

Proposing a compliance training success framework for South African banks to enhance an entrepreneurial business environment

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Abstract

Compliance departments are crucial to maintaining a competitive advantage, and are perceived to have high costs, compounded by sanctions and the difficulty of proving the value of compliance training. Research proves that an increase in corporate entrepreneurship and entrepreneurial orientation increases performance, and that entrepreneurial orientation is a component of corporate entrepreneurship. This study examined the relationship between corporate entrepreneurship and compliance training success, with entrepreneurial orientation as a mediating variable.

Compliance Officers within the South African banking sector were targeted through purposive sampling. There was a total of 1 232 participants in the study, with 341 surveys returned (27.7%).

Structural equation modelling was used in the empirical study. All ten compliance training success models were positively correlated with corporate entrepreneurship, thus proving that an increase in corporate entrepreneurship increases performance in terms of compliance training success. Entrepreneurial orientation positively mediated the relationship between corporate entrepreneurship and the classical Kirkpatrick training success model.

Theoretical contributions include supplementing the theoretical knowledge on corporate entrepreneurship, entrepreneurial orientation, and compliance training success. Practical contributions include the development of a training success framework, proposed for South African banks to enhance an entrepreneurial business environment, and a quality assurance framework with suggestions on how to evaluate compliance training success.

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1. Introduction

1.1 Background

BANKSETA identified regulation, compliance, and risk management as part of the five essential skills change drivers, within the banking sector, for the 2020-2025 period (2020). Effective training is vital to ensure that employees and third parties understand regulatory changes and the importance of compliance (Haig, 2020:34). The importance of innovation, within the regulatory landscape in which compliance departments operate, is evident in the literature. On the one hand, regulation is critical in enabling market-enhancing innovation (Gomber *et al.*, 2018:250). On the other hand, the rise of FinTech (Financial Technology) has paved the way and contributed to the need for RegTech (Regulatory Technology) solutions rapidly entering the marketplace. Innovation has been confirmed as a distinct character and primary factor of corporate entrepreneurship (Castriotta *et al.*, 2021:2842; Ziyae & Sadeghi, 2021:116) and innovation is also a measure of entrepreneurial orientation (Fan *et al.*, 2021:3). It is advantageous for employees, within the banking sector, to be entrepreneurial by creating something that does not exist or by solving a problem (Nymbus, 2022). It has been argued that compliance departments can be a competitive advantage for banks (Gabruashvili *et al.*, 2023). Corporate entrepreneurship, grounded in innovation, increasingly plays a crucial role in developing and maintaining competitive advantages in the present and future, according to Ireland and Webb (2007:50) and Xianguo *et al.* (2009:566).

1.2 Problem Statement

Despite the efforts of organisations, compliance failures still occur (Bird & Park, 2017:285). Administrative sanctions are frequently imposed. Nedbank was fined R35 million for not reporting large cash transactions and maintaining adequate records (Anon., 2022). In May 2022, the South African Financial Sector Conduct Authority (FSCA) revoked Brite Advisors' licence as a financial services provider (Moneyweb, 2022). Compliance risk can be minimised by implementing complex control systems, hiring dedicated staff, and thoroughly training employees (Bird & Park, 2017:298). It is challenging to measure compliance training's effectiveness and impact on employee behaviour (FinSMEs, 2023). The problem statement is summarised by stating that compliance departments have high costs, exacerbated by sanctions imposed on banks and the difficulty of demonstrating the value of compliance training effectiveness. Furthermore, there is a need within the banking sector to display entrepreneurship to gain a competitive advantage and increase performance. It was, therefore, valuable to assess the relationship between corporate entrepreneurship and the performance of compliance departments in terms of the success of the compliance training, and the mediating effect of entrepreneurial orientation.

1.3 Research objectives

The following primary and secondary research objectives were set.

1.3.1 Primary research objective

The primary research objective of this study was to propose a compliance training success framework for South African banks to enhance an entrepreneurial business environment.

1.3.2 Secondary research objectives

SO1: To investigate and establish the relationship between corporate entrepreneurship and the success of compliance training within South African banks.

SO2: To investigate and establish the relationship between entrepreneurial orientation as a mediating variable in the relationship between corporate entrepreneurship and the success of compliance training within South African banks.

SO3: To investigate the relationship between selected biographic variables and the success of compliance training within South African banks.

This paper covers the literature review followed in this study, the research methodology used, including the hypotheses formulated, ethical clearance obtained, a discussion of the results and findings, managerial implications with suggestions, and lastly, conclusions, limitations identified, and future research recommended.

2. Literature Review

From an entrepreneurship perspective, the literature review covered the concepts of entrepreneurship, intrapreneurship, corporate entrepreneurship, and entrepreneurial orientation. The definitions of the concepts were explored, as well as how the constructs are measured. From a compliance training perspective, the literature review covered the compliance environment within financial services organisations, corporate training environments, and in terms of the performance of compliance departments, how the success of compliance training is measured.

Each of these concepts is discussed briefly further.

2.1 Entrepreneurship

The French word “entreprendre” means “to undertake” (Burch, 1986:13). According to Lumpkin and Pidduck (2021:39), entrepreneurship is a multifaceted process of creating new value that involves (a) launching new enterprises and/or entering new markets; (b) establishing ownership regimes that bestow agency on those who launch businesses and enter markets, and (c) establishing the beliefs and behaviours that are associated with launching businesses and entering markets.

Based on literature studies, entrepreneurship can be measured in various ways, including attitudes Robinson *et al.* (1991:13), personality dimensions (Ortuño-Sierra *et al.*, 2021:4), the entrepreneurial environment in a region (Robu, 2019:72), determinants of entrepreneurship (Ahmad & Hoffman, 2007:18), Schumpeterian concepts (Henrekson & Sanandaji, 2020:733), small business activity (Henrekson & Sanandaji, 2020:737), or intentions to become entrepreneurs (Chan *et al.*, 2012:75).

2.2 Intrapreneurship

Intrapreneurs work within large corporations to turn ideas into profitable products, services or businesses through entrepreneurial thinking and skills, instead of leaving to form their own companies (Cambridge Dictionary, 2022). Neesen *et al.* (2019:551) describe intrapreneurship as recognising and using opportunities by being proactive and creative, not scared to take risks, to create new services, processes, and products. In a study by Blanka (2019:924), intrapreneurship was differentiated from corporate entrepreneurship and entrepreneurial orientation as organisational-level approaches.

An Employee Intrapreneurship Scale (EIS) was developed and validated by Gawke *et al.* (2019:806), measuring employees’ venture and strategic renewal behaviour. Measurement of employee intrapreneurship, in multiple contexts, has proven valid and reliable.

2.3 Corporate entrepreneurship

Innovation is regarded as a determining factor of corporate entrepreneurship (Castriotta *et al.*, 2021:2842; Ziyae & Sadeghi, 2021:116). Several studies have demonstrated the importance of innovation in corporate entrepreneurship (Castriotta *et al.*, 2021:2842; Ziyae & Sadeghi, 2021:116; Covin & Miles, 1999:47-63). Furthermore, Kuratko and Morris (2018:50) have identified entrepreneurial orientation as a dimension associated with corporate entrepreneurship, and innovation has also been identified as a dimension related to entrepreneurial orientation (Fan *et al.*, 2021:3, Asemokha *et al.*, 2019:427, Covin & Miller, 2014:15, Covin & Lumpkin, 2011:858). Kuratko, Hornsby and McKelvie (2021:132) postulate that corporate entrepreneurship is an environment where entrepreneurial mindsets are nurtured and supported to carry out innovative activities. Corporate entrepreneurship aims to revive innovation, by empowering employees to behave entrepreneurially

within organisations (Kuratko *et al.*, 2021:133). Shin and Cho (2020:2) define corporate entrepreneurship as entrepreneurship at the organisational level.

Multiple researchers say corporate entrepreneurship positively correlates with organisational performance (Sanchez-Gutierrez *et al.*, 2019:618; Tipu & Fantazy, 2018:2046).

The following main tools for measuring corporate entrepreneurship have been identified in the literature by Popowska (2020:75) and developed over time. The Entrescale has been used to assess organisational entrepreneurship, and the Corporate Entrepreneurship instrument has been used to assess corporate entrepreneurship (Popowska, 2020:75). The Corporate Entrepreneurship Assessment Instrument, adapted and tested by Strydom (2013:174-177) and verified in the South African environment by Steyn and De Bruin (2018:3), was used in this research study to assess corporate entrepreneurship within South African banks' compliance departments, and was used to set the hypotheses. This included the constructs of management support, work discretion and autonomy, rewards and reinforcement, time availability, and organisational boundaries.

The entrepreneurial orientation of a company is considered an essential element of corporate entrepreneurship (Kuratko & Morris, 2018:50). An entrepreneurial orientation often enhances corporate venture activities. Entrepreneurial orientation is the topic, which will be discussed next.

2.4 Entrepreneurial orientation

In 1983, Miller (1983:771) introduced the concept of entrepreneurial orientation, which states that an organisation is entrepreneurial if it innovates products and markets, undertakes risky ventures, and initiates proactive innovations first, beating competitors. Lumpkin and Dess (1996:136) postulated two additional dimensions: autonomous behaviour and competitive aggressiveness. Research has shown that entrepreneurial orientation studies typically concentrate on three constructs: innovativeness, risk-taking, and proactiveness, while less emphasis is placed on autonomy and competitive aggressiveness (Schachtebeck *et al.*, 2018:264).

In recent years, entrepreneurial orientation has received more attention in research than corporate entrepreneurship has; however, numerous researchers consider entrepreneurial orientation to be a part of corporate entrepreneurship (Kuratko and Morris, 2018:50). Opinions in the literature vary on the precise definition of entrepreneurial orientation (Okeyo *et al.*, 2016:192). According to Lumpkin and Pidduck (2021:41), being entrepreneurial consists of being autonomous, proactive, innovative, and competitive in taking risks. From micro businesses to multinational corporations, this view is universal and can be applied to individuals, family businesses, social enterprises, franchises, and many other entities.

Recent studies have demonstrated a strong positive correlation between entrepreneurial orientation and organisational performance (Leksono *et al.*, 2019, Putniņš & Sauka, 2020:729, Soares & Perin, 2019:155).

The most used instruments to assess entrepreneurial orientation were those developed by Miller (1983) and Covin and Slevin (1989). A wide range of literary publications has accepted Miller's (1983) conceptualisation, embodied within Covin and Slevin's (1989) scale, as the "dominant design" of entrepreneurial orientation. Alternate measurement practises, however, have been discussed in the literature. This study uses the Lotz and Van der Merwe (2013:31-32) questionnaire to measure entrepreneurial orientation within South African banks' Compliance departments. As constructs of entrepreneurial orientation, the instrument includes competitive aggressiveness, autonomy, risk-taking, innovation, and proactiveness. Lotz and Van der Merwe (2013:21) compiled the dimensions originated from the following measuring instruments: The Organisation Structure and Strategic Posture Scale (Covin & Slevin, 1989:85-86), the Entrescale instrument (Knight, 1997:213), Intrapreneurship items (Antoncic & Hisrich, 2001:489), Entrepreneurial Orientation items (Lumpkin & Dess, 2001:439), Corporate Entrepreneurship Assessment Instrument (Hornsby *et al.*, 2002:264-265), Measuring Intrapreneurship (Hill, 2003:58), Entrepreneurial Climate Survey (Oosthuizen, 2006:205), and The Corporate Entrepreneurship Climate Instrument (Morris *et al.*, 2008:331-335).

2.5 The compliance environment within financial services organisations

2.5.1 Introduction

Regulatory compliance has never been more important in South Africa than it is today (Powell, 2019). There have been several shocking public scandals that have rocked the country. The auditing profession has been scrutinised after several corporate collapses involving accounting scandals, including Steinhoff and Tongaat (Powell, 2019).

In 2019, the SARB fined five banks for anti-money laundering control failures (Kubheka, 2019). Due to its failure to comply with the requirements regarding reporting suspicious and unusual transactions, South African banks were fined and ordered to take remedial action. As a result of today's fast-paced and evolving business environment, such as regulatory changes, organisations must adapt their approach to compliance so that ethical practices and compliance are integrated into everyday work (Seth, 2021).

2.5.2 A short overview of the history of the Compliance industry in South Africa

Compliance functions in global markets are more mature than in South Africa (Maritz, 2013). The South African Futures Exchange (SAFEX) introduced the requirement for a compliance function in 1989 (Deloitte Global, 2016:6). The Banks Act of 1995, and the requirements for listed organisations (in 1990), subsequently required banks and listed organisations to have an independently functioning compliance function in place. To cope with the global financial crisis, the National Treasury published two policy documents, namely a safer financial sector for South Africa (National Treasury, February 2011), and a twin peak model of regulating financial institutions (Financial Regulatory Reform Steering Committee, February 2013) (Deloitte Global, 2016:6). A twin peak model of regulation blends an approach that is rules-based, with an approach that is principles-based (Deloitte Global, 2016:6). A dedicated Prudential Authority was located in the South African Reserve Bank, and a Financial Sector Conduct Authority replaced the Financial Services Board (Deloitte Global, 2016:6). The compliance department within the banking sector, as part of the second line of defence, ensures financial institutions comply with applicable laws, regulations, and rules and acts as a bank's internal police force. As a result, it helps to maintain the bank's integrity and reputation (Dayton, 2021).

2.5.3 Entrepreneurship within the banking sector and compliance industry

In 2008, the worldwide economic downturn changed the strategic direction of most organisations, including the banking sector. As a result of severe resource constraints and unpredictable market conditions, organisations struggled to survive, much less grow, through innovation and venture capital activities (Kuratko *et al.*, 2015:246). Any company, region, or nation must innovate to succeed economically. With the advancement of technology, old products are being phased out, and old industries are disappearing. A nation's future is built on innovation and invention (Mehmood *et al.*, 2019:5).

As regulations change, the compliance department has become an increasingly critical function within financial institutions. Powerful regulators, complex regulations, and data monitoring and reporting stipulations have been felt across various jurisdictions. The compliance agenda will be shaped by new forces (Herbert Smith Freehills, 2020:16) as strategic (and resilient) compliance teams adapt to these changes. Therefore, compliance departments within organisations must be more innovative and adaptable to changing environments. It may be deduced that compliance departments need to be more intrapreneurial.

Financial technology (FinTech) is encroaching on financial services, utilising fast-developing technology in retail and small businesses (Anagnostopoulos, 2018:8). Compliance Officers face increasing challenges due to growing demands from regulators and internal stakeholders. Several innovative approaches to technology, people, and processes can assist Compliance Officers and departments in steering through these challenges (Deloitte Global, 2016:7). According to the literature review, there is a high prevalence of FinTech disruptions in the banking sector, and RegTech

disruptions in the compliance sector. They imply that the banking and compliance industries must adapt to the changing landscape, be innovative, and demonstrate corporate entrepreneurship and entrepreneurial orientation to remain competitive.

In addition to assisting banks bring innovations to market, compliance departments within financial services industries should also be innovative. In 2017, Arner *et al.* (2017:378) analysed RegTech to facilitate understanding by regulators, industry, and entrepreneurial communities. Increased regulatory burdens have resulted in high compliance costs, making innovative technologies that may assist with efficiencies an attractive solution to compliance requirements (Arner *et al.*, 2017:390).

2.6 Corporate training environments

Although andragogy varies by country and context, it is generally used in the field of educating and guiding adults (Note *et al.*, 2021:3). The corporate training industry will reach \$487.3 billion worldwide by 2031, growing by 8% annually, according to Allied Market Research (2022). There is no denying the importance of the corporate training market.

The modern view of training is that it is a continuous, lifetime process of obtaining experience, skill, and knowledge (Mamatelashvili, 2021:701). Individuals learn by acquiring and developing new knowledge, skills, capabilities, attitudes, and behaviours (Armstrong, 2009:664).

“Training” refers to the process by which people learn a specific skill, and then applying the knowledge practically (Barnes, 2014). Providing the knowledge, skills, and job requirements for doing something specific requires one-dimensional training, with enhanced hands-on experience. For example, the placement of tyres on a vehicle may be taught to learners in manufacturing. Training focuses on a specific task (Whitney, 2017). Learning takes place anywhere and anytime (Thoms & Burton, 2016:93). Learning is not necessarily related to a job, but is broad-based (Whitney, 2017). Training and learning are inextricably linked in the educational process, but their outcomes differ (Ismael, 2020). Thus, in this study, reference is made to compliance training, which covers specific compliance knowledge and skill components and their applications, needed to understand compliance in the banking sector.

2.7 Measuring compliance training success

Evaluation models for training or learning journeys are systematic frameworks for investigating and analysing their effectiveness (Deller, 2020). Concerning this research, these constructs that examine the effectiveness of training, would be considered training success factors and refers to the performance of compliance departments within the South African banking sector and specifically the successfulness of compliance training. In the measuring instrument the variables measuring compliance training success assessed to what extent respondents are applying good training evaluation measures.

Based on the literature study completed, the following success factors were incorporated into this study to measure compliance training success, and thus the performance of the compliance departments under study.

- The four levels of training evaluation by Kirkpatrick (1996:55-56), namely learner reaction, learning, learner behaviour and business results
- The return on investment model, as specified by Phillips (1996:20) and made specific to compliance training by Marcheselli (2019)
- Elements of a learning organisation, as stated by Garvin *et al.* (2008:109), including a supportive learning environment (psychological safety, appreciation of differences, openness to new ideas and time for reflection), concrete learning processes (experimentation with new ways of working, information is systematically collected, active analysis occurs in the workplace, education and training is valued and offered and information is shared in the organisation), and leadership that reinforces learning

- Extracting business value from compliance identified by Young *et al.* (2017:4), including individually relevant learning, high-impact learner experiences, using social, workplace and media-rich digital learning, a focus on knowledge, skills, behaviours and decisions that embed lasting behaviour change and joined-up as strategic learning
- Effectiveness of compliance programmes, including training adapted from the Office of Inspector General of the Department of Health and Human Services (Health Care Compliance Association, 2017:24-27) including planning for, implementation of, and evaluation and administration of compliance training
- Compliance training success as specified by Dixon and Overton (2017:38)
- Desired characteristics of a holistic compliance and training programme (Rogers, 2022:2), as well as showing the painful consequences of non-compliance (Rogers, 2022:11).
- Factors that make training stick (Katz, 2014:66).

3. Research Methodology

The theories that corporate entrepreneurship increases performance (success of compliance training) and is mediated by entrepreneurial orientation were tested by implementing the research strategy (Saunders *et al.*, 2019:801). Mediation is expected as entrepreneurial orientation has been proven part of corporate entrepreneurship (Kuratko & Morris, 2018:50). These theories flow from Schumpeter's theory of innovation, entrepreneurship, and economic development (1934), theorising that employees within an organisation may act entrepreneurial as well as the resource-based view of entrepreneurial orientation (Barney, 1991:99), which views entrepreneurial orientation as a resource that increases performance, and similarly corporate entrepreneurship which improves performance.

A deductive research approach was selected, where hypotheses are deduced and put through empirical scrutiny (Bryman *et al.*, 2017:9). A theoretical postulation is tested by implementing a specific research strategy (Saunders *et al.*, 2019:801). The deductive approach was deemed most appropriate because the researcher tested the theory that corporate entrepreneurship increases performance (success of compliance training), and is mediated by entrepreneurial orientation.

The methodological choice was the mono method, quantitative. In quantitative research, the primary objective is to collect numerical data (Harrison & Reilly, 2011:11). Using the relationship between variables as a basis for testing objective theories, Creswell and Creswell (2018:4) define quantitative research as an approach to testing objective theories. The most appropriate method for this study is quantitative research to test the theories that corporate entrepreneurship positively influences compliance training success (performance) and is mediated by entrepreneurial orientation.

The research strategy selected for this study is a structured survey. A population sample is examined in survey research to determine attitudes, opinions, or trends (Cresswell & Cresswell, 2018:12). According to Creswell and Creswell (2018:12), survey research is a quantitative or numerical description of a population's attitudes, opinions, and trends by studying a sample of members. Therefore, data is collected at one point and the time horizon is cross-sectional (Creswell & Creswell, 2018:149).

The sampling method is the total population sampling method, and thus, the sample size includes 1 232 Compliance Officers within the banking sector in South Africa. Compliance Officers were chosen as a purposive sampling method, using the researcher's judgment due to the homogeneity factor (Saunders *et al.*, 2019:813). Compliance Officers are of the same occupation and perform similar roles, which includes training employees on compliance. As a purposive sampling method, total population sampling involves examining the entire population (Lund Research Ltd., 2012). In terms of nonprobability sampling, purposeful sampling is the most essential type.

3.1 Hypotheses

The following hypotheses were formulated for the study:

- H1. There is a positive relationship between corporate entrepreneurship and compliance training success, according to Kirkpatrick.
- H2. There is a positive relationship between corporate entrepreneurship and return on investment, according to Phillips and Marcheselli.
- H3. There is a positive relationship between corporate entrepreneurship and a supportive learning environment, according to Garvin *et al.*
- H4. There is a positive relationship between corporate entrepreneurship and concrete learning processes, according to Garvin *et al.*
- H5. There is a positive relationship between corporate entrepreneurship and leadership that reinforces learning, according to Garvin *et al.*
- H6. There is a positive relationship between corporate entrepreneurship and extracting business value from compliance training, according to Young.
- H7. There is a positive relationship between corporate entrepreneurship and the effectiveness of compliance programmes, according to the Health Care Compliance Association.
- H8. There is a positive relationship between corporate entrepreneurship and compliance training success factors, according to Dixon and Overton.
- H9. There is a positive relationship between corporate entrepreneurship and a holistic compliance communication programme, according to Rogers.
- H10. There is a positive relationship between corporate entrepreneurship and factors that make training stick, according to Katz.
- H11. Entrepreneurial orientation positively mediates the relationship between corporate entrepreneurship and compliance training success, according to Kirkpatrick.
- H12. Entrepreneurial orientation positively mediates the relationship between corporate entrepreneurship and return on investment, according to Phillips and Marcheselli.
- H13. Entrepreneurial orientation positively mediates the relationship between corporate entrepreneurship and a supportive learning environment, according to Garvin.
- H14. Entrepreneurial orientation positively mediates the relationship between corporate entrepreneurship and concrete learning processes, according to Garvin.
- H15. Entrepreneurial orientation positively mediates the relationship between corporate entrepreneurship and leadership that reinforces learning, according to Garvin.
- H16. Entrepreneurial orientation positively mediates the relationship between corporate entrepreneurship and extracting business value from compliance training, according to Young.
- H17. Entrepreneurial orientation positively mediates the relationship between corporate entrepreneurship and the effectiveness of compliance programmes, according to the Health Care Compliance Association.
- H18. Entrepreneurial orientation positively mediates the relationship between corporate entrepreneurship and compliance training success factors, according to Dixon and Overton.
- H19. Entrepreneurial orientation positively mediates the relationship between corporate entrepreneurship and a holistic compliance communication programme, according to Rogers.
- H20. Entrepreneurial orientation positively mediates the relationship between corporate entrepreneurship and factors that make training stick, according to Katz.

3.2 Ethics

According to Welman *et al.* (2010:201), researchers should consider four essential ethical considerations, namely informed consent, the right to privacy, protection from harm, and the researcher's participation. Creswell and Creswell (2018:89-90) recommend ethical considerations during all the stages of the research, namely, before conducting the study, beginning the study, collecting the data, analysing the data, and recording, sharing, and storing the data.

The research was introduced to the Skills Development Facilitators, present at the quarterly meeting between BANKSETA and the Skills Development Facilitators of the constituent banks, in December 2022. The BANKSETA was a connector to introduce the research study funded by them, and that they are interested in, with the Skills Development Facilitators present at this meeting.

Once informed consent was received from the Skills Development Facilitator and Chief Compliance Officer of a bank (or the respective compliance or another representative of the bank), the link to the electronic survey was mailed to the Skills Development Facilitator or the compliance contact of the bank for onwards transmission to the Compliance Officers in their banks for completion. Completion was voluntary, and the Skills Development Facilitators and compliance contacts were used as the contact persons and entry points into the respective banks. The Skills Development Facilitators and compliance contacts were also used to encourage participants to complete the electronic surveys. According to Creswell and Creswell (2018:150), a single-stage sampling procedure is one in which the researcher can directly access a population's names and sample individuals. As part of the research project, the researcher had access to the Skills Development Facilitators and compliance contacts within the South African banks, who, in turn, had access to the Compliance Officers within their respective banks.

As part of this study, ethical considerations were measured in the following way. Participation in the survey was anonymous and voluntary. The questionnaire indicated that implicit consent is provided to use the research data when completing it, for the purposes specified in the questionnaire. If consent was not provided, the participant could not continue with the survey. Informed consent was obtained from the Skills Development Facilitators, the Chief Compliance Officer, or the compliance contacts. Permission was also received from BANKSETA to use the email addresses of Skills Development Facilitators within current forums.

In addition, privacy rights were protected by keeping the identity of respondents, and the companies they work for, anonymous. The confidentiality of the respondents was guaranteed. No names or email addresses were obtained during the research study.

The researcher anticipated and actively addressed any ethical issues in the research plan as they arose, and as recommended by Creswell and Creswell (2018:89-90), before conducting the research at the beginning of the study, while collecting data, while analysing the data, at the reporting stage, data sharing, and storing of the data stages.

The faculty of Economic and Management Sciences Ethics Committee (EMS-REC) awarded this study ethical clearance. The ethical clearance number is NWU-01902-22-A4.

4 Empirical Results and Findings

4.1 Descriptive Statistics

4.1.1 Age group

Most of the respondents in this study (145 out of 341) represent a mature age group category of 40-49 years (42.5%), followed by 30-39 years (31.1%). According to the Sector Skills Plan of BANKSETA (2022:13), most South African banking sector employees (45%) are between 35 and 55 years of age. It is difficult to make a meaningful comparison due to the different age categories used.. The summary of the respondents' age distribution results is presented in Table 1.1, below.

Table 1.1: Age distribution of respondents

Age Distribution	Frequency	Percentage %	Cumulative percentage %
29 years and below	20	5.9%	5.9%
30-39 years	106	31.1%	37.0%
40-49 years	145	42.5%	79.5%
50-59 years	53	15.5%	95.0%
60 years and over	17	5.0%	100.0%
Total	341	100.0%	

4.1.2 Gender

Most respondents were female (54.8%), followed by 44.3% of men and 0.9% who identified as other. A fair comparison with the banking sector can be seen of 60% women and 40% men (BANKSETA, 2022:13). The summary of the gender distribution of the respondents is detailed in Table 1.2, below.

Table 1.2: Gender characteristics of respondents

Gender classification	Frequency	Percentage %	Cumulative percentage %
Female	187	54.8%	54.8%
Male	151	44.3%	99.1%
Other	3	0.9%	100.0%
Total	341	100.0%	

4.1.3 Seniority within the organisation

The compliance officers that responded to the questionnaire comprised most of the employees at the middle management level (32%), 25.5% at the senior management level, 19.1% at the junior management level, 12% at the general staff level, and 11.4% at the executive level. The summary of the level of seniority within the organisation is reflected in Table 1.3, below.

Table 1.3: Seniority within the organisation of respondents

Seniority within organisation	Frequency	Percentage %	Cumulative percentage %
General staff	41	12.0%	12.0%
Junior management	65	19.1%	31.1%
Middle management	109	32.0%	63.0%
Senior management	87	25.5%	88.6%
Executive	39	11.4%	100.0%
Total	341	100.0%	

4.1.4 Highest academic qualification

Most respondents (44.9%) have a post-graduate degree, 26.4% a degree, 14.1% a diploma, 10.9% a certificate, and 3.8% matric. No respondents have a qualification lower than matric. This statistic

compares to the banking sector, according to the BANKSETA (2022:16) Sector Skills Plan of 50.4% possessing a certificate, 21.1% having a postgraduate degree, 14.2% possessing a diploma, 12.8% possessing a degree, 1% possessing only matric, and 0.5% lower than a matric. Therefore, respondents have higher academic qualifications than the banking sector averages. The summary of the academic profile of the respondents is reflected in Table 1.4, below.

Table 1.4: Academic qualification of respondents

Academic Qualification	Frequency	Percentage %	Cumulative Percentage %
Lower than matric	0	0%	0%
Matric	13	3.8%	3.8%
Certificate	37	10.9%	14.7%
Diploma	48	14.1%	28.7%
Degree	90	26.4%	55.1%
Postgraduate degree	153	44.9%	100.0%
Total	341	100.0%	

Based on biographic data, the respondents represented a mature age group, primarily female, aligned with the banking sector (BANKSETA, 2022:13). Most respondents represented the managerial levels of employees in middle and senior management positions within the banks. In conjunction with their age group, it may be concluded that the respondents are seasoned, highly qualified employees, most of whom possess postgraduate degrees. The respondents appeared to have the correct population representation to participate in the study, compared to the banking sector (BANKSETA, 2022, 13, 16).

Structural Equation Modeling was used to analyse the data, and is discussed next.

4.2 Structural Equation Modeling (SEM)

Ten SEM models were run.

1. SEM model assessing the constructs and factors relating to corporate entrepreneurship, entrepreneurial orientation as a mediating variable, and compliance training success, according to Kirkpatrick (1996:55-56).
2. SEM model assessing the constructs and factors relating to corporate entrepreneurship, entrepreneurial orientation as a mediating variable, and return on investment, according to Phillips (1996:20) and Marcheselli (2019).
3. SEM model assessing the constructs and factors relating to corporate entrepreneurship, entrepreneurial orientation as a mediating variable, and a supportive learning environment, according to Garvin *et al.* (2008:112-113).
4. SEM model assessing the constructs and factors relating to corporate entrepreneurship, entrepreneurial orientation as a mediating variable, and concrete learning processes, according to Garvin *et al.* (2008:112-113).
5. SEM model assessing the constructs and factors relating to corporate entrepreneurship, entrepreneurial orientation as a mediating variable, and leadership that reinforces learning, according to Garvin *et al.* (2008:112-113).
6. SEM model assessing the constructs and factors relating to corporate entrepreneurship, entrepreneurial orientation as a mediating variable, and extracting business value from compliance training, according to Young (2017:4).

7. SEM model assessing the constructs and factors relating to corporate entrepreneurship, entrepreneurial orientation as a mediating variable, and effectiveness of compliance programmes, according to the Health Care Compliance Association (2017:24-27).
8. SEM model assessing the constructs and factors relating to corporate entrepreneurship, entrepreneurial orientation as a mediating variable, and compliance training success factors, according to Dixon and Overton (2017:38).
9. SEM model assessing the constructs and factors relating to corporate entrepreneurship, entrepreneurial orientation as a mediating variable, and a holistic compliance communication programme, according to Rogers (2022:2-11).
10. SEM model assessing the constructs and factors relating to corporate entrepreneurship, entrepreneurial orientation as a mediating variable, and Factors that make training stick, according to Katz (2014:66).

SEM enables researchers to simultaneously model and estimate complex relationships among multiple dependent and independent variables (Hair *et al.*, 2021:4). Despite its apparent similarity to regression, SEM is fundamentally different. A regression model has a clear distinction between dependent and independent variables. Furthermore, SEM is a beneficial method for analysing exceedingly complex multiple variable models, and revealing direct and indirect relationships between variables (Civelek, 2018:5).

Confirmatory factor analysis was used to determine the validity of the measuring instrument. Confirmatory factor analysis aims to verify theory using empirical data and is a component of the broader multivariate structural equation modelling method (Alavi *et al.*, 2021:2209). Factor loadings of greater than 0.298 can be accepted in samples larger than 300 and items with factor loadings of smaller than 0.3 have been considered acceptable in research (Hassim *et al.*, 2020:4). Confirmatory factor loadings were considered acceptable in this study.

The Cronbach alpha coefficient was calculated to determine the instrument's reliability and the internal consistency of the data. Cronbach's alpha is a rating of the stability of a measurement or instrument, or the responses to a questionnaire (or a domain of a questionnaire), based on the responses from subjects to a questionnaire (Bujang *et al.*, 2018:85). In general, a Cronbach's alpha value greater than 0.7 is considered acceptable (Shrestha, 2021:5). In this study, all factors in the measurement instrument reflected a Cronbach alpha of more than 0.7, except for rewards and reinforcement, which measured 0.69, and factors that make training stick, which was 0.66, both borderline, but acceptable. Furthermore, the composite reliability of the various factors within the SEM models was above the 0.7 threshold, except for the factors that make training stick, which measured 0.661, was considered borderline and still acceptable.

Convergent validity was further assessed when the extracted average variance (AVE) exceeded a threshold greater than 0.5 for the model (Baharum *et al.*, 2023:1). Borderline items were still regarded as acceptable.

Conformity indices were used in the model conformity testing, such as the Comparative Fix Index (CFI), Tucker-Lewis-Index (TLI), Goodness of Fit Index (GFI) and the Root Mean Square Error Approximation (RMSEA) (Halim *et al.*, 2018:163). These measures provide the most fundamental indication of how well the proposed theory fits the data. Absolute fit indices reveal how well an a priori model (based on the literature study) fits the sampling data and demonstrates which proposed model has the best fit (Hooper *et al.*, 2008:53). The Chi-Square value - Test Statistic (χ^2) is the traditional measure for evaluating overall model fit and, assesses the magnitude of discrepancy between the sample and fitted covariances matrices (Hooper *et al.*, 2008:53). The RMSEA indicates how well the model, with unknown but optimally chosen parameter estimates, would fit the population's covariance matrix (Hooper *et al.*, 2008:54). The Chi-square (χ^2) and Root Mean Square Error of Approximation (RMSEA) are examples of absolute fit indices used in SEM.

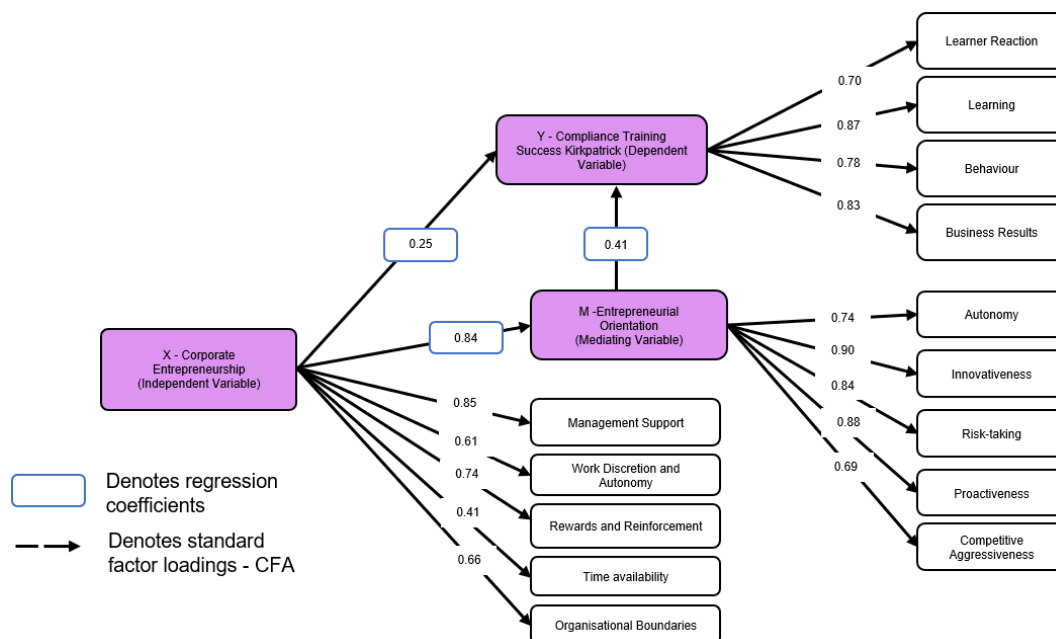
All 10 SEM models displayed adequate conformity and absolute fit indices. Standard errors and p-values also indicated significance.

Only one model indicated **partial mediation** of entrepreneurial orientation in the relationship between corporate entrepreneurship and compliance training success, according to Kirkpatrick (1996:55-56). Therefore, corporate entrepreneurship causes entrepreneurial orientation that positively impacts the success of compliance training, according to the Kirkpatrick model. The results revealed a significant direct effect of corporate entrepreneurship on compliance training success (performance), according to Kirkpatrick (1996:55-56), as well as a significant indirect effect through the mediator entrepreneurial orientation. Entrepreneurial orientation measured a variance that accounted for 58% in the relationship between corporate entrepreneurship and compliance training success, which means the level of mediation variance accounted for is between 20-80% and is, therefore, regarded as complementary partial mediation (Ali *et al.*, 2022:10, Ali & Park, 2016:1674), where the direct effect and indirect effects are both significant and point in the same (positive or negative) direction, in this instance being a positive effect (Timothy, 2022:4).

The Kirkpatrick (1996:55-56) compliance training success factors have been used for decades, and Don Kirkpatrick is seen as the father of the four levels of training evaluation (Site Staff, 2009). Of all the training success models, this model is known to more Compliance Officers than the others, and some components are most probably being implemented. Furthermore, structures may be in place within the compliance departments of South African banks to support corporate entrepreneurship. However, corporate entrepreneurship appears not to translate into, or cause entrepreneurial behaviour for the other training success models. The reason may be that within the compliance departments of South African banks, which are regulated by wide-ranging primary and secondary or subordinate legislation (South African Reserve Bank, 2020), there are limits as to the autonomy being allowed and selecting their methods to do their jobs or making decisions without approval procedures (referring to the constructs of entrepreneurial orientation). Also, in terms of innovation and proactiveness, these behaviours must be considered within the constraints of regulatory requirements, and the banking sector is historically risk-averse (Coetzee, 2019:146); therefore, competitive aggressiveness and risk-taking as part of constructs of entrepreneurial orientation may be subdued.

One SEM model is shown in figure 4.1, namely the SEM model of the Kirkpatrick training success model, with the independent variable Corporate Entrepreneurship and Entrepreneurial Orientation as Mediating variable. Individual items and standard errors are not reflected for the sake of conciseness.

Figure 1.1: SEM Path: compliance training success model – Kirkpatrick



A positive relationship exists between corporate entrepreneurship and compliance training success, according to Kirkpatrick, with a regression coefficient of 0.25 being evident. Standard regression coefficients indicate the strength of the relationship between a given predictor (corporate

entrepreneurship) and an outcome variable (compliance training success) in a standardised form (Field, 2018:1008). Thus, the change in compliance training success is indicated based on one standard deviation change in corporate entrepreneurship. A positive relationship between corporate entrepreneurship and entrepreneurial orientation can be observed, with a correlation coefficient of 0.84.

Standard factor loadings in confirmatory factor analysis of more than 0.5 are evident, except for time availability loaded at a borderline 0.41, but are still considered acceptable. The lower factor loading of time availability may be because the two negative questions may have been interpreted inconsistently. Items with factor loadings of less than 0.3 have been considered acceptable in research (Hassim *et al.*, 2020:4).

H¹. There is a positive relationship between corporate entrepreneurship and compliance training success, according to Kirkpatrick, is therefore accepted.

The results of the other SEM models and hypothesis are shown in Table 1.5, which is in alignment with the research.

Table 1.5: Summary of the findings of the hypothesised relationships

Hypothesis number	Hypothesis statement	Accepted or Rejected
H ¹	There is a positive relationship between Corporate Entrepreneurship and Compliance Training Success, according to Kirkpatrick.	Accepted
H ²	There is a positive relationship between Corporate Entrepreneurship and return on investment, according to Phillips and Marcheselli.	Accepted
H ³	There is a positive relationship between Corporate Entrepreneurship and a Supportive Learning Environment, according to Garvin.	Accepted
H ⁴	There is a positive relationship between Corporate Entrepreneurship and Concrete Learning Processes, according to Garvin.	Accepted
H ⁵	There is a positive relationship between Corporate Entrepreneurship and Leadership that Reinforces Learning, according to Garvin.	Accepted
H ⁶	There is a positive relationship between Corporate Entrepreneurship and Extracting business value from Compliance training, according to Young.	Accepted
H ⁷	There is a positive relationship between Corporate Entrepreneurship and the Effectiveness of compliance programmes, according to the Health Care Compliance Association.	Accepted
H ⁸	There is a positive relationship between Corporate Entrepreneurship and Compliance training success factors, according to Dixon and Overton.	Accepted
H ⁹	There is a positive relationship between Corporate Entrepreneurship and a Holistic compliance communication programme, according to Rogers.	Accepted
H ¹⁰	There is a positive relationship between Corporate Entrepreneurship and Factors that make training stick, according to Katz.	Accepted

Hypothesis number	Hypothesis statement	Accepted or Rejected
H ¹¹	Entrepreneurial Orientation positively mediates the relationship between Corporate Entrepreneurship and Compliance Training Success, according to Kirkpatrick.	Accepted
H ¹²	Entrepreneurial Orientation positively mediates the relationship between Corporate Entrepreneurship and return on investment, according to Phillips and Marcheselli.	Rejected
H ¹³	Entrepreneurial Orientation positively mediates the relationship between Corporate Entrepreneurship and a Supportive Learning Environment, according to Garvin.	Rejected
H ¹⁴	Entrepreneurial Orientation positively mediates the relationship between Corporate Entrepreneurship and Concrete Learning Processes, according to Garvin.	Rejected
H ¹⁵	Entrepreneurial Orientation positively mediates the relationship between Corporate Entrepreneurship and Leadership that Reinforces Learning, according to Garvin.	Rejected
H ¹⁶	Entrepreneurial Orientation positively mediates the relationship between Corporate Entrepreneurship and Extracting business value from Compliance training, according to Young.	Rejected
H ¹⁷	Entrepreneurial Orientation positively mediates the relationship between Corporate Entrepreneurship and the Effectiveness of compliance programmes, according to the Health Care Compliance Association.	Rejected
H ¹⁸	Entrepreneurial Orientation positively mediates the relationship between Corporate Entrepreneurship and Compliance training success factors, according to Dixon and Overton.	Rejected
H ¹⁹	Entrepreneurial Orientation positively mediates the relationship between Corporate Entrepreneurship and a Holistic compliance communication programme, according to Rogers.	Rejected
H ²⁰	Entrepreneurial Orientation positively mediates the relationship between Corporate Entrepreneurship and Factors that make training stick, according to Katz.	Rejected

The SEM models measured a negative relationship between age and the constructs of compliance training success, according to Kirkpatrick (1996:55-56), return on investment, leadership that reinforces learning, extracting business value from compliance training, and a holistic compliance communication programme. Therefore, these compliance training success factors' scores decrease as age increases. A negative relationship between education level and return on investment was also measured. Thus, as the level of education increases, the return on investment score decreases. It may only be speculated that more mature and educated Compliance Officers still need to practice these compliance training success factors, either because they do not know about these success measures or because they feel they are too cumbersome for implementation in compliance contexts. The fact that some banks have dedicated learning and development departments for compliance training may explain why Compliance Officers are unaware of training success models. These Compliance Officers may not be exposed to the success models of compliance training, and may need to be aware that these factors should be measured. This statistic is representative of most of the respondents, as 42%

were mature in age and fell within the age group category of 40-49 years, and 44.9% hold a postgraduate degree. It is recommended that Compliance Officers receive in-depth training on how the various success factors of compliance training are measured, as well as the value-added associated with each factor. Providing training to employees regarding compliance is the responsibility of Compliance Officers, so Compliance Officers must be up skilled in training evaluation.

Table 1.6 reflects a summary of the direct relationships between corporate entrepreneurship and the various access factor models of compliance training.

Table 1.6: Direct relationships between corporate entrepreneurship and the various success factor models of compliance training

Compliance Training Success Factor	Regression coefficient between corporate entrepreneurship and compliance training success
Compliance training success - Kirkpatrick	0.25
Return on investment - Phillips and Marcheselli	0.39
Supportive learning environment - Garvin <i>et al.</i>	1.00
Concrete learning processes - Garvin <i>et al.</i>	0.92
Leadership that reinforces learning - Garvin <i>et al.</i>	0.90
Extracting business value from compliance training - Young	0.62
Effectiveness of compliance programmes - Health Care Compliance Association	0.79
Compliance training success - Dixon and Overton	0.78
Holistic compliance communication programme - Rogers	0.69
Factors that make training stick - Katz	0.70

Table 1.6 reflects the standard regression coefficients for the various compliance training success models. Standardised regression coefficients indicate the strength of the relationship between a given predictor (corporate entrepreneurship) and an outcome (compliance training success as a compliance department's performance measure) in a standardised form (Field, 2018:1008). Thus, the change in compliance training success is indicated based on a standard deviation change in corporate entrepreneurship. All positive relationships can be observed between corporate entrepreneurship and the various training success factor models, with the weakest positive relationship being with the compliance training success factors, according to Kirkpatrick, measuring a regression coefficient of 0.25, followed by the return on investment model of 0.39. All other regression coefficients have measured relatively strong regression correlations above 0.6, with the highest being a supportive learning environment at 1.00, which indicates a strong relationship. Therefore, the more employees within the compliance departments of South African banks are allowed and supported to display and enter corporate entrepreneurship activities, the more significant the positive impact on performance in terms of compliance training success, although within the constraints of the regulatory landscape.

5. Managerial Implications

Managers and leaders of compliance departments within the banking sector should create an environment and structures that support and encourage innovative thinking and proactiveness, and allow autonomy within the constraints of the regulatory landscape and mandate of compliance departments. RegTech could assist Compliance Officers to focus on decision-making and complex regulatory issues where their expertise is valued. They could spend time implementing their

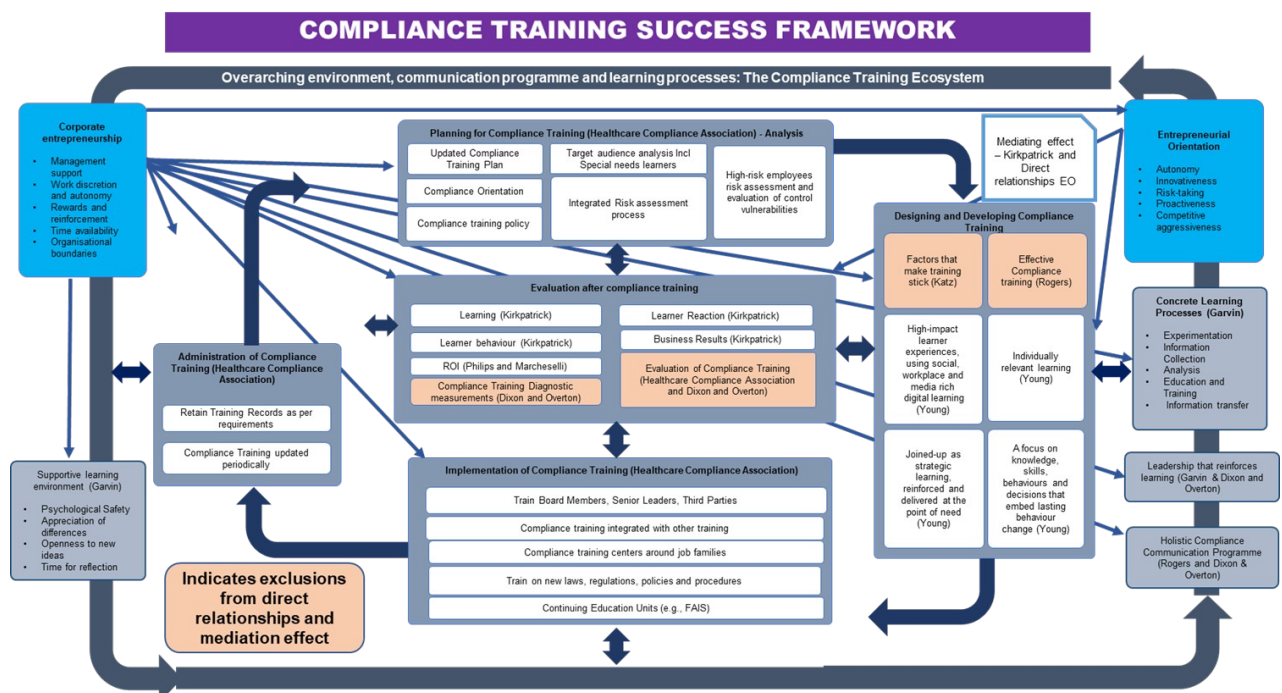
innovations within the department or assessing risks related to innovation within the banking sector. Managers and leaders should be considered experts in innovation, understanding the implications and possible compliance risks associated with innovations. Managers and leaders should also receive training on the innovation process, and provide ongoing employee support. Awareness and clarity should also be created around what is expected of Compliance Officers so that they know the volume, quality, and procedural aspects of work required. Within the innovation process, some projects are deemed to fail, and compliance departments must take cognisance of this fact within the regulatory landscape and the organisation's risk appetite. It is essential to fail forward and foster a safe culture of risk-taking in the workplace where learning occurs to avoid repeating the same mistakes (Childs, 2019). Appropriate rewards and recognition of outstanding work are also essential, and this could be supplemented with special innovation-related incentives within risk appetite and regulatory requirements for Compliance Officers, where Compliance Officers can proactively identify innovations to implement and compete for budget against other Compliance Officers to implement, with appropriate reward systems in place. There is often a perception that internal compliance processes are static, complex, and time-consuming; however, if intelligently implemented, the compliance department can play a crucial role in promoting, for example, data-driven innovation effectively and in compliance with regulatory requirements (Neubert & Berlin, 2022).

Furthermore, in assessing the compliance risk of innovative ideas within business areas in South African banks, Compliance Officers can participate early in the innovation process, together with other functional expertise, to find ways to make innovation possible whilst ensuring regulatory requirements are still met, but at the same time ensuring the bank is competitive in the marketplace possibly with a first mover advantage. First-movers could achieve high switching costs and brand recognition (Isaacson *et al.*, 2022). If switching to a competitor is costly for a customer, the first provider to acquire a customer will benefit. Additionally, a first mover can establish brand loyalty in some cases.

The empirical results show that not all Compliance Officers have a detailed understanding of the compliance training evaluation measures and how they are implemented. Therefore, it is recommended that Compliance Officers be trained on compliance training evaluation measures that will increase the performance and standard of compliance training.

It is also noted that there is an alignment between the constructs of corporate entrepreneurship, entrepreneurial orientation, and the success factors of compliance training. In corporate entrepreneurship, management support aligns with a supportive learning environment and leadership that reinforces learning (Garvin *et al.*, 2008:112-113), contributing to a learning organisation. Regarding risk-taking, innovativeness, and proactiveness as part of entrepreneurial orientation, there is an alignment to openness to new ideas as part of a supportive learning environment and experimentation with new ways of working as part of concrete learning processes by Garvin *et al.* (2008:112-113). Time for reflection, as part of a supportive learning environment, aligns well with time availability as part of corporate entrepreneurship. By implementing these compliance training success factors, the compliance department would also increase corporate entrepreneurship and entrepreneurial orientation. These concepts are contained within the compliance training success framework, discussed next.

Figure 1.2. Compliance Training Success Framework



Source: Researcher’s own design

Figure 1.2 shows the various success factors of compliance training, as obtained from the literature, and validated by the empirical study, as having a positive relationship with corporate entrepreneurship. Therefore, as corporate entrepreneurship increases, so too will the various success factors of compliance training as performance metric. The complementary partial mediating role that entrepreneurial orientation plays within the Kirkpatrick training success model, shows that corporate entrepreneurship causes entrepreneurial orientation, and positively impacts that success of the Kirkpatrick model. In the compliance training success framework, the various compliance training success factors have been placed chronologically, similar to the well-known ADDIE (Analysis, Design, Development, Implement, and Evaluation) instructional design process within the Learning and Development field (Afia & Laili, 2023:58).

On the outer side, the compliance training ecosystem can be observed - the overarching environment, communication programme and learning processes that need to be in place – the compliance training ecosystem. Here, the extent to which compliance departments within the banking sector allow, encourage, and support corporate entrepreneurship and entrepreneurial orientation can be observed. The requirement for a supportive learning environment, concrete learning processes that need to be in place, the requirement that leadership should reinforce the learning, and the requirement for a holistic compliance communication programme to be in place, can be observed.

The inside of the compliance training success framework covers the training analysis and planning, design and development, implementation, administration, and evaluation processes.

The analysis phase, together with planning for compliance training, falls within this cluster. The requirement exists for thorough risk assessments to be conducted for high-risk employees, and to identify control vulnerabilities that need to be trained on. The importance of this risk assessment process, to ensure the correct content is trained on and accentuated, integrated within the compliance framework, proper target audience analysis of who needs to be trained and how, the need for a compliance training policy, orientation programme, and updated compliance training plan or rule book, specifying who needs training on what, are essential.

The design and development process of compliance training phase include the requirements for individually role-relevant training using high-impact learner experiences using social, workplace, and media-rich digital learning that is effective; using factors that make training stick; ensuring that the training is joined-up as strategic learning, reinforced and delivered at the point of need and focusing on knowledge, skills, behaviour, and decisions that embed lasting behaviour change.

The implementation of compliance training phase includes providing training on new laws, regulations, policies, and procedures; training using job-families to distinguish between different content; making sure training is integrated with other learning where possible - thus training in the flow of work processes; ensuring board members, senior leaders and third parties are trained and providing continuing education units required of employees to be fit and proper to fulfil their roles.

The administration of compliance training cluster involves all administration tasks, including the requirement to update the training material periodically and retaining training records as per requirements, including the reporting of training to various forums.

The evaluation cluster covers the classical author Kirkpatrick (1996:55-56), in terms of obtaining learner reaction after a learning event, assessing whether learning took place in terms of conducting assessments, assessing whether learner behaviour changed after training and assessing impact on business results. Return on investment is considered in terms of Philips (1996:20) and Marcheselli (2019). Various diagnostic measurements are also covered according to Dixon and Overton (2017:38) as well as evaluation measures according to Dixon and Overton (2017:38) and the Healthcare Compliance Association (2017:24-27).

The Compliance Training Framework is also supplemented by a Quality Assurance Framework to guide compliance departments on what can be done to improve compliance training success, and allows compliance departments to benchmark themselves against the framework to prioritise those items they need to concentrate on first.

6. Conclusions, Limitations and Future Research

6.1. Scope and limitations of research

The scope of this study included the compliance departments of South African banks that agreed to participate. Some banks declined the request to participate in the study to distribute the link of the survey questionnaire to their Compliance Officers through the internal processes of their bank. The banks were comfortable that individuals can still complete the survey on their own, using the LinkedIn link, and that the bank process would then not be followed. No specific bank details were recorded as part of the survey. Thus, this limitation was overcome by expanding and using LinkedIn contacts from compliance departments and sending the link to the survey directly to them. Occasionally, it was challenging to establish that the compliance employees worked in South African banks. Clarification occurred at times with direct messages. The link to the survey was also placed on the researcher's LinkedIn feed, and personal contacts were approached. The Compliance Institute of South Africa also agreed to place the link to the survey on its website, and sent a message to its members to encourage them to participate. The context documentation of the survey questionnaire specified that the target audience was Compliance Officers in the banking sector.

The sampling unit is the Compliance Officer, responsible, among other tasks, for training employees within the bank about their compliance responsibilities. During the research process, it was confirmed that some banks use their learning and development departments to design and develop compliance training, which is also responsible for the evaluation metrics in terms of compliance training success. Some banks have incorporated these employees into the compliance department; others were part of the learning and development departments in human resources. Compliance Officers operating in an area with a dedicated learning and development area, responsible for the evaluation of compliance training, may not be au fait with training evaluation practices, which may have made it challenging for them to answer some of the questions in the survey. To overcome this limitation, the researcher worked closely with the banks to also include the learning and development employees who were responsible for the design, development, implementation, and evaluation of compliance training in the investigation, and they participated in the survey questionnaire. This was a negligible size of the overall sample population.

As the link to the survey was placed on LinkedIn and the Compliance Institute of South Africa's website, anyone who had access to the link could participate in the survey, which may affect inference. Likewise, CISA members outside the banking sector could have completed the survey, as

the link to the survey was placed on the website. To overcome this limitation, in the context of the research questionnaire and embodied in the title of the investigation undertaken, it was specified that the investigation focused on compliance within South African banks. The researcher clarified the sample frame being Compliance Officers within the South African banking sector, with the different banks during the approval processes, and in individual messages when questioned by respondents.

The sampling frame is generally limited to compliance departments within South African banks, and interpretation should be confined to this context. Furthermore, according to the biographic analysis, the education level of compliance employees is higher than in the banking sector in general. Thus, care should be taken to extrapolate the results outside the borders of compliance departments within South African banks.

6.2. Conclusions, recommendations, limitations, and future research

Conclusions and recommendations were made to various stakeholders, such as managers and leaders of compliance departments, South African banks, the People and Culture (Human Resources) industry, and regulators of banks, to enhance corporate entrepreneurship and entrepreneurial orientation within compliance departments of the South African banking sector. Recommendations include considering processes to create the right environment and structures that support and encourage entrepreneurship within the constraints of the regulatory landscape and mandate of compliance. Acceptable entrepreneurial behaviours should be recognised, encouraged, and incorporated into performance management contracts. The implementation of RegTech can free up time for innovation, and compliance leaders should become experts in the innovation process, advising their banks on managing compliance risks associated with FinTech solutions.

Theoretical contributions include supplementing the theoretical knowledge on corporate entrepreneurship, entrepreneurial orientation, and compliance training success as a performance measure. Practical contributions include the training success framework proposed for South African banks to enhance an entrepreneurial business environment, supplemented by the quality assurance framework with suggestions on how to evaluate compliance training success, as well as the action plans for various stakeholders to increase entrepreneurship within compliance departments of South African banks.

Several recommendations were made for future research, such as a longitudinal study within compliance departments and the banking sector, especially with Regulatory Technology (RegTech) and Financial Technology (FinTech) maturing. It would be interesting to conduct a longitudinal study over, say, three years within the compliance departments of South African banks, to assess whether corporate entrepreneurship and entrepreneurial orientation within the compliance departments in South African banks increase over time, possibly attributable to the extra time to spend on entrepreneurial activities.

The current research study could also be replicated within other regulatory departments within South African banks, such as within the risk or legal departments, and a comparison could be made to the research results and results of the current study.

The development of the compliance training success framework in this study transformed a general learning and development evaluation approach into a compliance-specific framework. It would be beneficial to use the questions in this research study to measure whether the success factors of compliance training would be applicable in the learning and development department of South African banks, beyond compliance departments, providing various training, including technical and leadership training. The compliance training success framework may apply to the broader learning and development community, and it would be valuable if it could be empirically tested.

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