity that is partially or entirely owned by another entity, typically referred to as a parent company, which may be either operational or a holding company. The subsidiary must be at least 50% owned by the parent company to be considered controlled by it. It is common for JSE-listed companies to have subsidiaries attached to them. A parent company creates a subsidiary entity to achieve its strategic objectives, and legally, the board of directors of the subsidiary has full authority to oversee the direction of the subsidiary's affairs (Institute of Directors South Africa, 2019). There was a pattern where participants recommended that a career in board leadership begin with managing subsidiaries on behalf of publicly listed companies. According to Brkic and Rossen (2023), an effective developmental mechanism for organisations to apply is to position efficient employees, typically in management roles, on their subsidiary board structures. This way, there is an opportunity to develop individuals within formalised frameworks while filling positions with aspiring board members. The professionals will gain relevant experience serving on boards, which can lead to a long-term career in board leadership. This kind of framework can also be used as an initiative to meet diversity targets by prioritising individuals belonging to marginalised groups.

In line with some of the participants' responses, another mechanism is for organisations to ensure that talented people are given exposure through meeting attendance, to understand the board's cadence. Moreover, there appears to be a consensus that mentoring and guidance for aspiring board members are crucial in accelerating their career development in board service, and this can be achieved through shadow boards.

According to Rodríguez (2022), shadow boards comprise intergenerational and interdisciplinary groups of people, where junior, talented individuals within a company work alongside senior managers on strategic projects, allowing for creativity within initiatives, encouraging team participation, and developing leadership styles. This is an excellent way to enable grooming processes within the mining industry.

A theme emerged where participants suggested that aspiring board directors should not start with large and complex boards, such as those of companies listed on the JSE. Instead, they can begin their careers within small to medium-sized organisations, as well as Non-Profit Companies (NPCs). However, it is important to note the concern that NPCs can introduce the risk that, since NPCs tend to be under-capacitated, independent boards of directors tend to perform executive and operational functions.

To address the exclusion of young board members, participants highlighted that governance structures require some adjustments to allow for diversity, where companies include quotas in their board charters that exceed what is specified by the King Code IV. Furthermore, companies, along with recruiters, can consider incorporating age diversity as a requirement in recruitment criteria. Entrepreneurs who have founded multi-million-rand businesses should also be considered for public company board recruitment, allowing for a wider pool of diversity and creating a pipeline of future leaders. It was also highlighted that succession planning is crucial for the organisation's continuity when older members retire; therefore, committees, recruiters, and shareholders must demonstrate deliberation towards succession planning and the development of younger leaders.

4.5. Summary of the findings

CHAPTER 4 presented a report of the thematic commentary provided by the research study's interview participants in relation to the interview guide questions. The questions were based on the research objectives presented in CHAPTER 1, and the findings were presented as verbatim statements from the research study participants. Valuable insights were imparted that the dynamics in boards, particularly in JSE-listed companies, are not as straightforward as anticipated. Several elements are required to contribute to the success and effectiveness of a board of directors. Recruiters will consider hiring skilled and experienced individuals who understand the intricacies of performing on a board and who demonstrate a high degree of self-confidence in performing board duties. Moreover, shareholders want to see skilled and capable professionals holding board positions to protect their interests.

While participants in the research study agreed that there is an underlying bias toward seasoned and experienced professionals in board recruitment within mining-listed companies, the study revealed a common trend in how board positions are filled. Rather than following a structured, merit-based selection process with publicised applications, candidates often rely on personal and professional networks built throughout their careers. The findings suggested that experience did count; however, it did not take precedence as a primary criterion for recruiting board services.

The reliance on existing relationships and referrals influences decision outcomes in board appointment processes and can significantly limit diversity, particularly age diversity. This exclusion of younger individuals from board leadership restricts opportunities for innovation and diverse thinking, especially in emerging areas such as ESG and digital transformation, which are key drivers of competitive advantage. As such, there is a need to review governance policies in ESG to ensure that young professionals are included in boards through structured processes that enhance diversity, governance, and board effectiveness.

While companies use recruitment services and follow compliant processes to appoint board members, being well-known in a particular industry and having prior board or executive experience creates additional opportunities. This is due to the referral system that often serves as the primary trigger for initiating board recruitment processes. Furthermore, although participants supported the notion of younger generations joining listed boards, expressing that the appropriate age for board leadership starts in a person's late 30s, the data repeatedly showed that networking and experience outweigh all other characteristics required to be a suitable board member candidate.

Additionally, seasoned board members are preferred as they appear to be more proficient when commencing in board roles, requiring little to no training and onboarding. Moreover, as most board members are older and retired, they are likely to be more valuable to organisations because they do not have time constraints owing to them concurrently building their careers. The data highlighted that including younger people on boards, to allow for age diversity, did have benefits. These benefits include succession planning, diverse thinking, and ingenuity within boards. Younger people are also concerned with ESG-related principles and sustainability, as they are more directly affected by the impacts of climate change. Although the literature suggests that young people tend to be more innovative than older people, the data collected indicated that younger individuals are not necessarily better at understanding of innovation.

The study also revealed that whilst the process for board leadership is inclusive, diversity principles within corporate ESG governance are not explicit and clear. The King Code IV allows for diversity; however, it is up to the discretion of the board remuneration committee and recruiters to determine the extent to which diversity will prevail within the company.

Chapter 5 will provide conclusions for each research objective and recommendations for the study.

4.6. Comparison of literature review and study findings

Table 17: Comparison of literature review and findings

RO #	**State Research Question or Objective**	**Hyp #**	**State Hypothesis** (Literature review response to RO)	**Findings from own study**
1	To understand the procedure for identifying and recruiting board members	1	The recruitment of board members typically requires networking. Younger people have likely built a meaningful rapport and reputation owing to their experience and are therefore at a disadvantage when compared to seasoned professionals. The reliance on networks for recruitment into board positions has the potential to counter age diversity in boards.	Whilst experience matters, the criteria for recruiting board members prioritise networks and experience over other characteristics. Board appointments are based on networks and referrals, favouring professionals who have built rapport in the board leadership fraternity. Furthermore, the typical trajectory to leadership for board members is having occupied

RO #	State Research Question or Objective	Hyp #	State Hypothesis (Literature review response to RO)	Findings from own study
				leadership positions in their mid-20s to early 30s.
2	To assess diversity principles that can drive the inclusion of young people in board leadership.	2	Older leadership structures tend to be less agile and innovative.	Younger people are more inclined towards innovative solutions and thinking; however, there is no strong correlation between age and innovation.
3	To understand the role that ESG can play in incorporating (including) young people into board leadership	3	Diversity should be viewed as more than the physical differences or a token exercise where people from differing groups are appointed just as a tick box exercise, and should include many other aspects that are much deeper than the visual representation of diversity	Governance must include long-term sustainability.

RO #	State Research Question or Objective	Hyp #	State Hypothesis (Literature review response to RO)	Findings from own study
4	To propose a mechanism for the inclusion of young people in board leadership.		To enable diversity within boards, creating strategies for recruiting diverse groups, particularly young people in leadership, is vital. Providing the relevant training to recruitment service providers to empower them to become experts in the field of diversity, particularly in board leadership.	Diversity and inclusion of marginalised groups are catered for in the governance principles, such as the King Code; however, it is insufficient in specifying the required quotas. Recruitment criteria have made no allowance for age diversity. ESG can take governance a step further by allowing for the establishment and tracking of age diversity targets to ensure accountability by firms. Board

RO #	State Research Question or Objective	Hyp #	State Hypothesis (Literature review response to RO)	Findings from own study
				charters must align with ESG principles and consider younger generations, who are more passionate about future trends and solutions. Corporate governance lacks intention; therefore, it needs to ensure that compliance is not a tick-box exercise for organisations.

CHAPTER 5.CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

This chapter presents the conclusions of the research study, based on the findings collected and analysed in CHAPTER 4. Initially, the conclusions will address each research objective and close with key differences between initial propositions and study findings from CHAPTER 4. and outline the study recommendations.

The main aim of the research was to determine how JSE- listed mining companies can leverage ESG principles to drive age diversity. In CHAPTER 2, a thorough review of existing literature was carried out. A thematic qualitative research approach, as referenced in CHAPTER 3 was relied upon to address the research objectives outlined in CHAPTER 1. In CHAPTER 4, the data collected was analysed and presented, narrating the verbatim statements provided by the interview participants.

5.2. Conclusions regarding the evaluation of the procedure for identifying and recruiting board members

In listed for-profit organisations, several elements influence the effectiveness of boards such as the competencies and skills of board members affecting their ability to perform key responsibilities to meet stakeholder expectations. The abilities and skill set of directors within companies are important to ensure that organisations are strategically directed to achieve value for the shareholders. Furthermore, to supplement experience and skills within boards, directors must possess a degree of self-confidence to find their voices within the teams they work in and to be able to make a meaningful contribution in leading executive management to perform optimally. The data findings confirmed that recruitment processes for board leadership were primarily through referrals and networks, although search firms are usually engaged to oversee the appointment. Furthermore, professionals who have taken up executive or management roles within JSE listed firms are more likely to secure board positions.

The data depicted that recruitment of board leadership is not based on age in particular but is predominantly dependent on networks and expertise. By the time professionals reach their late 30s, they can be assumed to have gained the requisite skills and capabilities and can therefore be suitable to serve on boards. The favour that older board directors have is that once they serve on boards for long, their credibility and marketability increase hence it becomes easier to justify their recruitment onto boards.

There appears to be an ingrained bias towards the recruitment of older people for board roles owing to the skill set and experience that they have acquired throughout their careers. As referenced by participant 2 under Table 10, the bias towards seasoned professionals is even more apparent in the mining industry as it is more resource heavy from a technical perspective, than other emerging industries such as technology and healthcare. This was also supported by participant 4 in Table 10, in saying that the mining industry is not for the timid.

Training young directors is also difficult, and organisations are not incentivised to develop young people because older directors require little assistance to climatise to the ways of working within boards based on their experience. Moreover, young professionals who sit on boards tend to be career ambitious, limiting their time for meaningful contribution to board roles, as opposed to their older and retired counterparts.

5.3. Conclusions regarding diversity principles that could drive the inclusion of young people in board leadership

The data presented that whilst recruitment processes for board member positions are inclusive in that they allow for gender and race diversity, the insights provided by this study demonstrate that age diversity is insufficient for listed companies. Furthermore, existing board members are most likely to recommend and nominate prospective board members that they know, trust and can relate to. Diversity in boards is vital for the performance of boards and therefore the committees and recruitment specialists that are responsible for the selection criteria, without neglecting skills and experience, should consider people from diverse backgrounds for the benefit of differing views. Aside from economic value for shareholders, diversity in boards exists to correct the historical inequalities that people from marginalised groups have experienced.

Age diversity can allow for diverse thinking and experience. Since there is a movement to transition to sustainable business practices, the inclusion of young people can benefit businesses as young people are more concerned with matters pertaining to ESG and willing to challenge the conventional way of implementing strategies and operations in a business.

5.4. Conclusions regarding the role that ESG can play in incorporating (including) young people into board leadership

Companies are required to consider the long-term effects of business operations by thinking strategically about future generations. Since current decisions, in business are likely to impact legacies, young people are required to be in boardrooms and part of the dialogue since they are most impacted. ESG governance means the consideration of sustainability and long-term thinking which demand the involvement of all types of differing groups of people. Although listed company board charters and MOIs supersede the King Code IV requirements by specifying diversity principles through target setting, they only prioritise such targets towards race and gender participation.

The governance requirements referring to board composition diversity in the King Code IV is not sufficient in that it is high-level and therefore compliance-driven, imposing the threat that companies will use it as a 'tick-box' exercise to claim compliance.

Entities that exhibit evidence to have gone a step further than governance in general though the establishment of sufficient requirements for diversity have the competitive edge since, from an ESG perspective, societies will view them as being sustainable and concerned about the sustainability of future operations.

From the study findings, it is clear that younger people are likely to drive innovation in certain industries and situations, however, this does not mean that the older generations are incapable of innovating.

5.5. Conclusions regarding mechanisms for the inclusion of young people in board leadership

Employers of young talented professionals have the responsibility to train and develop potential board members within the organisation. It is a norm for JSE listed companies to create subsidiaries for a number of reasons including to achieve set strategic objectives. Aspiring and promising employees can be allowed to fill board positions within subsidiary boards to equip them to hold positions with larger and more complex boards at a later stage. Through the serving of boards of subsidiary companies, professionals can gain expertise whilst companies achieve diversity targets by prioritising individuals belonging to marginalised groups, in line with ESG requirements.

Additionally, younger prospective can gain exposure to boards by joining meetings to be accustomed to the dynamics of boards. Shadow boards are an alternative for board leadership exposure which will allow for the development of leadership skills and mentoring.

Young people are also encouraged to start small by occupying board seats in small to medium firms as well as NPCs, however, be mindful that this can impose a risk in terms of board member duties as these entities lack capacity, resulting in board members having to engage in the operations of the business.

Table 18: Consistency table: research objectives, conclusions, and contribution to knowledge

RO#	State Research Objective	State literature-based proposition	Conclusion or answer based on own research	Key differences between initial propositions and study findings – contribution to knowledge
1	To understand the procedure for identifying and recruiting board members	The recruitment of board members typically requires networking. Younger people have likely built a meaningful rapport and reputation owing to their experience and are therefore at a disadvantage when compared to seasoned professionals.	Whilst experience matters, the criteria for recruiting board members prioritise networks and experience over other characteristics. Board appointments are based on networks and referrals, favouring professionals who have built rapport in the board leadership fraternity. Furthermore, the typical trajectory to leadership for board members is having	Experience in board leadership inherently encompasses broader leadership capabilities. This means that individuals who have held managerial or executive roles bring valuable insights and strategic acumen that are essential for effective board participation. While industry-specific experience is important, it is not sufficient on its own. A strong foundation in leadership, demonstrated through roles such as senior management, executive oversight, or strategic decision-making, is a critical

RO#	State Research Objective	State literature-based proposition	Conclusion or answer based on own research	Key differences between initial propositions and study findings – contribution to knowledge
		The reliance on networks for recruitment into board positions has the potential to counter age diversity in boards.	occupied leadership positions in their mid-20s to early 30s.	component in preparing individuals for board-level responsibilities. These roles cultivate the governance mindset, stakeholder engagement skills, and long-term vision required for successful board leadership.
2	To assess diversity principles that can drive the inclusion of young people in board leadership.	Older leadership structures tend to be less agile and innovative.	Younger people are more inclined towards innovative solutions and thinking; however, there is no strong correlation between age and innovation.	A key difference is that, based on the findings, innovation is not necessarily driven by the younger generation; rather, anyone at any age has the capability to be innovative, depending on the situation. Age is therefore not a driver of innovation.
3	To understand the role that ESG can play in incorporating	Diversity should be viewed as more than the physical	Governance must include long-term sustainability.	Both the literature review and key findings emphasise that governance

RO#	State Research Objective	State literature-based proposition	Conclusion or answer based on own research	Key differences between initial propositions and study findings – contribution to knowledge
	(including) young people into board leadership	differences or a token exercise where people from differing groups are appointed just as a tick box exercise, and should include many other aspects that are much deeper than the visual representation of diversity.		must prioritise long-term sustainability. A critical aspect of this is the authentic integration of diversity, not merely as a compliance measure, but as a strategic imperative. True diversity is realised when young leaders are intentionally trained, mentored, and developed to take on future leadership roles. This approach fosters meaningful succession planning, ensuring that board representation reflects genuine inclusion. In contrast, placing individuals in leadership positions

RO#	State Research Objective	State literature-based proposition	Conclusion or answer based on own research	Key differences between initial propositions and study findings – contribution to knowledge
				solely to meet diversity targets risks reducing the process to a superficial exercise, undermining the transformative potential of inclusive governance.
4	To propose a mechanism for the inclusion of young people in board leadership.	To enable diversity within boards, creating strategies for recruiting diverse groups, particularly young people in leadership, is vital. Providing the relevant training to recruitment service providers to	Diversity and inclusion of marginalised groups is catered for in the governance principles such as the King Code, however, is not sufficient in specifying the quotas required.	Recruitment criteria have made no allowance for age diversity. ESG can take governance a step further by allowing for the establishment and tracking of age diversity targets to ensure accountability by firms. Board charters must align with ESG principles and consider younger generations, who are more passionate about future trends and

RO#	State Research Objective	State literature-based proposition	Conclusion or answer based on own research	Key differences between initial propositions and study findings – contribution to knowledge
		empower them to become experts in the field of diversity, particularly in board leadership.	Recruitment criteria have made no allowance for age diversity. ESG can take governance a step further by allowing for the establishment and tracking of age diversity targets to ensure accountability by firms. Board charters must be in congruent with ESG and consider younger generations who are more passionate about future trends and solutions. Corporate governance lacks intention, therefore, needs to ensure that	solutions. Corporate governance lacks intention; therefore, it needs to ensure that compliance is not a tick-box exercise for organisations.

RO#	State Research Objective	State literature-based proposition	Conclusion or answer based on own research	Key differences between initial propositions and study findings – contribution to knowledge
			compliance is not a tick-box exercise for organisations.	

5.6. Recommendations

This section of the chapter proposes interventions that can drive an accelerated inclusion of young professionals in board leadership. These interventions are recommended based on the study findings and are recommended to rectify the situation in line with objective 4.

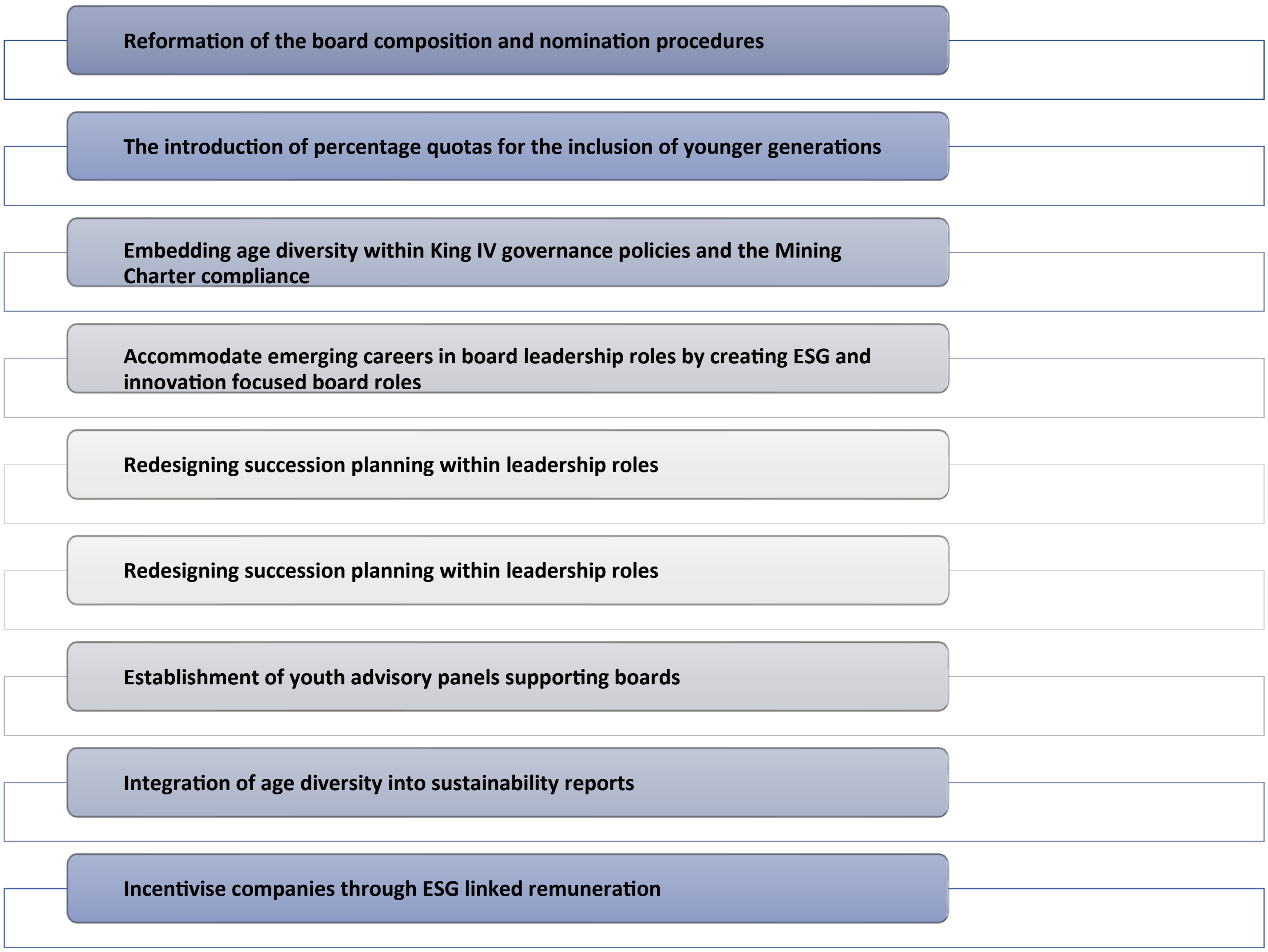
5.6.1. Proposed interventions to enhance ESG governance to accelerate the inclusion of young professionals in board leadership

To facilitate the meaningful inclusion and participation of young professionals in board leadership and corporate governance roles, publicly listed corporations can implement organisational and procedural changes within their governance frameworks. These changes should align with ESG (Environmental, Social, and Governance) principles, ensuring that the "G" pillar includes specific targets for age diversity on company boards.

Since the youngest average age of the companies referenced in Figure 12 is 54 years, it is recommended that JSE-listed mining companies adopt a formal threshold for board composition with an average age of at least 45 years. This recommendation is supported by data in Table 1, which shows that individuals can begin serving on boards in their late 30s. Furthermore, by 45 years of age, a person who has typically started their career at 22 years old has accumulated at least 23 years of industry experience. This would have equipped them with the maturity and leadership skills required for board positions. This target age sets a benchmark that can create a balance for diverse teams in leadership.

Figure 12 illustrates proposed interventions aimed at accelerating the inclusion of young professionals in publicly listed companies, such as those listed on the Johannesburg Stock Exchange (JSE). To avoid overregulating the mining industry, these interventions can be progressively implemented, in line with the industry's transformation.

Figure 12: Key interventions to enhance ESG governance to accelerate age diversity in boards



Source: Author

Based on the data analysis presented in CHAPTER 4, this study proposes the following interventions. These are recommended for adoption and ongoing monitoring to ensure that publicly listed companies continue to implement ESG principles effectively. Accordingly, the following interventions are proposed:

- Reforming or redesigning board composition and nomination procedures. Boards of listed mining companies are recommended to integrate ESG-related age diversity Key Performance Indicators (KPIs) into their nomination committee charters to hold themselves accountable for the inclusion of intergenerational groups and enable age diversity targets, as well as the representation of young people on boards.

- The introduction of vigorous quota percentages, aligned with company size, can ensure that a minimum percentage of board seats is reserved for directors under an agreed age, such as under 45 years. These quotas should be monitored and reviewed every three years to align with ongoing transformation and governance progress within the sector.
- Alongside gender and race, the recommendation is for the explicit inclusion of age diversity recognition in the King IV and Mining Charter codes and policies. This will enable a commitment to include intergenerational leadership as a means to transform corporate governance in a sustainable manner.
- Boards can be mandated to create at least one board-level role that specialises in emerging fields such as ESG, digital innovation, and sustainability as a whole. These fields are likely to prioritise qualified younger professionals.
- It is recommended that there be a review and redesign of succession planning, involving cross-board exchanges. Rather than following the current protocol of training within unlisted company boards or subsidiary boards, a rotational cross-board programme is recommended with corporates. Here, high-potential young professionals are identified and rotate through 2-3 different boards of the listed parent company (including its subsidiaries, joint ventures, and partner companies) over a specified period. This will provide hands-on, in-depth governance immersion, bring cross-pollination and differing views, and retain talent.
- Sustainability reporting by listed companies can incorporate age diversity, similar to gender and race, by disclosing relevant metrics to investors and the public at large within their reports. These reports can also track historical data to demonstrate how the companies have progressed over the years.
- Incentivising listed companies through ESG-aligned remuneration, similar to how remuneration is linked to financial performance. Diversity, from a governance perspective, should become a business outcome for board directors, ensuring that intergenerational representation drives diversity beyond compliance requirements.

This approach compels board members to integrate inclusion into their strategic decisions and the company's direction.

- The development of a youth advisory panel comprising under-40 young professionals who provide support to boards. These panels can then act as a pipeline for future board member appointments.

5.6.2. Recommendations to governance legislators / lawmakers

Whilst there is appreciation for diversity in certain legislations, some laws in place are insufficient in allowing for the inclusion of young people in leadership roles, especially on boards of directors.

Policymakers and regulators, together with institutions that develop and accredit board members, such as the Directors Association of South Africa, can formally embed age diversity requirements into promulgated codes and charters. Whilst the King Code IV and the Mining Charter focus on representation, such as race and gender, generational diversity can also be emphasised as a compliance requisite.

The B-BBEE regulations can also enable revisions to include young generations as part of the management control element, thereby progressing the inclusion of young people on the boards of trading companies, such as those listed on the JSE. Thus, the inclusion of percentage quotas for under-40 board members in listed companies can be set within the King Code IV and other compulsory integrated reporting frameworks. By regulating age diversity, policymakers can address intergenerational equity and ensure that listed mining companies can capitalise on opportunities for expanded innovation and risk-tolerant perspectives that younger generations bring, in support of current boards.

5.6.3. Recommendations to listed mining companies

Listed mining companies can embrace progressive governance practices that stretch beyond compliance. This can be achieved by targeting portions of remuneration and director fees towards age diversity targets, similar to incentivising firm financial performance. Additionally, to accelerate the participation of younger board members in the years to come, companies can focus on establishing cross-board or rotational board programs where young, high-potential professionals can rotate across boards of parent companies to gain experience and exposure, thereby building their readiness for governance roles. Furthermore, boards can establish youth advisory panels that provide support and input into board decision-making processes, thereby strengthening their capacity.

5.6.4. Recommendations to recruiters and board committee members

Nomination committees of boards and executive search partners or recruiters play a vital role in shaping the composition of boards. The consideration would be to include age diversity in the nomination charters through KPIs. Inventive succession planning should be a priority, and it would be worthwhile to expand the recruitment search beyond the typical executive pipelines by equally prioritising age diversity, just as with gender and ethnic diversity.

Furthermore, it is suggested that executive roles, which are also required to be part of a board, should not be limited to traditional past positions, such as the CEO or CFO. There is a need for board representation to expand to include managers with diverse skills and competencies that align with the organisation’s strategic objectives. This will ensure that the leadership team is well-rounded and delivers diverse competencies to strengthen decision-making processes within the business, thereby widening the pool of prospective board members, including young people.

5.6.5. Recommendations to investors and shareholders

Investors and shareholders play a vital role in the business success of JSE-listed firms and bear a significant responsibility in promoting sustainable practices among listed companies in the country. With the tracking of environmental and social impacts (“E” and “S”) having gained traction, shareholders are advised to uplift governance in terms of the ESG framework and ensure that companies are proactively and sufficiently amending policies that allow for aspects such as the fair governing of board composition to promote age diversity within leadership structures.

Since investors are progressively driving ESG performance, there should be a demand for transparent age diversity metrics within company integrated reports. The more companies report on age diversity, the higher the potential for prioritising it due to normative pressures. Showcasing year-on-year comparisons of age data will keep the momentum going and give stakeholders a need to want to see improvement. This creates a tacit expectation for improvement and sparks debates around the performance and achievement of other forms of diversity beyond gender and age.

Determining clear targets and accountability measures can help ensure that companies are not treating ESG as a compliance-driven ‘tick box’ approach but instead create value for the well-being and sustainability of all societies.

REFERENCES

AbouSeada, N., & Hatem, T. M. (2022). Climate action: Prospects of green hydrogen in Africa. *Energy reports*. 8, 3873-3890.

Accountancy Europe. (2023). ESG Governance: questions boards should ask to lead the sustainability transition. https://accountancyeurope.eu/wp-content/uploads/2023/11/ESG-Governance-toolkit-for-boards_FINAL.pdf

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of financial economics*, 94(2), 291-309.

Alsaba, W., Al-Sobhi, S. A., & Qyyum, M. A. (2023). Recent advancements in the hydrogen value chain: Opportunities, challenges, and the way Forward–Middle East perspectives. *International Journal of Hydrogen Energy*.

Akhtar, I. (2016). Research Design. Research in Social Science: Interdisciplinary Perspectives.

Alavi, S. T., Rabah, S., & Jones, A. (2021). Studying transactional and transformational leader and leadership in government and private organizations in UAE. *International Journal of Management (IJM)*, 12(4), 808-820.

Amanchukwu, R. N., Stanley, G. J., & Ololube, N. P. (2015). A review of leadership theories, principles and styles and their relevance to educational management. Management, 5(1), 6-14.

Anderson, M. J., Crist, T. O., Chase, J. M., Vellend, M., Inouye, B. D., Freestone, A. L., ... & Swenson, N. G. (2011). Navigating the multiple meanings of β diversity: a roadmap for the practicing ecologist. *Ecology letters*, 14(1), 19-28.

Antonakis, J & Day, D (2017). *The nature of leadership*. Sage Publications.

Alawadi, A., Kakabadse, N., Morley, M., & Khan, N. (2023). Diversified boards and the achievement of environmental, social, and governance goals*. Business Ethics, the Environment & Responsibility*, 33(3), 331-348.

Alex, D. (2023). How to Present the Limitations of a Study in Research? https://researcher.life/blog/article/what-are-limitations-of-study-in-research/

Atlas. ti. (2024). The Guide to Thematic Analysis. https://atlasti.com/guides/thematic-analysis/thematic-analysis-advantages-benefits-strengths#:~:text=This%20process%20facilitates%20a%20comprehensive,nuanced%20interpretation%20of%20the%20data.

Asenahabi, B. M. (2019). Basics of research design: A guide to selecting appropriate research design. *International Journal of Contemporary Applied Researches*, 6(5), 76-89.

Bass, B. M., & Bass, R. (2009). The Bass handbook of leadership: Theory, research, and managerial applications. Simon and Schuster.

Barak, M. E. M. (2022). Managing diversity: Toward a globally inclusive workplace. Sage Publications.

Bekos, G., & Chari, S. (2023). Upper echelons theory: A review. *TheoryHub book*.

Benmira, S., & Agboola, M. (2021). Evolution of leadership theory. *BMJ leader, leader-2020.*

Boshoff, A. (2023). The importance of governance in your ESG journey. https://www.bdo.com.au/en-au/insights/esg-sustainability/the-importance-of-governance-in-your-esg-

Boulenger, A. Job, A. Reeves, M & Rüdiger F. (2023). Businesses Need to Bring Younger Employees into Their Leadership Ranks. *Harverd Business Review*. https://hbr.org/2023/10/businesses-need-to-bring-younger-employees-into-their-leadership-ranks

Brennan, N. (2006). Boards of directors and firm performance: is there an expectations gap?. *Corporate Governance: An International Review*, 14(6), 577-593.

Brkic, K. & Rossen, M. (2023). Expanding and Diversifying Director Candidate Pools through Subsidiary Board Service. *Harvard Law School Forum on Corporate Governance*. Deloitte LLP. https://corpgov.law.harvard.edu/2023/02/05/expanding-and-diversifying-director-candidate-pools-through-subsidiary-board-service/

Broman, G. I., & Robèrt, K. H. (2017). A framework for strategic sustainable development. *Journal of cleaner production*, 140, 17-31.

Byron, K. & Post, C. (2015). Women on boards and firm financial performance: A meta-analysis. Academy of management Journal, 58(5), 1546-1571.Carter, D., Simkins, B., Simpson, W. (2003). Corporate governance, board diversity, and firm value. *Financial Review* 38, 33–53.

Capps, G. (2012). Victim of its own success? The platinum mining industry and the apartheid mineral property system in South Africa. Review of African Political Economy, 39(131), 63–84.

Centobelli, P., Cerchione, R., & Esposito, E. (2020). Pursuing supply chain sustainable development goals through the adoption of green practices and enabling technologies: *A cross-country analysis of LSPs*. Technological Forecasting and Social Change, 153, 119920.

Chemeli, Angelah & Njoroge, Joseph. (2021). Generation X.

Clune, R., Hermanson, D. R., Tompkins, J. G., & Ye, Z. (2014). The nominating committee process: A qualitative examination of board independence and formalization. *Contemporary Accounting Research*, 31(3), 748-786.

Collevecchio, F., Temperini, V., Barba-Sanchez, V., & Meseguer-Martinez, A. (2024). Sustainable Governance: Board Sustainability Experience and the Interplay with Board Age for Firm Sustainability. *Journal of Business Ethics*, 1-19.

Creswell, J. W., & Poth, C. N. (2018). Qualitative inquiry and research design: Choosing among five approaches. Sage publications.

Dartey-Baah, K. (2014). Effective leadership and sustainable development in Africa: is there “really” a link? Journal of Global Responsibility, 5(2), 203-218.

DasGupta, R. (2022). Financial performance shortfall, ESG controversies, and ESG performance: Evidence from firms around the world. *Finance Research Letters*, 46, 102487.

Dawadi, S. (2020). Thematic analysis approach: A step-by-step guide for ELT research practitioners. *Journal of NELTA*, 25(1-2), 62-71.

Delgado, D., Hill, N., Regalado, A., & Waldman, N. (2020). Millennials leading the workforce. *Journal of Business Studies Quarterly*, 10(2), 35-42.

Dimock, M. (2019). Defining generations: Where Millennials end, and Generation Z begins. Pew Research Center. https://www.pewresearch.org/short-reads/2019/01/17/where-millennials-end-and-generation-z-begins/

Donohue, J. (2023). What is a subsidiary company? Definition, examples and FAQ. Diligent. https://www.diligent.com/resources/blog/what-is-a-subsidiary-company

Dube, S., & Maroun, W. (2017). Corporate social responsibility reporting by South African mining companies: Evidence of legitimacy theory. South African Journal of Business Management, 48(1), 23-34.

Easwaramoorthy, M & Zarinpoush, M. E. (2006). Interviewing for Research. https://sectorsource.ca/sites/default/files/resources/files/tipsheet6_interviewing_for_research_en_0.pdf.

Edwards, T., Marginson, P., Edwards, P., Ferner, A., Tregaskis, O., Edwards, T., Marginson, P., (2007). Corporate social responsibility in multinational companies: management initiatives or negotiated agreements? Internat. Inst. for Labour Studies 1e27.

Elmusharaf, K. (2012). Qualitative data collection techniques. *Training Course in Sexual and Reproductive Health Research*. Geneva.

Farag, H., & Mallin, C. (2017). Board diversity and financial fragility: Evidence from European banks. International Review of Financial Analysis, 49, 98-112.

Farndale, E., Biron, M., Briscoe, D. R., & Raghuram, S. (2015). A global perspective on diversity and inclusion in work organisations. The International Journal of Human Resource Management, 26(6), 677-687.

Ferrero-Ferrero, I., Fernández-Izquierdo, M. Á., & Muñoz-Torres, M. J. (2016). The effect of environmental, social and governance consistency on economic results. Sustainability, 8(10), 1005.

Field, L. C., Souther, M. E., & Yore, A. S. (2020). At the table but can not break through the glass ceiling: Board leadership positions elude diverse directors. Journal of Financial Economics, 137(3), 787-814.

Fos, V., Jiang, W., & Nie, H. (2024). A diverse view on board diversity. *Working Paper,* Boston College.

Gardiner, E. (2024). What's age got to do with it? The effect of board member age diversity: a systematic review. Management Review Quarterly, 74(1), 65-92.

Garg, S., & Sangwan, S. (2021). Literature review on diversity and inclusion at workplace, 2010–2017. Vision, 25(1), 12-22.

George, E. O. (2023). Top 5 Ethical Considerations in Research. https://paperpal.com/blog/researcher-resources/phd-pointers/top-5-ethical-considerations-in-research

Gigauri, I. (2021). Understanding the expectations of young employees towards leadership in organizations. In *Proceedings of the XXVIII International Scientific and Practical Conference: Social and Economic Aspects of Education in Modern Society, 3* (Vol. 8).

Goes, M. K. (2017). Scope, Limitations, And Delimitations. https://www.ders.es/limitationscopedelimitation1.pdf

Grover, V. (2015). Research approach: An overview of interdisciplinary research. *Journal of Golden Research Thoughts*, *4.*

Guha, A. B. (2010). Motivators and Hygiene Factors of Generation X and Generation Y-The Test of Two-Factor Theory. Vilakshan: *The XIMB Journal of Management,* 7(2).

Hafsi, T., & Turgut, G. (2013). Boardroom diversity and its effect on social performance: Conceptualization and empirical evidence. *Journal of business ethics,* 112, 463-479.

Halcro, K., Ben Noamene, T., Chaher, D., & Talib, A. (2021). Is there a business case for board diversity? An investigation of UK's FTSE 100 companies. Human Systems Management, 40(3), 421-434.

Hallam, A., Macnamara, A., Morris, B., & Spagnolo, D. (2018). Diversifying boards: beyond tokenism.

Hamberg, A. (2024). Board Age Diversity Impact on Environmental Sustainability Performance: A Study on Nordic Companies.

Hambrick, D. C., & Mason, P. A. (1984). Academy of Management. *The Academy of Management Review*, 9, 193.

Harjoto, M. A., & Wang, Y. (2020). Board of directors' network centrality and environmental, social and governance (ESG) performance. Corporate Governance: *The international journal of business in society*, 20(6), 965-985.

Hartzmark, S. M., & Sussman, A. B. (2019). Do investors value sustainability? A natural experiment examining ranking and fund flows. *The Journal of Finance*, 74(6), 2789-2837.

Heidrick & Struggles. (2023). Board Monitor South Africa 2023. https://www.heidrick.com/-/media/heidrickcom/publications-and-reports/board-monitor-south-africa-2023.pdf

Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: *A systematic review of empirical tests.* Social science & medicine, 292, 114523.

Henisz, W., Koller, T., & Nuttall, R. (2019). Five ways that ESG creates value*. McKinsey Quarterly*, 4, 1-12.

Holvino, E., Ferdman, B. M., & Merrill-Sands, D. (2004). Creating and sustaining diversity and inclusion in organizations: *Strategies and approaches.*

Hom, P. W., Roberson, L., & Ellis, A. D. (2008). Challenging conventional wisdom about who quits: Revelations from corporate America. *Journal of Applied Psychology*, 93(1), 1.

Handoyo, S., & Anas, S. (2024). The effect of environmental, social, and governance (ESG) on firm performance: the moderating role of country regulatory quality and government effectiveness in ASEAN. Cogent Business & Management, 11(1), 2371071.

Houle, C. O. 1990. Who should be on your board? Nonprofit World, 8: 33–35.

Hussain, N., Rigoni, U., & Orij, R. P. (2018). Corporate governance and sustainability performance: Analysis of triple bottom line performance. Journal of business ethics, 149(2), 411-432.

International Actuarial Association. (2018). Decarbonization: A Briefing for Actuaries Discussion Paper*. Resource and Environment Working Group*.

Institute of Directors South Africa. (2019). Group Governance- *King IV Practice Notes*.

Ismail, A. M., & Latiff, I. H. M. (2019). Board diversity and corporate sustainability practices: Evidence on environmental, social and governance (ESG) reporting. *International Journal of Financial Research*, 10(3), 31-50.

Jagoo, K. (2024). What Is Inclusion? Race and Social Justice. https://www.verywellmind.com/what-is-inclusion-5076061

Janahi, M., Millo, Y., & Voulgaris, G. (2023). Age diversity and the monitoring role of corporate boards: Evidence from banks. human relations, 76(10), 1599-1633.

Jones, K. P., Peddie, C. I., Gilrane, V. L., King, E. B., & Gray, A. L. (2016). Not so subtle: A meta-analytic investigation of the correlates of subtle and overt discrimination. *Journal of management*, 42(6), 1588-1613.

Johannesburg Stock Exchange. (2022). Leading the way for a better tomorrow. *JSE Sustainability Disclosure Guidance*.

Kakar, Z. U. H., Rasheed, R., Rashid, A., & Akhter, S. (2023). Criteria for assessing and ensuring the trustworthiness in qualitative research.

Kang, H., Cheng, M., and Gray, J. 2007. Corporate Governance and Board Composition: diversity and independence of Australian boards, Corporate Governance: An Interview Review, 15 (2): 194-207

Karima, S. (2023). Millennial leadership in Great place to work companies in Finland.

Khanday, SA & Khanam, S. A. (2019). The Research Design. *Journal of Critical Reviews*, 6.

Kirchherr, J., & Charles, K. (2018). Enhancing the sample diversity of snowball samples: Recommendations from a research project on anti-dam movements in Southeast Asia. PloS one, 13(8), e0201710.

Knott, E., Rao, A. H., Summers, K., & Teeger, C. (2022). Interviews in the social sciences. *Nature Reviews Methods Primers*, 2(1), 73.

Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1), 120-124.

Hujdur, A. &. Kostić, N. (2023). Building a Sustainable Future: ESG Business Handbook. How Environmental, Social and Governance Standards Can Benefit Your Business, (3) p, 10.

Kowske, B. J., Rasch, R., & Wiley, J. (2010). Millennials'(lack of) attitude problem: An empirical examination of generational effects on work attitudes. *Journal of business and psychology*, 25, 265-279.

Knauer, T., Silge, L., & Sommer, F. (2018). The shareholder value effects of using value-based performance measures: Evidence from acquisitions and divestments. *Management Accounting Research*, 41, 43-61.

Kulik, C. T., Ryan, S., Harper, S., & George, G. (2014). Aging populations and management. *Academy of Management Journal*, 57(4), 929-935.

Kunze, F. (2013). Age Diversity, Age discrimination, and performance consequences – A Cross Organizational Study. *International Journal of Humanities and Social Science*, 3(30), 187-192.

Lalanne, M. (2021). Social networks and job referrals in recruitment (No. 652). Collegio Carlo Alberto.

Lehn, K. M., Patro, S., & Zhao, M. (2009). Determinants of the size and composition of US corporate boards: 1935-2000. *Financial management*, 38(4), 747-780.

Leitão, C. F., Gomes, J., dos Santos, D. C., & Maia, B. M. (2021). Impact of Leadership on the Relationship Between Innovation and Performance: Portuguese Hotel Sector. *International Journal of Tourism and Hospitality Management in the Digital Age* (IJTHMDA), 5(2), 29-49.

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Newberry Park.

ListCorp. (2025). Johannesburg Stock Exchange (JSE). https://www.listcorp.com/jse/sectors/basic-materials

Lopez, V., & Whitehead, D. (2013). Sampling data and data collection in qualitative research. *Nursing & midwifery research: Methods and appraisal for evidence-based practice,* 123, 140.

Low, L. A. (2022). The All Important" G" in ESG and Its Relationship to Good Governance and Corporate Compliance in Anti-Corruption: *Towards a More Holistic Approach.* Sw. J. Int'l L., 28, 340.

Lowan, V. (2024). Board Effectiveness and Succession Planning. Odgers Berndtson

Lyons, S., & Kuron, L. (2014). Generational differences in the workplace: A review of the evidence and directions for future research. *Journal of organizational behavior*, 35(S1), S139-S157.

Mack, N. (2005). Qualitative research methods: A data collector’s field guide.

Madanchian, M., Hussein, N., Noordin, F. & Taherdoost, H. A. M. E. D. (2016). Leadership theories; an overview of early stages. *Recent advances in energy, environment and financial science*, 198, 201.

Mallin, C. A., & Farag, H. (2017). Balancing the Board: Directors' Skills and Diversity. ICAS.

Mande, W. (2019). The International Journal Of Business & Management.

Mariano, L. & Matthee, R. (2018). South Africa CFO South Africa CFO Route to the Top. Spencer Stuart.

McKinsey & Company. (2022). https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-diversity-equity-and-inclusion#/

Merendino, A., & Melville, R. (2019). The board of directors and firm performance: empirical evidence from listed companies. Corporate Governance: *The international journal of business in society*, 19(3), 508-551.

Miller, T., & del Carmen Triana, M. (2009). Demographic diversity in the boardroom: Mediators of the board diversity–firm performance relationship. *Journal of Management studies*, 46(5), 755-786.

Miller, F. A., Miller, F., & Katz, J. (2002). Inclusion breakthrough: Unleashing the real power of diversity. Berrett-Koehler Publishers.

Minerals Council South Africa. (2023). Facts and Figures 2023. Johannesburg.

Mirza, H., Mirza, C., & Bellalem, F. (2023). Ethical considerations in qualitative research: Summary guidelines for novice social science researchers. *Social Studies and Research Journal*, 11(1), 441-449.

Montenegro, M. (2023). ESG Performance drives Corporate Performance. https://www.wolterskluwer.com/en/expert-insights/the-importance-of-esg-as-a-key-drive-of-corporate-performance#:~:text=According%20to%20McKinsey%2C%20studies%20show,and%20reduction%20in%20downside%20risk

Moore, R., Nielsen, C. & Karlsen, S. (2014). 10 keys to becoming a successful board member: How to contribute to the success of a board. Mercuri Urval. 1-7. *The International Journal Of Business & Management.*

Moraka, N. V. (2023). Appointment of women to mining boards-Evidence of tokenism. Journal of the Southern African Institute of Mining and Metallurgy, 123(12), 565-572.

Morrison, R. (2021). Environmental, Social, and Governance Theory: Defusing a Major Threat to Shareholder Rights. Available at SSRN 3845709.

Morrow-Howell, N., Dinman, M., Mauk, S., & Galucia, N. (2024). Age as a factor in diversity, equity, and inclusion initiatives in higher education. Journal of gerontological social work, 67(3), 386-402.

Mothe, C., & Nguyen-Thi, T. U. (2021). Does age diversity boost technological innovation? Exploring the moderating role of HR practices. European Management Journal, 39(6), 829-843.

Musson, S. (2014). The importance of upskilling both technical and leadership skills. *Training Journal.* https://www.trainingjournal.com/2024/content-type/opinion/the-importance-of-upskilling-both-technical-and-leadership-skills/

Natesan, P. & du Plessis, P. (2018). Board tenure: Don't do it by the numbers. Institute of Directors South Africa. https://www.iodsa.co.za/news/415224/Board-tenure-Dont-do-it-by-the-numbers.htm

Natesan, P. & du Plessis, P. (2018). Number of boards: A delicate balance. Institute of Directors South Africa. https://www.iodsa.co.za/news/405714/Number-of-boards-A-delicate-balance.htm#:~:text=This%20role%20has%20certainly%20become,hours%20(2015%E2%80%9316).

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International journal of qualitative methods*, 16(1), 1609406917733847.

Onorato, M., Walsh, L., & Lei, Y. (2018). Millennials: Effective leaders of the future. *Academy of Business Research Journal*, 2, 22-35.

Paradis, E., O'Brien, B., Nimmon, L., Bandiera, G., & Martimianakis, M. A. (2016). Design: Selection of data collection methods. *Journal of graduate medical education*, 8(2), 263-264.

Pearce, J. A., & Zahra, S. A. (1992). Board composition from a strategic contingency perspective. *Journal of management studies*, 29(4), 411-438.

Pfeffer, J., & Salancik, G. R. (1978), The External Control of Organisations: A Resource Dependence Perspective. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.

Pollman, E. (2022). The making and meaning of ESG. *U of Penn, Inst for Law & Econ Research Paper*, (22-23).

Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*, 89, 62–77.

Ramotowski, S. (2024). The Importance of Diversity in Leadership Roles 2024. (N. University, Ed.)

Peng, H., & Chandarasupsang, T. (2023). The effect of female directors on ESG practice: Evidence from China. *International Journal of Financial Studies*, 11(2), 66.

Rajgopal, S. (2022). ESG–A Defense, A Critique, And A Way Forward: An Evidence-Driven Pragmatic Perspective. Forbes.

Rau, P. R., & Yu, T. (2024). A survey on ESG: investors, institutions and firms. China *Finance Review International*, 14(1), 3-33.

Rhode, D. L., & Packel, A. K. (2014). Diversity on corporate boards: How much difference does difference make. *Del. J. Corp. L.*, 39, 377.

Richardson, M. Nielsen, C. Karlsen, S. (2016). Building self-confidence and critical thinking skills. *Training & Development*, 43(2), 14.

Rodríguez, R. (2022). 5 benefits of implementing a shadow board. iFeel. https://ifeelonline.com/en/occupational-health/shadow-board/

Rodrigues, M., & Mendes, L. (2018). Mapping of the literature on social responsibility in the mining industry: A systematic literature review. Journal of cleaner production, 181, 88-101.

Rossouw, G. J. (2017). The King IV Report on Corporate Governance for South Africa, 2016. Journal of Business Ethics, 152(4), 893–901.

Sahin, I. (2006). Detailed review of Rogers' diffusion of innovations theory and educational technology-related studies based on Rogers' theory. *Turkish Online Journal of Educational Technology*-TOJET, 5(2), 14-23.

O’Leary, P. & Sample, A. (2021) Board Readiness Essentials. How to Navigate Today’s Board Landscape and Stand Out as a candidate. Navigate Forward. 1-13

Sarfo, J. O., Debrah, T., Gbordzoe, N. I., Afful, W. T., & Obeng, P. (2021). Qualitative research designs, sample size and saturation is enough always enough. *Journal of Advocacy, Research and Education*, 8(3), 60-65.

Sathiyaseelan, M. (2015). Research Instruments. *Indian Journal of Continuing Nursing Education*, 16(2), 57-60.

Schroth, H. (2019). Are you ready for Gen Z in the workplace? *California Management Review*, 61(3), 5-18.

Senadheera, S. S., Gregory, R., Rinklebe, J., Farrukh, M., Rhee, J. H., & Ok, Y. S. (2022). The development of research on environmental, social, and governance (ESG): A bibliometric analysis. Sustainable Environment, 8(1), 2125869.

Serfling, M. A. (2014). CEO age and the riskiness of corporate policies. *Journal of corporate finance*, 25, 251-273.

Seth, R., Gupta, S., & Gupta, H. (2021). ESG investing: a critical overview. Hans Shodh Sudha, 2(2), 69-80.

Sharma, M. K., & Jain, S. (2013). Leadership management: Principles, models and theories. *Global journal of management and business studies*, 3(3), 309-318.

Shen, J., D'Netto, B., & Tang, J. (2010). Effects of human resource diversity management on organizational citizen behaviour in the Chinese context. *The International Journal of Human Resource Management*, 21(12), 2156-2172.

Shore, L. M., Cleveland, J. N., & Sanchez, D. (2018). Inclusive workplaces: A review and model. *Human resource management review*, 28(2), 176-189.

Slagsvold, B., & Hansen, T. (2021). The Baby-boomer generation: Another breed of elderly people?. In Generational Tensions and Solidarity Within Advanced Welfare States (pp. 153-172). Routledge.

Sovacool, B. K. (2016). How long will it take? Conceptualizing the temporal dynamics of energy transitions. *Energy research & social science*, 13, 202-215.

Stål, H. I., Riumkin, I., & Bengtsson, M. (2023). Business models for sustainability and firms' external relationships—A systematic literature review with propositions and research agenda. *Business Strategy and the Environment*, 32(6), 3887-3901.

Stedman, S. M. (2023). ESG strategy and management: Complete guide for businesses. https://www.techtarget.com/whatis/definition/environmental-social-and-governance-ESG#:~:text=Environmental%2C%20social%20and%20governance%20(ESG)%20is%20a%20framework%20used,various%20sustainability%20and%20ethical%20issues

Stephanie Creary, M.-H. M. (2019). When and Why Diversity Improves Your Board's Performance. *Harvard Business Review*. https://hbr.org/2019/03/when-and-why-diversity-improves-your-boards-performance

Stiles, P., & Taylor, B. (2001). Boards at work: How directors view their roles and responsibilities: How directors view their roles and responsibilities. OUP Oxford.

Sutiono, N. (2020). Board Gender Diversity, ESG, and Corporate Performance.

Swaraj, A. (2019). Exploratory Research: Purpose And Process. Vol.-XV, 666-670. ISSN 0974 7222

Teherani, A., Martimianakis, T., Stenfors-Hayes, T., Wadhwa, A., & Varpio, L. (2015). Choosing a qualitative research approach. *Journal of graduate medical education*, 7(4), 669-670.

Tenny, S., Brannan, J. M., & Brannan, G. D. (2017). Qualitative study.

Ting, I. W. K., Azizan, N. A. B., & Kweh, Q. L. (2015). Upper echelon theory revisited: The relationship between CEO personal characteristics and financial leverage decision. *Procedia-Social and Behavioral Sciences*, 195, 686-694.

The Department of Justice and Constitutional Development. (2008). The Companies Act. https://www.justice.gov.za/legislation/acts/2008-071amended.pdf

The KPMG Board Leadership Centre. (2024). The strategic imperative of an age balanced board. https://assets.kpmg.com/content/dam/kpmg/uk/pdf/2024/03/age-balanced-board.pdf

Theofanidis, D., & Fountouki, A. (2018). Limitations and delimitations in the research process. *Perioperative Nursing-Quarterly scientific, online official journal of Gorna*, 7(3 September-December 2018), 155-163.

Tuggle, C. S., Schnatterly, K., & Johnson, R. A. (2010). Attention patterns in the boardroom: How board composition and processes affect discussion of entrepreneurial issues. *Academy of Management Journal*, 53(3), 550-571.

United States Army (1983). Military Leadership (FM 22-100). Washington, DC: U.S. Government Printing Office.

Van Vuuren, H. J. (2020). The disclosure of corporate governance: a Tick-Box exercise or not? *International Journal of Business and Management Studies*, 12(1), 50-65.

Varhegyi, M. M., & Jepsen, D. M. (2017). Director succession planning in not-for-profit boards. Asia Pacific *Journal of Human Resources*, 55(1), 106-126.

Rusadi, G. O., & Zen, T. S. (2023). Does the Age of Board Members Affect Firms' Financial Performance? A Case of ESG Leader Companies in Indonesia. *Journal Integration of Management Studies*, 1(1), 48-60.

Vender, R. J. (2015). Leadership: an overview. *Official journal of the American College of Gastroenterology*| ACG, 110(3), 362-367.

Vetchagool, W. (2025). Board Age Diversity and Firm Performance: Empirical Evidence from Thailand. Review of Integrative Business and Economics Research, 14(2), 450-467.

Wadhwa (V). (2012). Innovation without Age Limits. MIT Technology Review. https://www.technologyreview.com/2012/02/01/187568/innovation-without-age-limits/

Wang, C. (2024). The Relationship between ESG Performance and Corporate Performance - *Based on Stakeholder Theory*. doi:10.1051/shsconf/202419003022

Wangombe, J. G., Wambui, T. W., Muthura, M. W., Kamau, A. W., & Jackson, S. M. (2013). Managing Workplace Diversity: *A Kenyan Pespective.*

Webber, S. S., & Donahue, L. M. (2001). Impact of highly and less job-related diversity on work group cohesion and performance: A meta-analysis. *Journal of Management*, 27: 141–162.

Webber Wentzel. (2022). ESG: Reporting & Disclosure in a New Era for Companies. https://www.webberwentzel.com/News/Pages/esg-reporting-and-disclosure-in-a-new-era-for-companies.aspx

World Economic Forum (WEF). (2022). Defining the 'G' in ESG Governance Factors at the Heart of Sustainable Business. https://www3.weforum.org/docs/WEF_Defining_the_G_in_ESG_2022.pdf

Willie, M. M. (2023). Distinguishing between population and target population: A mini review. *Surgery Research Journal*, 3(2), 1-2.

Yamane, T., & Kaneko, S. (2021). Is the younger generation a driving force toward achieving the sustainable development goals? Survey experiments. *Journal of cleaner production*, 292, 125932.

Yaseen, H., Iskandrani, M., Ajina, A., & Hamad, A. (2019). Investigating the relationship between board diversity & corporate social responsibility (CSR) performance: Evidence from France. *Academy of Accounting and Financial Studies Journal*, 23(4), 1-11.

Yin, R. K. Case study research: design and methods, *Applied Social Research Methods Series,* v. 5, 1994.

Zemke, R., Raines, C., & Filipczak, B. (2013). Generations at work: Managing the clash of Boomers, Gen Xers, and Gen Yers in the workplace. Amacom.

Zhu, D. H., Shen, W., & Hillman, A. J. (2014). Recategorization into the in-group: The appointment of demographically different new directors and their subsequent positions on corporate boards. *Administrative Science Quarterly*, 59(2), 240-270.

Zohrabi, M. (2013). Mixed method research: Instruments, validity, reliability and reporting findings. *Theory and practice in language studies*, 3(2), 254.

Hou, Z. (2024). What drives innovation within a business. *Open Journal of Business and Management*, 12(02), 932-944.

Zumente, I., & Bistrova, J. (2021). ESG importance for long-term shareholder value creation: Literature vs. practice. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(2), 127.

ANNEXURE A: INTERVIEW GUIDE

APPENDIX (A) RESEARCH INSTRUMENT – INTERVIEW GUIDE- LEVERAGING ESG TO DRIVE AGE DIVERSITY IN BOARD LEADERSHIP - A CASE OF JSE TOP 50 MINING COMPANIES

1. **Prelude**
   1.1. Introduction of the researcher & the purpose of the interview
   1.2. Introduction of the respondent
   1.3. Request for permission to proceed with the recording of the interview from the respondent.
2. **Background of the respondent**
   2.1. What is your current position and how long have you held the position?
   2.2. Have you been involved in board leadership? For how long have you been involved in board leadership?
   2.3. How old were you when you held your first leadership position?
   2.4. In which sector was your first leadership role?
   2.5. Are you comfortable to share your current age? How old are you now?
3. **Identifying and recruiting board members.**
   3.1. How were you recruited to board leadership positions?
   3.2. What is the procedure for board leadership recruitment?
   3.3. Do you think young people[1] should be recruited to board leadership? Yes or no? Please provide the rationale for your answer.

[1] Young people refers to a cohort of people born as Generation Y and Generation Z (Yamane & Kaneko, 2021).

3.4. Is there a role for young people in board leadership?

3.5. In your view, what could be the potential advantages and disadvantages of recruiting young people in board leadership?

3.6. Based on your experience, how can young people be accelerated to board leadership? How can age diversity be improved in board leadership?

3.7. What mechanisms can be utilised to drive the inclusion of young people in board leadership?

3.8. In your view, why does there seem to be limited participation of young people in JSE listed companies' board leadership?

3.9. Do you think there is bias towards seasoned and experienced individuals for board leadership recruitment? What is the considered age?

3.10. When board members get replaced, does the recruitment process tend to be biased towards young people or seasoned and experienced professionals?

3.11. In your view, what are the reasons for this bias[2] when replacing board members?

3.12. Do you believe that the current process for board appointments is inclusive?

3.13. In your experience, do you believe leaders are born or made? In other words, is leadership innate or developed?

4. To determine diversity principles that drive the inclusion of young people in board leadership.

4.1. Do you believe that young people can be board leaders?

4.2. What do you think would be an appropriate age for board leadership especially if the intent is to promote age diversity??

5. To examine the role that ESG can play in incorporating (including) young people into board leadership.

5.1. In your understanding, do you think governance should influence board composition and how can that be done?

[2] The study hypothesis is that the inclusion of young people is limited in board leadership.

5.2. In your view, are young people likely to drive innovation in board leadership?

5.3. If you were to choose between young people and seasoned individuals for board leadership, who would you choose and why?

ANNEXURE B: PARTICIPANT CONSENT FORM

Participant Consent Form

Determine how JSE Top 50 listed mining companies can leverage on ESG principles to drive age diversity.

- I……………………………………… agree to voluntarily partake in this research study as an interview participant.
- I hereby confirm that I understand the research topic and commit to ask questions where necessary
- I am aware that I can retract participation from the study, at any point in time, without any reason or consequences
- I am aware that I can retract all given consent to the use of data from my interview within a week following the interview
- I am aware and understand that I will not benefit directly from participating in this research.
- I grant permission to allow for voice or video recording of the interview through a digital device.
- I understand that the data that I will provide for this study will be treated as confidential.

- I understand that a transcript of my interview in which all identifying information has been removed will be retained by the Wits Business school.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

Signature of research participant

---------------------------------- ------------------------

Signature of participant Date

Signature of researcher

I believe the participant is giving informed consent to participate in this study

--- ----------------------

Signature of researcher Date

ANNEXURE C: ETHICS CLEARANCE CERTIFICATE

Graduate School of Business Administration
University of the Witwatersrand, Johannesburg

Wits Business School

Wits Business School Ethics Committee
Constituted under the University Human Research Ethics Committee (Non-Medical)

Ethics Clearance Certificate

Ethics protocol number: WBS/EL378600/584

This certificate is only valid with a legitimate ethics protocol number and signed by the Researcher (below).

Project title	Leveraging ESG to drive age diversity in board leadership - a case of JSE Top-50 mining companies
Investigator / Researcher	Ms Masego Penelope Lekomanyane
Nature of Project	MM (Energy Leadership)
Decision of the Committee	Approved, provided stakeholders and participants are guaranteed confidentialty.
Issue Date of Certificate	25/10/2024
Expiry date	Date of submission of the project / research report
Chairperson	Dr Ayanda Magida ☎ +27 11 717 3953 ayanda.magida@wits.ac.za

---

Declaration by Researcher

One copy must be signed by the Researcher and returned to the Chairperson of the Wits Business School Ethics Committee.

I fully understand the conditions under which I am authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I undertake to resubmit the protocol to the Committee.

Signature

30 October 2024

Date: