

**UNIVERSITY OF KWAZULU-NATAL**

**Evaluation of the National Development Agency's training on improving governance of  
Non-Profit Organisations**

**By**

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Administration**

**Graduate School of Business and Leadership**

**College of Law and Management Studies**

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## DECLARATION

I, Nthabiseng Innocentia Kraai, declare that **Evaluation of National Development Agency's Training on Improving Governance of Non-Profit Organisations**, is my work and that all the sources used or quoted have been indicated and acknowledged employing complete references.

(i) Except where otherwise indicated this thesis my original research.

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Signature

## Acknowledgements

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## ABSTRACT

Numerous research studies on training effectiveness have been conducted, but seldom found in NPO settings within the South African context. In an effort to evaluate the effectiveness of NDA training on improving the governance of NPOs, a training programme for NDA trained NPOs in Gauteng was studied. The focus of the study was to examine the learning, transfer, and reasons for continuous non-compliant and poor governance practices of NPOs in South Africa. The study adopted a mixed-method research approach with the rationale of using qualitative findings to confirm the quantitative findings. The research was conducted three years of post-training. The tested hypotheses amongst 200 respondents translated into a response rate of 79% for the questionnaire and 8 respondents from the interviews. The Statistical Package of the Social Sciences (SPSS) and Structural equation model (AMOS) was used for quantitative data, whereas NVIVO was used for qualitative data analysis. Data analysis results revealed some degree of learning and training transfer and several reasons for low and high transfer of training. The transferability of training back in the workplace was found to be at very low rates amongst the trainees. In practice, the findings of this research have practical implications for the training institutions when designing the training interventions. To assure learning and the maximum transfer several considerations must be made before and during the training programme. First, to make a good training design that accommodates the different training needs at different levels, thorough training needs assessment at the individual participant level seems important to ensure the success of training transfer as well as the quality of training. Second, the training needs of the participant's level varies from individual to individual, so the more a training satisfies the individual participant level training needs, the better the chances of the existence for learning and training transfer. The use of diverse instructional methods is considered an important strategy for training design that leads to successful training transfer. Third, providing learning experiences in different ways, the trainees can master the training content conceptually and practically. Lastly, the training facilitator also plays a critical role in guiding the trainee' learning and application of the learning back to the jobs. Several research implications surfaced from this study. The study contributes to the literature on how trainee's behavioural change can affect training effectiveness regardless of how the training is designed.

*Keywords:* Training, Evaluation, Kirkpatrick' model, Non-Profit Organisations

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## **CHAPTER 1: INTRODUCTION**

### **1.1 Introduction**

Non-profit organisations play a significant role in the social and public spheres of South Africa. This introductory statement is supported by the number of NPOs which are registered with the NPO directorate in the Department of Social Development. As of 05 June 2018, approximately 200 000 NPOs registered on the database with a further 1000 applications still in progress (DSD, 2018). Despite the high numbers of registration, non-compliance by registered NPOs in meeting the reporting requirements of section 18(1) of the NPO Act remains a challenge (DSD, 2013). The non-profit sector is heavily reliant on grants from Government, private sector and donors to fund its activities (Hadebe, 2014). The Non-Profit Sector, by its virtue, does not exist to generate revenues but instead exists to meet the social needs of the marginalised while operating outside the ambit of Government. The government and donors require NPOs to be legally registered to give them funds; however, this is a challenge as most NPOs are de-registered due to non-compliance. In the absence of such financial support, the sector struggles to survive and fail in its mission to meet the social needs of communities where the Government and Private sector cannot reach.

This introductory chapter provides the background of the study, describes governance in the Non-profit sector, the aims and objectives and the rationale for conducting this research. The chapter further reflects on the research methodology applied for the study. It then concludes by providing the structure of the dissertation. For this study, the term NPOs is used throughout and refers to a wide range of non-profit organisations. The NPOs are those formally registered with the Department of Social Development (DSD) in terms of the Non-Profit Organisations Act 71 of 1997.

### **1.2 South African Non-Profit Sector**

The concept of Non-government organisations (NGOs) came into usage in 1945 following the establishment of the United Nations Organisation. The UN recognised the need to give a consultative role to organisations that were neither the government nor member states (Willets,

2006). The (World Bank, 1995) defines NGOs as “Private organisations that pursue activities to relieve suffering, promote the interests of the poor, protect the environment, provide basic social services, or undertakes community development”. The term applies to any non-profit organisations (NPOs). There have been mixed responses across the world with different suggestions that the Not for Profit Sector should be called “The Third Sector” or “Civil Society” (Adalbert, 2013). Others have expressed a preference for “not-for-loss”, “for purpose” or “community” organisations (Tortajada, 2016). According to Tortajada (2016), the emergence of NGOs as important actors is due to their significant roles in promoting social, economic and political development of the particular countries in which they are operating. The NPOs, through their enlarged efforts to provide disaster relief, deliver ongoing social services, build local capacities for self-help, promote self-governance, and enhance the political and policy influence of marginalised populations. At the international level, NGOs have been increasingly important in creating a kind of global civil society and influencing the practices and policies of international institutions (Khagram, et al., 2002). NGOs play an essential role in facilitating socio-economic growth and development, including the rights-based role as well as strengthening political stability and accountability both in developing and developed countries (United Nations, 2008). NPOs play a prominent role in influencing local, national and regional policy formulation, development and implementation (Tortajada, 2016).

Organisations in the third sector refer to the voluntary associations of people, involved in collective action, around shared interests, purposes, and values. The ‘third sector’ covers a range of different types of organisations, such as voluntary organisations, community-based organisations, NGOs, civil society organisations, non-governmental organisations and charities (Bach-Mortensen & Montgomery, 2018). Today Non-profit/Non-Government Organisations (NPOs/NGOs) have emerged as cognizant rational actors within the national and the international development discourse. The dynamic rise of the NPO sector and the impact that it has created on social and developmental issues across the world, has led to the emerging field of study concerning the role, scope and desirability of governance of this third sector (Maier, et al., 2014). The increasing contributions of the philanthropies towards the sector have led to greater need and expectation for transparency and accountability in how the non-profit sector utilises and run their operations.

Moreover, with the changing global scenario, the NPO sector is confronted with different types of challenges, which demands the promotion of good governance practices (Maier, et al., 2014). An increased need arose for the NPO sector to learn and borrow principles and practices of good governance from both the corporate and the public sector. The Non-profit sector has shown rapid growth across the world in the past decade (Casey, 2016). The recognition of the magnitude of HIV and AIDS, increasing levels of poverty, structural adjustments and the inability of governments to provide essential services have accelerated the growth of the sector. Non-governmental organisations have become key actors in responding to poverty challenges. In Africa, NGOs play a leading role in providing health care and education. In South Africa alone, there are more than 100 000 registered NPOs, whereas, in other African countries such as Kenya, there was a rapid growth over 400% of registered NGOs between the years 1997 and 2006 (Casey, 2016). Table 1.1 depicts the summaries of the development of the sector in different countries.

**Table 1. 1 Summaries of NGOs/NPOs Growth Narratives in Different Countries**

<i>Country/Region</i>	<i>Narrative</i>
India	The number of NPOs formed after 1990 has increased manifold, and the pattern of increase over the years is almost the same in all the States. There were only 144,000 societies registered till the year 1970, followed by 179,000 registrations in the period 1971 to 1980, 552,000 registrations in the period 1981 to 1990, 1,122,000 registrations in the period 1991 to 2000, and as many as 1,135,000 societies registered after 2000 (Hall-Jones, 2006)
South Korea	Since the June 1987 democracy uprising, activity in interest group politics has surged, and NPOs have become salient political actors that undertake public functions through private initiatives (Martini, 2012).

Sub-Saharan Africa	In the post-independence period, advocacy, development, and human rights organisations emerged across the continent. Besides, [non-profits] increasingly played a critical role as service providers. Indeed, some commentators described their growth as an “explosion of associational life in Africa” (World Economic Forum, 2013)
Spain	The Non-profit sector has witnessed a long growth period over the last decades which has resulted in a considerable increase in both their number and size, as well as in their social impact (Kim & Bradach, 2012)
Saudi Arabia	Saudi Arabian society has seen an unprecedented increase in demand for civil rights. As a result, many collaborative civil society initiatives have been undertaken to establish independent non-profits working on public affairs issues. In response to these collaborative initiatives, the Saudi Government enacted legislation that addresses the issue of registering and supervising these organisations (Kingdom of Saudi Arabia, 2018)

The long-term resilience of NPOs is directly related to whether they adhere to good governance or not. “NGOs must continually strive to meet the highest standards of good governance: transparency, accountability, sound management, and ethical behaviour (Gilman, 2005). Internationally, governments have taken steps to mitigate governance risks by introducing governance codes to standardise expectations in best practices in NPOs (OECD, 2014). South Africa introduced the NPO Act to regulate the non-profit sector and promote an enabling environment for such organisations to flourish (DSD, 2001).

One common challenge faced by the Non-Profit sector is weak or non-existent governance structures, lack of accountability and transparency (Ebrahim, 2010). Limited knowledge on roles and responsibilities by NPOs Board, lack of accountability, non-disclosure of finances are

fundamental governance issues that weaken the effectiveness of the Non-profit sector (Burger, et al., n.d)The South African non-profit sector is of no difference to the statement above. In developing countries, the NPOs frequently operate in an environment characterised by weak social structures. While NPOs themselves, particularly the smaller and newer organisations tend to have underdeveloped internal structures (Walsh & Lenihan, 2006). Governance is high on the agenda in all public sectors, commercial and voluntary as it is the primary form of accountability in all bodies. Good governance is a vital part of how NPOs operate and held accountable (European Union, 2009). There is a well-cited quote by the former UN Secretary-General Kofi Annan that *“good governance is perhaps the most important factor in eradicating poverty and promoting development.* The term ‘good governance’ is increasingly used in development literature (Gisselquist, 2012). Many donors, government institutions and international financial institutions are increasingly basing their grants on the organisations that conform to good governance (Sabatini, 2002). The South African constitution has entrenched several socio-economic rights in its Bill of Rights. These rights, as stated in the preamble, intend to improve the quality of life of all citizens and free the potential of each person (Constitution of the Republic of South Africa, 1996). The South African government, in its Development Plan, conceded that: “All provinces rely heavily on not-for-profit organisations to deliver services” (Wyngaard, 2013). A correlation between a weak, ineffective organisation and a weak governing board was found amongst the NPOs (BoardSource, 2016). The typical challenges found to be facing these NPOs include inadequate understanding of the Board’s mandate and responsibilities, lack of experience amongst the Board members, poor understanding of staff responsibilities, weak financial fund-raising capacity and the tendency of Board members to use their positions to further external interests. These are fundamental governance issues that can weaken the effectiveness of an NPO, and there are, therefore, clear and obvious reasons why NPOs require active Boards (Mangaba, 2017). In South Africa, the non-profit sector is service driven, and the other one focuses on human rights, advocacy and monitoring (NGO Pulse, 2013).

The service-driven organisations fulfil the role of providing social services to the unprivileged communities, and the latter performs the role of social ‘watchdog’. NPOs that successfully professionalise stand a better chance of receiving government funds from donors as this encourages accountability and transparency in their running of the business (Wyngaard, 2013).

The Department of Social Development has a legislative role in monitoring the registered NPOs in the country. The monitoring process involves the annual submission of narrative and financial reports by the registered NPOs, and failure to do so leads to cancellation or de-registration. The NDA is a public entity, listed under Schedule 3A of the Public Finance Management Act (PFMA), Act 1 of 1999. The establishment of the NDA was through the National Development Agency Act, Act 108 of 1998, as amended, and reports to the Parliament of the Republic of South Africa through the Minister of Social Development. The agency is mandated to contribute to the eradication of poverty and its causes. The NDA must contribute towards building the capacities of Civil Society Organisations to enable them to carry out development work effectively (National Development Agency Act No 108, 1998).

The Department of Social Development asserts that principles and practices that make up good governance are critical to the effectiveness, success and long-term sustainability of non-profit organisations (DSD, 2001). Good governance is an integral part of the overall management process of an organisation, looking at finance, administration, program implementation, monitoring and evaluation, human resources and communications, and is therefore high on the agenda in all sectors, public, private and non-profit (DSD, 2013). Given the above, as espoused by DSD, good governance remains the heart of the effectiveness and sustainability of the non-profit sector. Burger et al. (n.d)’s work provided types of developmental support that the South African government has given to the Non-profit sector.

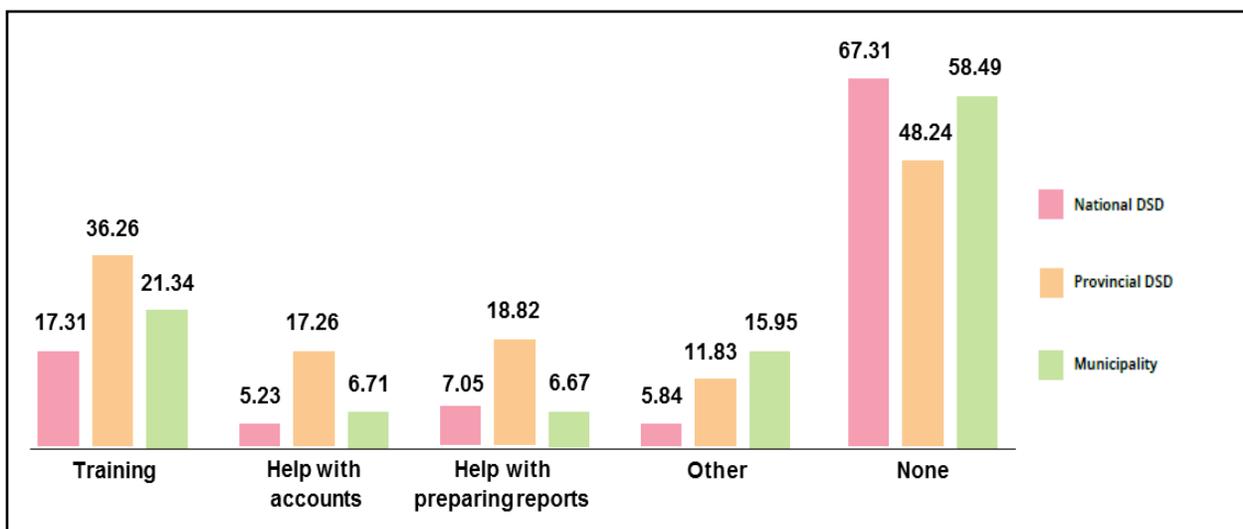


Figure 1. 1 Capacity Building Support by DSD and Municipalities, (Burger, et al., n.d, p. 17)

The support was through training workshops and other capacity-building initiatives. Figure 1.1 illustrates the types of capacity building support from the public sector in South Africa. The capacity building programs by DSD achieved 46% of surveyed NPOs who attended the training workshops. In comparison, 20% received government support with compiling their financial accounts, and 20% received support to produce their narrative reports (Burger, et al., n.d). Existing studies on training within the South African or emerging economy context do not go far enough to demonstrate the effectiveness of training and development programmes. Organisations such as the NDA invest their resources extensively in training initiatives, however, the effectiveness of such interventions is unknown. This study offers a model of behavioural change as a starting point for training effectiveness.

### **1.3 Background to the Study**

The primary object of the NDA is to contribute towards the eradication of poverty and its causes by granting funds to civil society organisations (National Development Agency Act No 108, 1998, p. 3). According to the NDA Act, these grant funds are for:

- a) Carrying out projects or programs aimed at meeting the development needs of disadvantaged communities;
- b) Strengthening the institutional capacity of other civil society organisations involved in direct service provision to underprivileged communities.

The secondary objects of the NDA are:

- a) To promote -
  - i) Consultation, dialogue and sharing of development experience between CSOs and relevant organs of state; and
  - ii) Debate on development policy; and
- b) To undertake research and publication aimed at providing the basis for development policy.

Civil Society Organisations (CSOs) means “a Trust, company or voluntary association established for a public purpose but does not include an organ of state” (National Development Agency Act No 108, 1998, p. 2) The NDA reports to the parliament of the Republic of South Africa through the ministry of Social Development. The Department of Social Development is responsible for the implementation of the NPO Act. The NPO directorate was established within the Department of

Social Development in terms of the Non-profit Organisations Act 71 of 1997 to primarily administer the register of NPOs in South Africa (DSD, 2011). Over the medium term, the agency is focusing on providing legislative compliance support and training to NPOs, and mobilising funds to support their work (NDA, 2015). The agency provides training, mentorship and capacitates CSOs through an allocation of R322.7 million through its CSO development program. Of this amount, R63.5 million was towards training and mentoring of CSOs to comply with the registration and reporting requirements of the NPO Act (71 of 1997), and strengthen the institutional capacities of such organisations in governance, financial and general management, legal compliance, constitution drafting, business plan development and resource mobilisation (NDA, 2015).

**Table 1. 2 Capacitated Civil Society Organisations by the NDA**

<i>Province</i>	<i>CSOs on Governance and NPO Act Compliance</i>	<i>CSOs trained in organisational management</i>	<i>NPOs trained in community development practice</i>
Eastern Cape	697	815	53
Free State	468	297	122
Gauteng	225	200	108
KwaZulu-Natal	236	254	64
Limpopo	322	306	71
Mpumalanga	427	274	76
Northern Cape	110	262	77
North West	379	226	116
Western Cape	201	246	19
Total	3 065	2 880	706

Source: (NDA, 2016)

The NDA provided the institutional strengthening of CSOs to ensure that they manage their organisations effectively and efficiently. In the financial year 2016/17, the organisation trained just more than three thousand CSOs across the country on governance and NPO Act compliance. By

building the capacities of the CSOs, the organisations will have systems and processes that can guarantee compliance, growth, and sustainability (NDA, 2016).

### **1.3.1 Brief Context of the NPO Act**

The NPO Act came into operation in 1998, to provide a supportive regulatory system for (predominantly) smaller emerging organisations. According to its permeable, the NPO Act should provide for an environment in which these organisations can flourish; to establish an administrative and regulatory framework within which NPOs can conduct their affairs. Section 2 of the NPO Act (Interpretation and objects of the Act), provides that the objects of the act are: “To encourage and support NPOs in their contribution to meeting the diverse needs of the population of the Republic by, amongst others, encouraging NPOs to maintain adequate standards of governance, transparency, and accountability, and to improve those standards”.

The NPO Act has five chapters, namely: Interpretation and objects of the Act; Creation of an enabling environment; Registration of NPOs, Regulations and General provisions. Two chapters are essential for the focus of this study, chapter 2 “creation of an enabling environment” and chapter 3 “Registration of NPOs”. Section 3 of chapter 2 of the NPO Act, is one of the most significant chapters in the Act where the NDA should claim its space. It reads:

*“State’s responsibility to non-profit organisations. Within limits prescribed by law, every organ of state must determine and co-ordinate the implementation of its policies and measures in a manner designed to promote, support and enhance the capacity of non-profit organisations to perform their functions.”*

Chapter 3 of the NPO Act deals with registration, reporting requirement and cancellation of NPOs. Section 17 of chapter 3 deals with accounting records and reports, where it states that “every registered non-profit organisation must, to the standards of generally accepted accounting practices, amongst others, draw up its financial statements within six months”. Section 18 of chapter 3 deals with the duties of registered NPOs to provide reports and information. The section 18(1) amongst others, states that “every registered non-profit organisation must, in writing, provide a narrative report of its activities in the prescribed manner, together with its financial statements and the accounting officer’s report as contemplated in section 17 of the Act.”

### 1.3.2 The Benefits of NPO Registration

There are many benefits to be gained from registering an NPO with the Department of Social Development; some of these benefits are (Western Cape Government, 2009):

- Improvement of the credibility of the non-profit sector;
- To bring the organisations onto the system;
- To attract donors and funders that are interested in funding NPOs that are accountable to the public office;
- To promote good governance practice in the sector;
- To help the non-profit sector to be more organised; and
- Assist in finding ways of getting benefits for the sector.

### 1.3.3 The Role of NPOs in the obligations of the Act

Once the organisation is registered, it is obligated, in terms of section 18 and 19 of the Act to submit within 9 months after the end of its financial year, annual reports (narrative report, annual financial statement and accounting officer's report) including any changes to the organisation's constitution, physical address and office bearers ( (DSD, 2016, p. 8).

The Department of Social Development classifies types of deregistered NPOs into four categories, these are:

- a) **Constitutional non-compliance** – this refers to organisations that have not complied with the (i) material provision of its constitution; (ii) a condition or term of arty benefit or allowances conferred on it in terms of section 11;
- b) **Non-Compliant Deregistration** – These are organisations that have not submitted their documents as per its obligations in terms of section 17, 18 and 19 and any other provision of the NPO Act 71, of 1997;
- c) **Voluntary De-registration** – These are organisations that choose to voluntary deregister as per section 23(1) of the NPO Act 71, of 1997; and
- d) **Dissolved** – These are dissolved organisations as per section 23(2) of the NPO Act 71, of 1997.

The sector is growing very fast, as indicated by the NPO registers from the Department of Social Development. However, it is of great concern to also see the increasing numbers of de-registrations

due to non-compliance. The sector needs training in dealing with non-compliance and governance challenges. Through improvement in skills and knowledge of the sector through the training, NPOs are in a favourable position to approach the State and Donors for funds in supporting their mission. However, this does not create a dependency on the sector to only depend on grants but also have the skills and capabilities of fundraising and sustaining their operations. The NDA is mandated to strengthen the institutional capacities of the NPOs, and it is, therefore, crucial to study the effectiveness of the NDA training in improving the sector.

#### **1.4 Problem Statement**

Although NPOs are considered ‘independent’ organisations, however, they are characterised by high dependency on donor funding and risking collapse without continued support from government and donors (Fowler, 2000). Such reliance has skewed the alignment of NPOs away from beneficiaries and towards donors in terms of accountability (Banks & Hulme, 2012). There are increased concerns by the donors and government on the poor accountability and performance of the Non-Profit sector (Cornforth & Brown, 2013). As the number of civil society organisations is growing, competition for scarce resources and the demand for greater accountability by stakeholders have put pressure on these organisations to comply with good governance practices. According to the NPO register report produced by the Department of Social Development, about 86 768 NPOs were reported to be non –compliant in 2016. The reported figures also revealed that there was a non-compliance rate of 56% as compared to only 44% of compliance rate (DSD, 2016). Poor governance is a common challenge in the non-profit sector, and many of the non-profit organisations have a deficit of understanding the importance of having or setting up a Board (Maximpact, 2017). Training and capacity building is essential in addressing this challenge and can help provide crucial new skills (Maximpact, 2017).

*“The impact of the NDA interventions has improved the compliance with the NPO Act”* (NDA, 2016). The above statement is of concern to the researcher because no research or evaluation has been conducted to measure the effectiveness or impact of the programme. The NDA has not evaluated the change in the skills and knowledge of NPOs on improving governance practises, and the effectiveness of the training thereof is unknown. Training requires human, time and financial resources. Despite the substantial investments of the valuable resources, the skills learned from the

training may never be applied back in the organisation (Donovan et al., 2001). The increasing numbers of de-registered NPOs that are reported annually by the department of social development due to non-compliance to the NPO Act show that rigorous training is needed to improve the status quo of the sector. Owing to the investments already put towards the training, it is not a question of “*should we train*”, but rather is the training worthwhile and relevant? All this boils down to measuring the training effectiveness by evaluating such training. The importance of evaluation in any training program has been stressed out and further emphasised as the most neglected phase in the training process by training organisations and practitioners (Al-Attia, Sherif, Hossain & Ahmed, 1998). The current approach of the NDA in evaluating the training is its inability to objectively measure the effectiveness of the training beyond the responses given immediately after the training by the trainees.

## **1.5 Aim and Study Objectives**

The study evaluates the effectiveness of the NDA training programme on improving governance practices of non-profit organisations in Gauteng province. The next section outlines the objectives of the study

### **1.5.1 Research Objectives**

Training evaluation models underpinning the study are Kirkpatrick’s four-level evaluation model and other essential variables outside the model when evaluating the effectiveness of the training programme. The specific objectives of the study are to:

- 1) Examine the effects of training characteristics (training content and objectives) on training outcomes (trainee’s reaction, learning, behaviour, and training results)
- 2) Investigate the moderating effects of training content and training objectives on the relationship between the training outcomes (learning, behaviour, behaviour and results).
- 3) Examine the relationship between the four levels of the Kirkpatrick’s training evaluation framework
- 4) Develop a conceptual framework and test the hypotheses to expound on the impact of training characteristics on training effectiveness of the NPO Governance and non-compliance training.
- 5) Provide recommendations to maximise the effectiveness of training in practice.

### **1.5.2 Research Questions**

The research questions are as follows:

- What are the effects of training content objectives on the trainee's reaction, learning, behaviour and results?
- What are the moderating effects of training characteristics (training content and objectives) on the relationships between the training outcomes (learning, behaviour, and results)?
- Which of the four levels of the Kirkpatrick's models influences the training effectiveness of the NDA?
- What conceptual framework and hypotheses can be developed to define the effects of training content and objectives in measuring the effectiveness of the NDA training?
- What recommendations and lessons learned can be provided to maximise the effectiveness of training programs in practice as well as expounding on the existing literature?

### **1.6 Brief Discussion of the Research Methodology**

The design of the study was a mixed-method where both qualitative and quantitative data were collected and analysed. The perspective that informed this study was a pragmatism where there is a freedom to use any of the methods, techniques, and procedures associated with quantitative or qualitative research, but also recognising that the approaches can be complementary to each other. There are limitations to both approaches (Feilzer, 2010). Furthermore, Creswell (2015) is of the view that this type of inquiry is good with the assumption that collecting diverse types of data will best provide a more thorough understanding of the research problem than only using either quantitative or qualitative approaches alone. The researcher applied Creswell's assumption to complement quantitative data with more information. Looking at the limitations of using either of the approaches for this research was not going to provide the perspective of the participants that one gets from the interviews, as well as the generalizability of results if only the qualitative approach was adopted. Furthermore, the approach ensured that the study findings are grounded in participants' experiences through interviews. The mixed-method approach provided much stronger evidence for a conclusion through convergence and used the strengths of one method to overcome the limitations in another. Through triangulation, the approach provided the researcher with stronger evidence for corroboration of findings. Through a simple random sampling technique,

233 individuals (Governing body of the NPO) in Gauteng were from a population of 589, determined at a 95% confidence level and margin of error at 5%. The NDA database of trained individuals on Governance was used as a sample frame to draw the study sample. Semi-structured interviews and structured questionnaires formed instruments used in the study for collecting data. The pre-testing of the questionnaire was on 15 governing bodies in other provinces, including Gauteng. The pilot did not form part of the main study. Chapter four of this study elaborates the data collection techniques used. Furthermore, chapter four justifies the selection of the research methods, design and sampling processes. Since this study focused on human beings, the importance of ethical considerations employed in this study are in Chapter four.

### **1.7 Justification for the Research**

The NDA has since its inception approached its mandate by giving grant funding to civil society organisations. As guided by the outcomes from the NDA review which was commissioned by the Department of Social Development, and the environmental scan conducted for the NDA to review its strategy and programmes, the NDA re-defined its interventions to develop CSOs through capacity building interventions more than just grant funding (NDA Annual Performance Plan: 2016). According to Bates and Coyne (2005), the distinction between learning and job behaviour of a trainee has sparked an interest to researchers on the importance of transfer of learning on the job as a means of ensuring training effectiveness. (Holton, et al., 2000) asserts that training that is not be transferred to the job is a waste of resources. The NDA training has not been comprehensively evaluated thus far as its current approach is focusing only on the reaction (level 1) of the trainees. The training ignores learning (level 2), reaction (level 3) and results (level 4). As a result, the effectiveness of the training is unknown, particularly in learning and especially transferring training back on the job. The NDA continues to invest resources towards training without any empirical results to indicate whether or not the programme is producing the desired outcomes. Reactions of trainees is an inadequate measure to evaluate the effectiveness of a training program. The statement means that the programs must be assessed at a deeper level to have a real picture of the usefulness and effectiveness of the training intervention (Rehmat et al., 2015). Thus, the current study evaluates how effective is the NDA's training on improving the good governance of NPOs through adaptation of Kirkpatrick's evaluation model. In this study, the focus is on all four levels of the model.

## **1.8 Significance of the Study**

Singh and Mohanti (2012) are of the view that training that is not evaluated at all or evaluated in a very casual way leads to a lack of understanding by the training organisation to prove the actual value of the training and reasons for its existence. The NDA training focuses on evaluating the reaction of trainees concerning their feelings and perceptiveness on the training. As a result, learning and transfer of knowledge are not known, and the effectiveness of the programme is also unknown. The formal evaluation of these training has not been carried out. As a result, the study is significant in measuring the degree at which the training is successfully producing the desired outcomes. Evaluation of the effectiveness of the NPO governance training is essential for the NDA to determine if the programme is significant to the NPOs. Consequently, the Agency will continue investing resources in something that might not be addressing the real issue. The results of the study can be useful to improve the NDA training approach and provide helpful knowledge on training effectiveness and evaluation to other training institutions and researchers. The study is significant in providing ways in which training, in general, should be approached, especially considering the factors that can negatively impact the outcome of the training.

## **1.9 Scope and Delimitations of the Study**

The study focus was on evaluating the effectiveness of NDA training on Governance for NPOs. The confinement of this study is to NPOs in Gauteng province who received training from the NDA on governance and NPO Act. This confinement is for those trainees between 2016 and 2017. All the study participants formed part of the governance structure within their respective organisations. Hence a simple random sampling technique was used. Since the study focused only on one province within South Africa, the generalisation of findings may not apply to other sectors outside the non-profit or different geographical areas. Notwithstanding the similarity of challenges in other provinces, the researcher could not involve all of them for the study. The reason for not involving all the nine provinces was due to the time, logistics and financial constraints associated with such an approach. However, under normal circumstances, the study would have covered all the nine provinces of South Africa. The final limitation that the evaluation mainly focused on the first three levels of Kirkpatrick's model; the fourth level is not evaluated in detail. This is because the fourth level is focused on impact and will require more time and resources to conduct an impact

evaluation study. The level four (Results) of the models looks at the long-term organisational effects and seeks to determine an increase in profits or similar measures as a result of the training. An impact or longer-term evaluation to measure the holistic improvement in the non-profit sector after the learning experience would be highly beneficial but is beyond the scope of this study.

## **1.10 Definition of Key Terms**

**1.10.1 Non-Profit Organisations (NPOs)** are a collection of people coming together for a common purpose and agree to formalise a programme to fulfil such purpose. They conduct their activities towards this common purpose, and should there be excess income after expenditure (“profit”) this excess is made available to the benefit of the purpose. The NPOs have other generic titles such as Non-Governmental Organisation (NGO), Community Based Organisation (CBO), Civil Society Organisation (CSO), Public Benefit Organisation (PBO), Trust or Foundation, Charity, and Religious Body/Institution (Gabrielle, 2013)

**1.10.2 Civil Society Organisations (CSOs)** are community groups, indigenous organisations, non-governmental organisations (NGOs), non-profit organisations (NPOs), professional associations and foundations, citizen coalitions and networks, charitable organisations, faith-based organisations (FBOs), labour unions, and citizen advocacy organisations that give voice to various sectors of society and ultimately enrich public participation in public affairs (DSD, 2013).

**1.10.3 Training Effectiveness** is a systematic and planned training activity specifically designed, planned and implemented to promote learning and achievement of defined training goals (Landers & Armstrong, 2017).

**1.10.4 Training Evaluation** is a process of collecting data systematically with the intentions to understand the efficiency or effectiveness of a training program and to make informed decisions about the program (Brown & Sitzmann, 2011).

**1.10.5 Kirkpatrick Model** is a training evaluation framework for examining the effectiveness of training programs through four levels, which are: reaction, learning, behaviour, and results. The trainee’s response to the training is the first level of the framework, and it assesses the feelings and attitudes of trainees towards the training. The reaction of trainees is evaluated immediately after

the training by using a questionnaire or post-training feedback forms. The second level is learning, and it intends to assess the gaining of knowledge and skills acquired by trainees. The determination of such skills and knowledge are through learning inventories or tests after the training. The third level is behaviour which assesses the behavioural change of trainees on knowledge transfer back on the job. The final level of the framework is the results, and it considers the organisational impact (Raju & Jena, 2016).

### 1.11 Dissertation Structure

Chapter 1 introduced the background of the research, the research problem, the research objectives, the significance of the study and a summary of the research methodology. Chapter 2 is the reviewed literature, Chapter 3 describes the theoretical foundation and main theories underpinning this study., while Chapter 4 discussed the CSO Development framework of the NDA. Chapter 5 is the research methodology employed in this study, the description of data collection and analysis techniques, methodological constraints and ethical issues. Chapter 6 is the results of quantitative data; Chapter 7 is the results of the qualitative data; Chapter 8 discusses the results, and chapter 9 concludes and suggests recommendations.

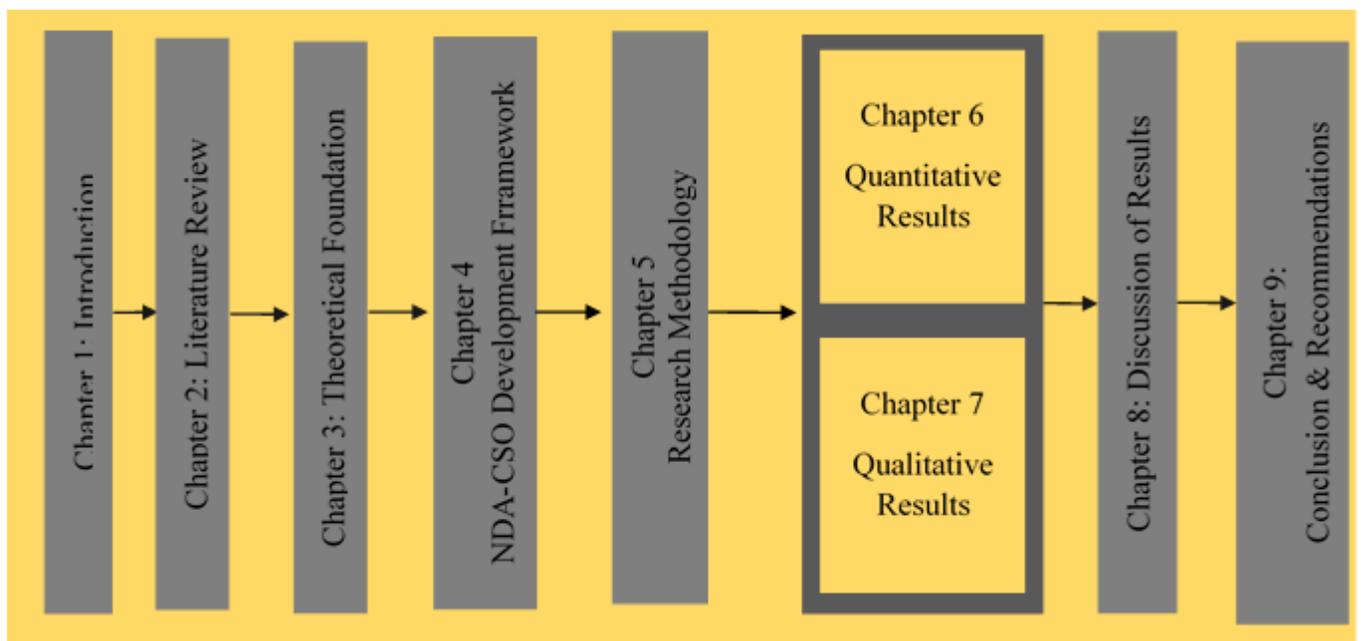


Figure 1. 2 The Dissertation Structural Flow

## **1.12 Chapter Conclusion**

This introductory chapter provided the context and rationale for this research. It covered the introduction, the background to the study, problem statement, motivation, the research objectives and questions guiding the study. The chapter further gave a brief overview of the research methodology, research site, and the study participants. Finally, the chapter concluded by providing the overall structure of this study through a description of each chapter.

## CHAPTER 2: LITERATURE REVIEW

### 2.1. Introduction

This chapter explores different definitions of training and development. Previous scholarly work conducted on different types of training, training evaluation definitions, benefits and challenges of evaluating training programs, training effectiveness, different types of training evaluation models, critiques of the training evaluation models, and the discussions on the measures for training effectiveness are reviewed in this chapter. The literature reviewed in this chapter guides the conceptual framework for this study. The review further provides an overview of the previous research studies on the usage of the Kirkpatrick's four-level model to evaluate training effectiveness, training transfer and explicate the relationship between training effectiveness and training transfer variables. Furthermore, an overview of the process of searching the literature in this study is discussed.

### 2.2. Literature Search Method

The search of the literature focused on studies that met the following inclusion criteria:

- Training evaluations, effectiveness using any level Kirkpatrick's model;
- Training and learning-related outcomes, including skills, knowledge, and attitude;
- Quantitative, qualitative or mixed methods studies;

The literature search used a combination of keywords. The "Training Evaluation", "Training Effectiveness" and "Kirkpatrick model" were the keywords used in searching the literature. The researcher firstly evaluated the titles and abstracts, and then full-text articles read to determine their relevance to this study. The literature search took place between June 2018 and November 2018. This study reviewed International Journal of Training and Development, Journal of Research and Reflections in Education, Global Education Journal, Journal of Theoretical Educational Science, Human Resource Development International, Issues in Educational Research, South African Journal of Higher Education, Journal of Interactive Learning Research, Behaviour Change, Performance Improvement. Table 2.1 summarises the procedure in searching for literature.

**Table 2. 1 Summary of Systematic Literature Search**

<i>Database</i>	<i>Search Type</i>	<i>Search Terms</i>	<i>Search Results</i>	<i>Search Results Refinements/Limits</i>	<i>Papers</i>
Emerald Insight	Advanced Search	Training Effectiveness OR Training Evaluation AND Kirkpatrick's four levels model	1259	Published date (2014-2018), Full-Text, Accepted articles, Only content with full access	38
JSTOR	Advanced Search	Training Effectiveness AND Training Evaluation AND Kirkpatrick's four levels model	1876	Published date (2014-2018), Full-Text, Journals, Books, full access content only	29
Taylor & Francis Online	Advanced Search	Training Effectiveness AND Training Evaluation AND Kirkpatrick's four levels model	1918	Published date (2014-2018), full access content only, Peer-Reviewed	37
Total Number of Relevant Papers included in the Study					104

In ensuring that the review is explicit, the researcher removed the duplicated records during the search process in different databases. Furthermore, three reference management software such as EndNote, RefWorks and Mendeley were used to identify and remove any duplicates. The advanced filter from Microsoft Excel was also used to manually check any possible remaining duplicates by extracting unique records to highlights duplicates. After the de-duplication process, the full-text versions of citations were looked into to verify the de-duplication by the systems. Information such as the methodology, population sizes and findings of the studies were examined to verify whether

the citations removed by the system were indeed duplicates. The use of different reference management system rather than depending on one system only to de-duplicate was beneficial in enabling the researcher to identify false positives (*duplicate citations that were deleted by the software/system but should not have been deleted*) and false negatives (*duplicates that should have been detected and deleted by the system but were not deleted*) duplicates.

### **2.3 Training Definitions**

Training according to Vinesh (2014) means equipping employees with new or traditional methods or techniques or modules to translate information, knowledge, and skills to practice it in an organisation to improve the overall effectiveness of the organisation. The extent of external environment's fierce competition, complexity in work, innovative technology breakthrough and uncertainty of violent society, are evidence for the need of training to become common in almost all types of organisations (Vemic, 2007). There is a gap between knowledge provided in formal schooling and required in a work environment. As a result, training is crucial in filling this gap. Learning is a reliable source to deal with turbulent, uncertainties and complex global environments. Knowledge provides a competitive advantage. Complex business challenges have to be answered quickly with exclusive and selective knowledge gathered during training (Vemic, 2007). For this reason, the majority of companies are putting their focus and efforts on training. Sanders and Wagner (2011), posit that training was seen to be an expenditure, but now it is seen as an investment activity. In addition to this, Milhem et al. (2014) are of the view that training should not be a once-off activity but rather an ongoing process. Similarly, Byrne et al. (2001), supports the views by Sanders and Wagner (2011) that modernisation and legislative requirements by the government, organisations need employees with updated skills and knowledge. The realisation of the achievement of the updated skills is through ongoing training and development efforts. Also, Aguinis and Kraiger (2009) agree that for organisations to be able to face up to the new challenges outside their local environment, there should be learning of new skills from the training initiatives. They further emphasised that training and development do not only improve the capabilities or skills of individuals but also contribute to the improved performance of the whole team and ultimately, the organisation. Thus training plays a crucial role in improving the

performance of the organisation, well-being, profitability in a society. Individual training can lead to the organisation' effectiveness as the outcome (Kraiger, 2003).

It is evident from the definitions that training is a tool that organisations can use in solving work-related issues. Furthermore, the purposes of training by various authors involve filling the gaps in the employee's skills and knowledge. Most definitions support employee training and development as remedies for resolving undesirable attitudes within organisations by improving the effectiveness, efficiency, and performance. This study uses the definitions of training and development interchangeably.

## **2.4 Types of Training**

There have been several definitions of training by probing more into the various objectives of the training. In this context, Ghuman (2010) categorised the different types of training as follows:

- Technical skills training- this focuses on developing the skills of trainees, such as manual skills, required to perform work duties, for example, during apprenticeships.
- Trainer training – it supports the trainers to develop their skills to achieve the training goals.
- Performance management helps employees to improve their job performance by providing them with skills that reduce waste and improve the quality of work.
- Personal training such as assertiveness, coaching, communication and time management enables people to manage their career and life.
- Problem-solving/decision-making teaches individuals to solve difficulties by systematically approaching them.
- Management training helps managers and supervisors to improve their management skills by studying, understanding problems and finding solutions in resolving those problems
- Mandatory training focuses more on reducing the organisational risks and complying with policies and government prescripts.
- Interpersonal skills training supports the development of leadership, coaching and communication skills, as well as interpersonal skills.
- Business function training improves the essential knowledge and skills required to perform various business functions.

- Organisational procedures training teaches employees about organisational practices, such as (health and safety, performance management, equal opportunities, managing diversity policies and practices, and induction programmes)

This study focuses on NPO governance and non-compliance training, which falls under business function, mandatory training, performance management and problem-solving training.

## **2.5 Training Effectiveness**

In understanding the effectiveness of training, it is vital to improving the process of training so that training objectives and goals are accomplished (Homklin et al., 2014). The term training effectiveness comprises of two fundamental concepts, which are training and its effectiveness on trainees (Borate et al., 2014). Devi and Shaik (2012) defined effectiveness as the achievement of desired outcomes. Training effectiveness enhances the skills and knowledge learned by trainees in a training programme, then eventually transferring the learning back in the work environment (Bates & Coyne, 2005). Two elements are involved in training effectiveness. They are individual performance measurement as the training outcome; and measurement on the effectiveness of the training processes and delivery method to the trainees (Mohammed et al., 2013). Therefore, in trying to understand the effectiveness of the NDA training, the researcher investigates the impact of training design characteristics (training content and objectives) and trainees' characteristics on training effectiveness (reaction, learning and behaviour). Borate et al. (2014), expounded on the two critical elements in measuring the effectiveness of training as the training program itself and how it is evaluated. Kraiger (2003) is of the view that the best possible way of determining if the training intervention or program has indeed produced desired outcomes is through evaluation. In gathering information through evaluation, the organisation will know whether the training has produced the desired results or not (Farjad, 2012).

Similarly, Noe (2016) supports the view that in understanding the effectiveness of a training program as per its design, the training evaluation criteria should be identified first. As a result, this study first considered Kirkpatrick's four levels model (reaction, learning, behaviour, and results) to evaluate the NDA's training. Moreover, the study combined training characteristics as suggested by Baldwin and Ford's (1988) model of training transfer to the Kirkpatrick's four-level model.

There have been suggestions on several models to evaluate if the training has produced the desired outcomes. Accordingly, Alvarez, Salas and Garofano (2004) support the four-level model of Kirkpatrick's to be the widely accepted and recognised model to evaluate training effectiveness across all the sectors. The trainee's reaction to the training, newly acquired skills and knowledge, learning transfer, and the effect or impact of training on the organisation are some of the critical elements in measuring training effectiveness (Kirkpatrick, 1967). According to Jehanzeb and Bashir (2013), evaluating the effectiveness of training is an instrumental approach or strategy to gain in-depth knowledge of the achievements of the training efforts. The training effectiveness is generally low globally due to lack of proper trainees needs assessments, methods of training and lack of reinforcement (Atiyyah, 1993).

## **2.6 Training Process**

Robert (2016) outlined four stages of the training process, which are crucial elements of training effectiveness; they are:

- Training needs identification;
- Selection of the type of training to fulfil the identified training needs;
- Trainers that have the training qualifications, capabilities and abilities to deliver on the training; and
- Periodic follow-ups and training assessments to ensure that the program is on the right track towards achieving the desired outcomes.

Effective training should address all the training processes which entail well-defined training goals and objectives. Furthermore, its design should be in such a way that the training content is closely related to the work context (Robert, 2016). A well-designed training programme should consider different phases of the training process Safavi (Safavi, 2008). Regarding the statement by Safavi (2008), Torrington and Hall (1991) proposed that the processes of training should start with training needs identification and end with training evaluation. Consideration of factors in practical training as recommended by Kirkpatrick and Kirkpatrick (2008) is the identification of training aim and objectives, correctly selection of topical issues to be included in the training content, training participants selection, suitable training schedule establishment, training facilities and techniques identification, skilled training instructors, preparation and selection of visual and audio aids,

properly organised and managed training programme and, finally periodic training follow-ups and evaluation. Since training evaluation is the focus of this research, the following subsection will discuss only training evaluation.

## **2.7 Evaluating the Training**

According to Noe (2016), the purpose of the training evaluation is to measure specific outcomes in determining the benefits of the training for either the individual or the organisation. According to Goldstein (1993, p. 13), training evaluation is “the process of collecting descriptive and subjective information essential for making effective training decisions regarding selection, adoption, value, and modification in the training activities”. Kirkpatrick's model provides detailed guidelines on how to evaluate the effectiveness of a training program (Aryadoust, 2017). Similarly, Praslova (2010) supports this opening statement that Kirkpatrick’s four-level evaluation is indeed a highly influential framework for evaluating training programs. Although the model has been developed primarily in assessing training in business, its application to higher education programs and governmental programs has achieved acceptable success (Praslova, 2010). The model of training evaluation by Kirkpatrick classifies the outcomes of a training programme into four levels. Level one (reaction) emphasises evaluating the reaction of trainees to the training programme, such as their views and satisfaction about the training in general. Level two (learning) evaluates the changes in knowledge, skills, and attitudes of the trainees after the training. Level three (behaviour) evaluates the transferability of skills and knowledge on the job. The final level (results) evaluates the impact on the operational performance of the organisation as a result of the training.

In the training cycle, the process of evaluating training is considered to be the final step; however, Devins and Smith (2010) suggest that evaluation should not be left to the end of the programme as it might be late at that stage to make any adjustment to the programme. They further emphasised that evaluating training should be embedded in the organisational culture as an active and continuous process throughout the entire training cycle. This means that training evaluation should be embedded in the programme as an ongoing activity as opposed to being done as a once-off activity at the end of the program. The following section provides the differences between the effectiveness of training and its training evaluation.

## **2.8 Training Evaluation and Effectiveness**

Training evaluation is a critical and valuable component of training (Bimpitsos & Petridou, 2012). Training evaluation is a process of systematically assessing the results of a training programme to determine if the learning objectives were achieved (Tan et al., 2003). Training effectiveness is a theoretical approach to understand the learning outcomes, with a macro view of the training outcomes. Training evaluation, on the other hand, is more of a methodological approach to measure the learning outcomes with a micro view of the training results (Alvarez et al., 2004). Furthermore, the focus of training evaluation is more on what has happened as a result of the training. In contrast, training effectiveness determines why learning or no learning took place, and the occurrence of the intended training outcomes (Mohamed & Alias, 2012). Therefore, the information that resulted from the evaluation of a training program can be used to make adjustments and improvements to the training (Deros et al., 2012).

### **2.8.1 Training Evaluation Definitions**

The definition of training evaluation is in many different forms based on the intended outcome of such evaluation. The critical definitions of training evaluation in the existing literature relating to this study are presented in Table 2.2. Evaluation, as defined by Giberson, Tracey and Harris (2006, p. 48), is “a systematic process used to determine the merit or worth of a specific context”. In the same view by Foxon (1989), evaluation assesses the value of any program. According to Brown (2015, p. 382), training evaluation is “the process that may be used to determine the effectiveness and efficiency of instructional programmes”. Concerning its ability on effective decision making, Saks and Burke-Smalley (2012, p. 121) define it as “a systematic process of collecting data to determine the effectiveness or efficiency of training programmes and to make decisions about training”. In the same view, it is “the process of collecting descriptive and subjective information that is essential to making effective training decisions regarding the selection, adoption, value, and modification of training activities” (Goldstein & Ford, 2002, p. 128). In terms of its focus on determining the performance improvement, it is “the determination of the extent to which a programme has met its stated performance goals and objectives”; and on its ability to provide feedback, it is “an attempt to obtain information (feedback) on the effects of a training programme and to assess the value of the training in light of that information” (Topno 2012, p. 16).

Since training evaluation has been defined differently, in this study, information gathering and analysis are the two relevant and considered definitions. Training evaluation is a systematic procedure of collecting and analysing information in determining training efficiency and effectiveness (Brown & Gerhardt, 2006; Brown & Sitzmaann,2011). Hence, in this study, the definition of training evaluation by the above authors is suitable for this study. Even though Kirkpatrick 's four-level model has been widely applied and accepted in the assessment of training programmes, there are critiques on the model. Some of the critiques are the model not considering other factors that might contribute towards the effectiveness of training such as, trainee's characteristics, work environment and training design factors (Homklin, et al., 2014). The evaluation exercise can help the management to decide whether to continue or discontinue allocating resources towards the training programme. In other words, it will provide an understanding of whether the training is producing the desired outcomes. (Devi & Shaik, 2012). According to Brown & Gerhardt (2006), evaluation of a training program should include procedures that ensure that there is alignment between the training activities and the organisational strategy. Evaluation of training effectiveness is "the measurement of improvement in the employee 's knowledge, skill and behavioural pattern within the organisation as a result of the training programme" (Al-Swidi & Al-Yahya, 2017, p. 841). Devi and Shaik (2012) are of the view that if the training outcomes are closer to the set training objectives, then the training will be core effective. Anjani (2013) asserts that even though evaluating training programmes is essential in determining the training effectiveness, there are other factors to be considered that influence training effectiveness. According to Scaduto, Lindsay, and Chiaburu (2008), training effectiveness is a function of the training design, the individual characteristic or the organisational context.

Furthermore, (Mohammed et al., 2013) asserts that it is impossible to determine training goals achievements without considering the effectiveness variables. Thus, the study evaluates the effects of training content and objectives on training effectiveness outcomes. Adequate and suitable training characteristics, such as training environment, training methods, trainer performance and behaviour, training content and objectives have a significant contribution on the effectiveness or ineffectiveness of training programs (Hafeez & Akbar, 2015). Thus, it is vital to understand the contextual factors when evaluating the effectiveness of a training programme (Faizal Amin & Ruhizan, 2014).

The American Society for Training and Development (ASTD) assessed the nationwide prevalence of the importance of measurement and evaluation to the Human Resources Department executives from different types of organisations in the United States of America. They found the majority (81%) of HRD executives attached some level of importance in evaluating their training, whereas about 67% used Kirkpatrick four-level evaluation model to assess the training programs. According to Siengthai (2015), different factors such as participant's skills, knowledge, abilities, effectiveness of instructors, training content, training objectives, and the methods of training influence the training effectiveness. Since different researchers have shown that evaluation of training outcomes can be very complex and multidimensional, it is crucial to be flexible when evaluating outcomes of training so that variety of different forms such as skill-based tests, behavioural measures, efficiency measures, job performance measure, and utility analyses are taken into consideration (Siengthai, 2015). Punia and Kant (2013) emphasised that of great concern to the management of organisations that have invested resources in training is measuring the effectiveness of such intervention and how it has improved the organisational results. Kirkpatrick (1967) introduced a well-known "four-level evaluation model" for evaluating the effectiveness of training programs. Later on, some other evaluation experts used, critiqued and made modifications to this model.

The reviewed literature indicated the enormous usage of Kirkpatrick's model by different sectors in evaluating training programs to measure effectiveness. The primary objective for training evaluation is to understand the usefulness of the intervention in achieving the desired outcomes. Training organisations and practitioners need to define the purpose of the training at the beginning clearly and systematically evaluate any change made by such a programme (Borate et al., 2014). Furthermore, there is a proclaim that undertaking evaluation of pieces of training is critical to assess the effectiveness or impact of a training program at an individual or organisational level (Borate et al., 2014). The authors further emphasised that there is no alternative method to ensure that the resources invested in training are worthwhile except carrying out a proper evaluation. Two models of interest for training effectiveness and evaluation are Kirkpatrick's (1967) and Holton (1996) training evaluation models.

Previous studies that evaluated training programs focused on how training characteristics can lead to desired training outcomes by using the Kirkpatrick 's model either on individual levels or the relationship between two discrete levels (Baldwin & Ford, 1988; Kraiger, 2003; Tannenbaum, Cannon-Bowers & Mathieu, 2000). Nevertheless, their less devotion was put towards understanding how the training characteristics can influence training effectiveness (Homklin, et al., 2014). Training cannot be appropriately evaluated in isolation from these surrounding factors (Tannenbaum et al., 2000). The next subsections expound on the expectations of trainees from the training to improve on the training processes.

### **2.8.2 Expectation of Trainees on the Training**

The expectation of trainees from the training that they will be attending is crucial towards the development of training programmes (Clemenz, 2001). Noe and Schmitt (2006) posit that a well designed and administered training can lead to trainee's positive reactions to the training, acquisition of skills and knowledge, change in behaviour and improved overall organisational performance. Hence, the expectations of trainees about the quality, design, delivery method and job relevance of the training are critical before undertaking or implementing a training programme. Therefore, training program designers should ensure that the programmes are aligned to the needs and expectations of trainees to achieve the desired training outcomes (Maria-Madela, et al., 2010). Furthermore, understanding the expectations of trainees before the training can assist and guide training institutions and trainers to design and deliver training interventions that are aligned to the trainees' needs and expectations (Praslova, 2010). The achievement and enhancement of training effectiveness are possible if the training providers can establish the expectations of trainees' way before the training session.

The perceptions and expectations of trainees before participating in the training programme may affect their satisfaction levels with the training, motivation and intention to learn, and application of learned skills on the job after the training intervention (Coetsee & Eiselen, 2006). Meanwhile, Tannenbaum et al., (2000) found that the trainee's expectations pre-training and during the training to influence their commitment and self-efficacy post-training. Tannenbaum et al., (1991, p. 759) defined training fulfilment as "the extent to which training meets or fulfils trainee 's expectations and desires".

According to Wahome, Ng ‘ang’a, and Sakwa (2013), trainees have certain expectations from the trainers. They found 35% of trainees have expectations on the trainer’s support, whereas about 45.74 % expected excellent presentations and clear communication from their trainers. Malik and Grover (2014) found 70% of the participants considered supervision as a vital element of training, 25% expected training to increase their prospects in their field of expertise, 15% expected training to improve their theoretical knowledge, and finally, 15% expected their personal development to improve as a result of the training they received. On the other hand, undesired training expectations can have adverse effects on training outcomes (Tannenbaum et al., 1991). Therefore, understanding the expectations of trainees before the training is very crucial as it may help to improve the training process.

## 2.9 Training Evaluation Models

Different organisations apply different models in evaluating their training programmes (Topno, 2012). The purposes of training evaluation models assist in finding the essential factors for consideration in the evaluation of training programmes (Giberson et al., 2006). Generally, training evaluation models are considered to be in two categories which are goal-based and system-based approaches (Al-Mughairi, 2015).

**Table 2. 2 Training Evaluation Definitions**

<i>Definition</i>	<i>Evaluation Outcome</i>	<i>References/Authors</i>
“A systematic process used to determine the merit or worth of a specific context”	Judgements about the value and worth of the programme	Giberson et al., (2006, p. 43)
“Assessment of the value of a training system, training course or programme in social and financial terms”	The social and financial value of the programme	Al-Athari & Zairi (2002, p. 242)

“The process of collecting descriptive and subjective information that is essential to making effective training decisions regarding the selection, adoption, value, and modification of training activities”	Offering input for making effective decisions	Goldstein & Ford (2002, p. 138)
“A systematic process of collecting data to determine the effectiveness or efficiency of training programs and to make decisions about training”	Offering input for making effective decisions	Saks & Burke (2012, p. 119)
“A process that may be used to determine the effectiveness or efficiency of an instructional programme”	Determining programme effectiveness	Brown (2015, p. 382)
“Any attempt to obtain information (feedback) on the effects of a training programme and to assess the value of the training in light of that information”	Giving feedback	Topno (2012, p. 16)

In recent years, there has been a predominant usage of the system-based and goal-based model in training and development literature (Dahiya & Jha, 2011). There are specific characteristics for each of the two evaluation models. The goal-based approach may assist training practitioners to accurately conceptualise the purposes of the evaluation (Eseryel, 2002). The system-based approach, on the other hand, helps to define the critical and necessary steps to be followed in achieving the goals and provide strategic ways in using the findings to make improvements on the training programme (Eseryel, 2002). The system-based approach also focuses on finding out the efficiency and effectiveness of the intervention (Rotem et al., 2010). Another method is a macro-view which focus on particular training session then analyses and explain the activities of such training event without explicitly accounting for environmental factors that are associated with the training activities (Al-Mughairi, 2015). In contrast, the micro-based model put more emphasis on internal and external organisational factors that influence the training activities (Dahiya & Jha, 2011). Eseryel (2002) suggested different frameworks for evaluating training programmes based on the approaches explained in the above paragraph.

Many models have been developed by different academics based on the ‘goal-based’ approach. Kirkpatrick's model is one of such models and is used in this study in evaluating training effectiveness of the NDA. Systems-based models may not provide adequate granularity due to the dynamic interactions between the training design and training evaluation which are not well represented. Few of the system-based approach provides a detailed description of the processes to be undertaken at each level. However, there is no provision for the evaluation tools (Dahiya & Jha, 2011). Table 2.3 present models of training evaluation used in organisations.

**Table 2. 3 Training Evaluation Models**

<i>Model</i>	<i>Levels</i>	<i>Model Type</i>	<i>Weaknesses</i>
Kirkpatrick’s four-level model (1959)	Reaction, Learning, Behaviour, Results	Micro View	Fails to take into account intervening variables affecting learning and transfer
Kaufman’s and Keller’s five levels of evaluation (1994)	Input & process, acquisition, application, organisation output, societal outcomes	Micro View	Lack of clarity on Kaufman’s five levels of evaluation aspects.
Phillips’ return on investment model for evaluation (1996)	Reaction, learning, application, implementation, business impact, ROI	Micro View	Return on Investment (ROI) is difficult to measure because it is subjective.
Stufflebeam’s Context, input process, product model (1983)	Context, input, process, product	Macro View	Fails to give information about what standards are more operant as well as identification of processes which are essential to enable decision-makers to apply value criteria
Bushnell’s Input, process, output model (1990)	Input process, output, outcomes,	Macro View	Lack of knowledge to operate and implement instructions and factors that influence evaluation results

Warr et al.'s Context, inputs, reactions outcomes evaluation model (1970)	Context, inputs, reactions outcomes	Mixed micro and macro view	Fails to present information about current training conditions and no behavioural focus
Brinkerhoff's six-stage model (1987)	Goal Setting, programme design, programme implementation, immediate outcomes, intermediate or usage outcomes, impacts and worth	Different measures	Suitable only for specific situations, such as when the employer and training organizers are closely related or when an evaluation design has already been built during the training process or where there are no competing deadlines or reduced budgets
Kraiger et al. 's learning outcomes model (1993).	Cognitive, skill-based, affective	Different Measures	Inadequate to measure learning and unable to differentiate between learners at higher levels of cognitive progress.
Holton's HRD evaluation and research model (1996).	Learning, individual performance, organisational results	Use Different Measures	Only a description of the order of influences on outcomes in individual learning experiences with no emphasis on feedback loops.
Brinkerhoff's Success case method (2003).	Focus and planning, impact model creation, survey to gauge success rates, interviews to determine the success of the training, formulation of conclusions	Uses Different Measures	Lack of understanding of the difficulties that trainees will face when back at their workstations

Adapted from Al-Mughairi (2015, p. 40)

The next sections (2.11. and 2.12) discusses the most critical training evaluation models in the literature for the two approaches. The alternative models of training evaluation that directly or indirectly relate to Kirkpatrick 's four levels model as proposed by Kirkpatrick (1959), Warr et al. (1970), Stufflebeam and Weil (1983), Brinkerhoff (2003), Bushnell (1990), Kraiger et al. (1993), Kaufman and Keller (1994), Holton (1996) and Phillips (1996) discussed in more details.

### **2.9.1 Training Evaluation Model (Goal-Based Approach)**

Kirkpatrick 's four-level model is a goal-based approach model. The measurements of the model are the result of integrating macro and microanalyses, whereby clear and achievable goals are broken down into logical processes (Kirkpatrick, 1996). The four training outcomes are reaction, learning, behaviour, and results. In contrast, the focus of system-based models is mainly on the essential components and their interactions, which enables training designers to examine the training process (Dahiya & Jha, 2011). In comparison to the approach of the system-based model, the Kirkpatrick 's four-level model is inclined more towards representing the interactions between training design and its evaluation thereof. Kirkpatrick's four levels model is useful in identifying complex processes and simplify them in reality application (Goldstein, 1993). Furthermore, the Kirkpatrick model is the most basic utilised model in training evaluation approaches (Nickols, 2005). According to Holton (1996), Kirkpatrick 's four-level model is more prevalent among academics and human resources development practitioners. As a result, most of the models have been developed using Kirkpatrick's model as the base. Furthermore, one of the critical strengths of Kirkpatrick 's four-level model is its identification of change in behaviour of trainees as well as its emphasis on the change in the trainees' abilities and transfer of learning back in their work environment (Tennant et al., 2002). The model further provides information on training outcomes, which help the training institutions and trainers to make informed decisions about the improvement or discontinuation of the training (Reio Jr. et al., 2017).

The four levels of Kirkpatrick 's model can be used in both formative or summative evaluations as the reactions and learning focus on the learning environment of the learner, and are captured at the end of the training session by the training facilitator (Long, 2005). Summative evaluation is an evaluation that is conducted after completing a programme and for the benefit of some external audience or decision-maker, such as a funding agency or future users (Bach-Mortensen &

Montgomery, 2018). Meanwhile, behaviour and results focus on the transfer of training to the work environment, are captured in the work setting and require management involvement. This study aims to evaluate the effectiveness of NDA training, and in achieving this, the focus is on the impact of training characteristics and trainee's characteristics. The following section compares Kirkpatrick 's four-level model with other models that evaluates training programmes.

### **2.10 Kirkpatrick's Four Level Evaluation Model**

Kirkpatrick 's model (1959) has been used to measure training effectiveness for more than fifty years. As depicted in Figure 2.1, Kirkpatrick 's model is considered to be the critical evaluation criteria to measure the effectiveness and/or efficiency of training programmes. The model identifies weaknesses and further improves future training programmes (Saks & Burke-Smalley, 2012). According to Chen et al. (2007), Kirkpatrick's model provides a straightforward and simplified system of evaluating the training outcomes. However, Bates and Coyne (2005) identified several shortfalls or limitations of the models such as incompleteness, and assumption of causality. Supporting these limitations were Ford and Kraiger (1995) who indicate that the over simplicity of the model in evaluating the effectiveness of training omitted essential factors such as trainee characteristics, work environment, training design, continuous support for the acquisition of skills and change in trainees' behaviour. In 1959, the original idea of Kirkpatrick 's model and its related methodology was developed, and since then, it has become well established within the training and development profession (Homklin et al., 2013; Saks & Burke, 2012). Kirkpatrick (1959, 1967; 1994, 1996, 2006, 2008) proposed the four levels for this model: reaction, learning, behaviour, and results.

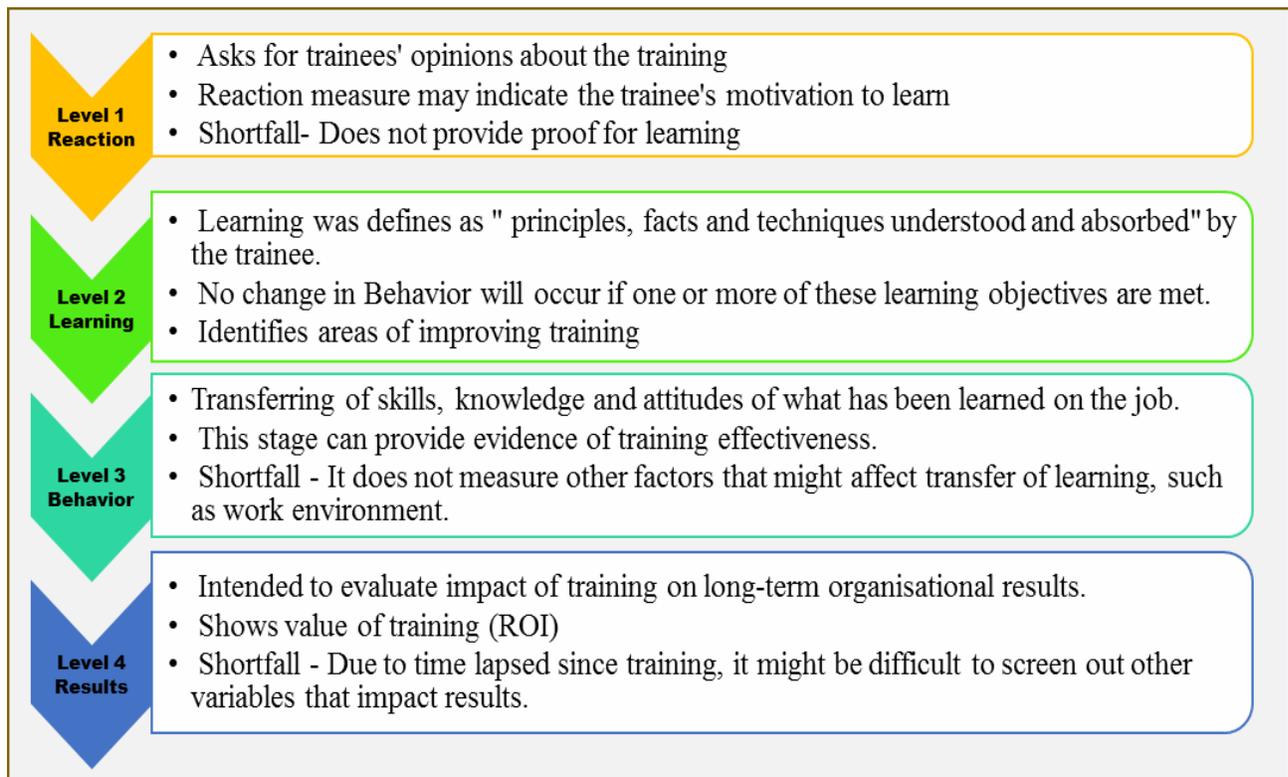


Figure 2. 1 Kirkpatrick four-levels model -adapted from Homklin et al. (2014, p. 15)

The model has helped organisations to focus on training evaluation practice on measuring outcomes and emphasised the importance of examining multiple measures of training effectiveness (Homklin et al., 2014). The first level of the framework assesses the reaction of the trainees on the training they attended. This level assesses reactions to training factors such as the trainer, training content, duration of the training and training setting. Kirkpatrick (1959), initially discussed this level of how well the trainees enjoyed a training program. In practice, the measures at this level have advanced and directed at assessing the affective responses of trainees on the quality or relevance of the training intervention (Homklin et al., 2014). Positive reactions to a training program may motivate and encourage trainees to attend future programs. However, if the trainees did not like the program or do not see its relevance, there is a possibility of reluctance in transferring the skills and knowledge in the workplace.

Furthermore, other trainees may be discouraged from attending such a training programme in the future. In summary, this level measures the trainees' attitudes and perceptions of the training program. Level two determines the extent to which learning has occurred. Learning is when there is a change of attitudes, improved skills, and knowledge as a result of training (Kirkpatrick, 1996).

He further emphasised that no change in behaviour can be expected from the trainees unless there has been the attainment of one or more of these learning elements. Rouse (2011) accentuates that though trainees might possess skills, knowledge, and attitudes acquired from the training, application of such cannot be guaranteed. Training effectiveness is when learned skills and knowledge are retained and applied on the job (Rouse, 2011). In understanding the emphasis by Rouse (2011), it is clear that training organisations should find innovative ways to ensure transferability of learning to the job after the training. Level three refers to change in trainees' behaviour as a result of training intervention (Kirkpatrick & Kirkpatrick, 2008). The change in behaviour on this level refers to the transfer of learning on the job, meaning the application of new knowledge, skills or/and attitude. The efforts of the training are ineffective if learned skills, knowledge or attitudes are not transferred back on the job (Homklin et al., 2014). Levels one and levels two evaluations should be concluded before proceeding to the third and fourth levels of evaluations (Kirkpatrick & Kirkpatrick, 2008). The final level of the model measures the impact of the training on the organisation. The measures can include the attainment of organisational goals and objectives, such as a reduction in absenteeism and personnel turnover, productivity gains, and cost reductions. It is worth noting that Kirkpatrick 's four-level model is significant to achieve more exceptional results and evaluating the effectiveness of training programmes (Kirkpatrick & Kirkpatrick, 2006).

### **2.10.1 Critiques of Kirkpatrick's Four Level Evaluation Model**

Notwithstanding the valuable contribution by Kirkpatrick's model to the thinking and practices of evaluating training programmes, the model has been critiqued by some practitioners and researchers critiqued the model. There are at least three limitations of Kirkpatrick's model in evaluating training programs. These include the incompleteness of the model, the assumption of causality, and the assumption of the increasing importance of information as the levels of outcomes are ascended (Bates, 2004). The model does not consider the evaluation of contextual factors that significantly influences the effectiveness of training (Baldwin & Ford, 1988).

#### ***The incompleteness of the Model***

The model presents an oversimplified view of evaluating the effectiveness of training by not considering individual or contextual factors that influencing training effectiveness (Bates, 2004).

Over the past two decades, different research studies have documented the presence of a wide range of organisational, individual and the design and delivery of training as factors that can influence the effectiveness of training before, during or after the training (Bates, 2004). Predictors such as post-training motivation and self –efficacy to transfer learning, peer support, collaboration, team learning and strategic link of performance transfer to the career advancement of the trainees have shown to have a positive influence on the transfer of learning on the job (Tews & Tracey, 2008). Kirkpatrick’s evaluation model implicitly assumes that an examination of these factors is not essential for evaluating the effectiveness of training (Bates, 2004).

### ***Causal Linkages Assumptions***

Kirkpatrick’s model assumes that the levels represent a causal linkage. The causal link such as positive reactions leading to more significant learning, and positive learning producing higher job transferability, and subsequently leading to positive organisational impact. Kirkpatrick states that “if training is going to be effective, it is important that trainees react favourably” (Kirkpatrick,1996:27), and that “without learning, no change in behaviour will occur” (Kirkpatrick, 1996:51). Research, however, has failed to confirm such causal linkages by Kirkpatrick. Kirkpatrick (1996) found a causal relationship between the four levels of his model. Furthermore, positive reactions of trainees were found to increase learning and learning lead to change in behaviour, and change in behaviour lead to desired organisational impact. Thus, the lower (from reaction to results) level of Kirkpatrick ‘s model must be evaluated first to gain useful results from the evaluation (Alliger & Janak, 1989).

The reaction level of trainees should be evaluated first as positive reactions to a training programme may encourage trainees to attend future training programmes. In contrast, adverse reactions may discourage them from attending future training (Reio Jr. et al., 2017). In other words, it might be difficult or even impossible to have a proper and good evaluation at the upper levels of the model unless the lower/preceding levels are measured first. According to Stewart and Brown (2011) , the outcomes of all the four levels provide different types of information about the training programme which might be less or more beneficial depending on what the purpose of the evaluation was.

### ***Incremental Importance of information***

Kirkpatrick's model assumes that data from each of the preceding levels of the evaluation process is more informative and essential than the last (Bates, 2004). Consequently, this assumption has led to perceptions that establishing level four results will provide the most useful information about training program effectiveness. However, the weak conceptual linkages that occur within the model and resulting data generated do not provide a sufficient basis for this assumption (Homklin et al., 2014). As a result of the critiques and pressures in organisations to measure the return on investments of the pieces of training, the model has been continuously improved to overcome difficulties in training evaluations (Al-Mughairi, 2015). The critiques of Kirkpatrick's model helped in the expansion of the model as well as the development of new training evaluation frameworks. The following section describes the developed frameworks in improving the shortfall of Kirkpatrick's model.

## **2.11 Other Training Evaluation Models**

There have been other models developed to evaluate the effectiveness of training programmes as a result of the shortfalls of the Kirkpatrick model. The next section discusses these models that aimed at closing the identified gaps from the Kirkpatrick four-level model.

### **2.11.1 Holton's Training Evaluation Model**

Holton (1996), in his research, argued that Kirkpatrick's four-level model is a taxonomy of outcomes and is flawed if used alone as a model to evaluate the training program. As a result of his critiques, he proposed a new model based on the existing research and investigated the impact of primary intervening variables such as motivation to learn, trainability, job attitudes, personal characteristics and transfer of training conditions (Holton, 1996). "If only the four levels of outcomes are measured, and a weak correlation between levels two and three, all we know is that learning from training was not associated with behavioural change. In the absence of a fully specified model, we do not know if the correlation is weak because some aspect of the training effort was not effective or because the underlying evaluation model is not valid" (Holton, 1996:6)

According to Holton (1996), Kirkpatrick's model does not consider other complex systems of factors that influencing the outcomes of training. He further considered the influence of factors in

only three training outcomes, namely, learning, individual performance, and organisational results. This model ignores the influence of elements on the reaction level, which is the first level in Kirkpatrick 's model. Instead, Holton 's model focused on the hypothesis of trainability and the primary variables that affect the ability, motivation, and perceptions of the work environment by trainees (Noe & Schmitt, 2006). As suggested and outlined by Antos and Bruening (2006), the primary moderating or mediating factors that affect the learning outcomes are trainee reaction, motivation to learn, and being able to learn (cognitive ability). The primary moderating or mediating factors influencing individual performance outcomes are motivation to transfer knowledge, transfer conditions within the organisation and transfer design. Finally, the primary moderating factors influencing the results of the organisation are as a result of the linkages between the training and organisational goals, expected utility, as well as external factors (Antos & Bruening, 2006).

### **2.11.2 Kaufman and Keller Evaluation Model**

Kaufman and Keller (1994) expanded on Kirkpatrick's four levels of evaluation by adding value to society and continued improvement, rather than a summative measurement (Watkins et al., 1998). The Kaufman and Keller's model increased the scope of the reaction level of Kirkpatrick's model by including enabling to the reaction, then renaming the level one 'input process', the mode further added the fifth level that measures societal outcomes and the impact of training on the society (Preskill & Russ-Eft, 2005). The five levels of evaluation if applied outside the training, it can allow for consideration of other performance improvement interventions (Kaufman & Keller, 1994). Therefore, the Kaufman and Keller's model looks into both internal and external results of training, linking to performance and organisational development (Passmore & Velez, 2012). Kaufman et al. (1996), are of the view that the Kirkpatrick model does not recognise the effects of training on society. As a result, they recommend the consideration of the worthiness of the resources in the evaluation of training. There are five levels in Kaufman 's evaluation training model. The first level (Level 1) there is a separation of inputs and process. This level is more concerned with the quality of the available organisational resources, and efficiency of the methods as well as resources invested in the process (Kaufman et al., 1996). Watkins et al. (1998), argue that the separation of input and process at Level 1 is highly useful for training evaluators as it provides managers and decision-makers with valuable information enabling for continuous

improvement of organisational training and education efforts. Level 2 is focusing on measures and acquisition of competencies; Level 3 is skills transfer in the work environment, and Level 4 measures the training output towards the organisation. Finally, Level 5 evaluates the responsiveness, consequences, and payoffs of the society as a result of the training intervention (Kaufman et al., 1996). Stokking (Stokking, 1998), on the other hand, believes that some of the extended aspects of Kaufman's model are unclear and lack clarity. As a result, the model needs further adjustments. As an example, "there are differences between the desired chronology of activities and the aspects of levels and importance or no clear distinction is made regarding the implementation condition of training" (Stokking, 1998, p. 180). In this model, implementation, learning objectives, and their achievements are all incorporated into Level 2 (acquisition). These are regarded to be the indicators of training effectiveness and proper training implementation (Stokking, 1998). Furthermore, Kaufman's model is good in theory. However, less has been offered by the model with regards to practical application (Topno, 2012). Therefore, there are similarities in this model with the Kirkpatrick as it provides similar information without consideration of other contextual factors.

### **2.11.3 Philips' ROI Model**

Phillips (1995) represented the results in terms of money on return on investment (ROI) to the four levels of Kirkpatrick's model. According to James and Roffe (2000), Phillip's five-level evaluation approach translates the worth of training into a monetary value which, in effect, addresses return on investment. Phillips framework provides the trainers with a logical framework to view ROI both from human performance and business outcomes perspectives. However, the measurement goes further, comparing the monetary benefit of the programme with its costs (Topno, 2012). According to Downes (2017), the Phillips model focuses on how to (a) collect data, (b) isolate training impact with other impacts of other factors, and (c) account for intangible benefits. According to Phillips (1996), many programs have failed to deliver on the set expectations. This failure has led to the sponsors of the programs to request for the return on investment justification. To justify their contributions, training institutions have increased their interest in the processes of return on investment (Phillips, 1996, p. 11). Kirkpatrick's four-level model fails to measure the economic value of a training programme or its benefits. Therefore, Phillips (1996) developed a way to measure the contributions of training by adding a fifth level to Kirkpatrick's four levels

(ROI-Return on Investment) and also expanded Level 1 (Reaction) to include trainees ‘intentions to apply knowledge from the training programme to their workplaces. According to Phillips (1996), the return on investment refers to “a ratio based on the monetary benefits to the costs of the training” (McKenna & Beech, 2014, p. 214). Preskill and Russ-Eft (2005) proclaim that defining return on investment is a multifaceted and complex task within a complex system. They further emphasised that the calculation of ROI is more of a subjective measurement. Consequently, it has not produced accurate training investment measurements.

### **2.11.5 Kraiger, Ford and Salas’s Learning Outcome Model**

Kirkpatrick ‘s four-levels evaluation model does not provide reliable measurements at the levels of behaviour and results (Patterson & Hobley, 2003). Kraiger et al. (1993) proposed three learning outcomes that training evaluations must be made up of and these are cognitive, skill-based and affective outcomes. As Kraiger et al. (1993) convey, training organisations often view learning outcomes as a change only in verbal knowledge. Through research, they discovered that this was a restrictive viewpoint on learning transfer and thus developed the classification scheme of learning outcomes based on taxonomies of Bloom’s 1956 and Gagne’s 1984. Bloom’s Taxonomy proposed cognitive-based learning outcomes, those beyond the recall of verbal knowledge, whereas Gagne’s taxonomy reinforced the need for assessment of cognitive, skill-oriented, and attitudinal learning outcomes. As a result of these taxonomies, Kraiger et al. (1993) in characterizing the learning outcomes, they proposed cognitive, skill-based and affective learning outcomes. Furthermore, the constructs were identified for each learning outcome. In Kraiger et al. (1993), the cognitive results include three indicators which are verbal knowledge, knowledge organisation, and cognitive strategies. Cognitive perspectives focus on the dynamic acquisition, organisation, and application of knowledge.

Once the trainees develop a foundation of verbal knowledge, he or she can begin to focus more on the procedural knowledge acquisition through practice. Once the trainee has built the foundation, then he or she is then able to start to apply the skills to real-life work situations (Kraiger et al., 1993). The second identified category is skill-based outcomes, which focuses on the development of technical and motor skills. In this learning outcome category, the trainees begin to be able to reproduce the trained behaviours through what is known as compilation. In this phase of learning

transfer, the performance of the trainee becomes less error-prone and operates in a more fluid and focused manner. At this point, individuals are more likely to identify the appropriate situations for using a skill (Kraiger, et al., 1993). The third and final specified category is a useful learning outcome. Kraiger et al. (1993), used the research conducted by Gagne to support that attitudes can determine behaviour and performance. Having to do with motivational tendencies, they identified three other secondary indicators; motivational dispositions, self-efficacy, and setting of goals.

The first two outcomes of this model are similar to levels 1 and 2 of the Kirkpatrick model, however, the levels are not considered to be hierarchical as compared to the Kirkpatrick. This means that one level does not necessarily lead to the next level (Patterson & Hobbey, 2003). Although this model has some advantages over Kirkpatrick's model, its shortfall is that it does not give or provide guidance on how to determine the financial value or cost-effectiveness of the training (Beech & Leather, 2006). Moreover, the model emphasises on the effects of training only at the trainee's level and neglects the impact of training at the organisational level. It further ignores the possible delays between training and on-the-job performance improvement. Lastly, on the model, there is insufficient opportunity to enable the collection and incorporation of the subjective views of trainees (or trainers) into the evaluation (Beech & Leather, 2006).

#### **2.11.6 Brinkerhoff 's Success Case Method Model**

Kirkpatrick 's model fails to consider the possibility of multiple variables that can contribute to the impact of learning opportunities; the model assumes that performance results can be achieved only through training (Brinkerhoff, 2003). The success case method is a way to evaluate the impact of training on business that is aligned with and fulfils a deliberated strategy (Brinkerhoff, 2003). Two fundamental parts involved in a successful case study process are a) participants who are the most successful and participants who are the least successful at applying learned knowledge and skills from the training programme, b) draws a sample from the most and least successful cases (Brinkerhoff & Dressler, 2003).

Brinkerhoff (2003) extended the training evaluation model to six stages (goal setting, program design, program implementation, immediate outcomes, intermediate or usage outcomes, and impacts and worth). This model differs from Kirkpatrick's by including the earlier phases of the

training process, need assessment, design, and implementation, into the evaluation phase (Homklin, et al., 2014). According to Downes (2016), Brinkerhoff's model focuses on qualitative analysis and is not restricted to learning, and can be used to analyse any significant changes in the organisation such as how to implement new processes. This model involves the identification of the most and least successful cases within a learning program and followed by studying such cases in detail. Downes (2015) asserts that comparing the successes to the failures, enables the organisation to learn what to change, and ensures success in future endeavours. As a result of these learnings, the organisation can produce success stories and show the value of the training, based on the lessons learned. However, in overall learning evaluation, Downes (2016) recommends using other training evaluation methods other than the Brinkerhoff Success Case Method.

Although the model has particular worthiness, it still needs refinement on the identification of success factors that relate to a specific type of work by the training experts and instructors. This clarity is necessary because of the difficulties that trainees face when they are back at their work environment (Casey, 2016). The following section discusses the justification for the researcher in adopting Kirkpatrick 's model for this study.

## **2.12 Kirkpatrick's Four-level Evaluation Model**

The Kirkpatrick four-level evaluation model was established in 1959 by Donald Kirkpatrick. Kirkpatrick 's four-levels model was adopted as a relevant model to evaluate training effectiveness in this research for several reasons. The model has been widely recognised and mostly applied by training institutions and Human Resources professionals in evaluating the effectiveness of their training interventions (Chen, et al., 2007). The simplicity and the basic approach of the model have made it the most commonly used methods in the field of evaluating training effectiveness (Sachdeva, 2014). Furthermore, the model is the foundation of most training evaluation models, which were expanded or developed using Kirkpatrick 's four-level model as a reference or foundation (Preskill & Russ-Eft, 2005).

Notwithstanding the critiques of Kirkpatrick 's four-level model, as indicated earlier in this chapter, most of the models have similar challenges and requires further development. Therefore, this study aims to evaluate the effectiveness of NDA training on improving governance and non-

compliance of non-profit organisations through investigating the effects of training characteristics on training effectiveness. The following section provides a thorough explanation of four-levels of Kirkpatrick 's model training evaluation (reaction, learning, behaviour, and results).

### **2.13 Measuring the Effectiveness of Training (Training Effectiveness)**

Notwithstanding that training effectiveness evaluation is a critical aspect of training and development, the correct and appropriate selection of evaluation criteria is crucial for determining the success of the training programme. The following subsections provide details on using the four levels model of Kirkpatrick in assessing the effectiveness of a training programme.

#### **2.13.1 Level 1 - Reaction**

The reaction is either a single dimension such as the satisfaction of trainees about the training (Diamantidis & Chatzoglou, 2012), or a multi-dimensional construct such as enjoyment, utility, affection and difficulty (Warr & Birdi, 1999). Harrison (1992), Warr and Birdi (1999) suggested that the reactions should include enjoyment, utility and difficulty dimensions. Furthermore, Alliger et al. (1997) assert that the reaction consists of utility perceptions and affective constructs. Most studies focus on the trainee reaction construct for assessing the multi-dimensional constructs (Brown & Sitzmann, 2011). The current research uses reaction as a multi-dimensional construct, as suggested by Brown and Sitzmann (2011) .

Table 2.4 gives a summary of the trainee reaction dimensions, which are discussed extensively in the literature. Brown (2007) asserts that understanding the participants about certain aspects of the training can be beneficial to trainers to identify problems and measurement of satisfaction with the training and this understanding of how they feel can be useful in detecting motivation or diagnosing the trainees ' issues. Morgan and Casper (2000) added six distinct factors when measuring the trainees 'reaction to the training. According to Brown (2007), as indicated earlier on in this chapter, the reaction can measure one dimension, such as satisfaction, or multiple dimensions, such as training content, materials, delivery methods, trainer, instructional activities, duration, evaluation, and improvements.

In the same vein, trainee reaction indicates the trainee ‘s perception of participating in a training programme by measuring elements of the training programme, such as trainer performance, training environment (Diamantidis & Chatzoglou, 2012); and training components, goals (Sitzmann, et al., 2008); content, material, process, and design and delivery, to redesign and develop an instructional programme (Saks & Burke-Smalley, 2012). The initial response of trainees about the training is essential and represented by three elements: expectations, desire, and perception (Tannenbaum, et al., 1991).

**Table 2. 4 Trainees’ Reaction Dimensions**

<b>Dimensions</b>	<b>Authors/Sources</b>
Satisfaction only (Liking the training)	Alliger and Janak (1989); Kirkpatrick, (1994); Noe (1986); Ghosh et al., (2011); Lin et al., (2011).
The extent to which the participants can apply the content to their job (enjoyment, utility), and difficulty.	Alliger and Janak (1989); Harrison (1992); Giangreco et al., (2010); Warr and Bunce (1995), Warr et al., (1999).
Utility and affective (the extent to which a participant —liked or was satisfied with different aspects of the training) reactions	Alliger and Janak (1989); Alliger et al., (1997); Arthur et al., (2003a); Morgan and Casper (2000), Tracey et al., (2001), Sitzmann et al., (2003), Tan et al., (2003), Yoon (2018)
Overall satisfaction (The perceived efficiency (effectiveness) and usefulness of training, and the perceived trainer performance)	Giangreco et al., (2009), Giangreco et al., (2010)
Satisfaction and ease of use	Kettanurak et al., (2001); Giangreco et al., (2010).
The utility of training only	Bhatti and Kaur (2010).

Researcher’s Summary of Reaction Dimensions of Trainees

Patrick (1992) asserts that the feelings and motivation of trainees toward training plays a critical role in determining their level of success in the training programme. The reaction is another way of trainees 'feedback with regards to the training they have attended (Blanchard et al., 2000). The evaluation of reaction, on the other hand, is merely finding out the extent to which trainees liked or disliked the training that they participated (Morgan & Casper, 2000) Therefore, evaluators assess the reactions of trainees for various reasons which the details are in the subsections below:

### ***Receiving Feedback***

Receiving feedback about a training programme assists the trainers or instructors to improve their training efforts and further demonstrate the effectiveness of the training programme. The strength of measuring reaction lies in getting feedback from the trainees and judging the effectiveness of training so that the training instructor/trainer can recognise the trainees 'needs from the training programme (Kirkpatrick & Kirkpatrick, 2006). Accordingly, by analysing the trainees 'feedback results, the trainer can be able to adjust the programme as required and share the results with the organisation (Mavin & Robson, 2014). Trainee reactions provide immediate and valuable feedback about how well the training was delivered (Turner et al., 2017). Hence, the trainer can get a quick understanding of how the learners felt about the training session in terms of the content, structure and delivery method (Mavin & Robson, 2014).

### ***Improving future training programmes***

Morgan and Casper (2000) assert that the reaction of trainees on the training can provide meaningful input for the design and improvement of training efforts. Measuring the reactions of trainees about the training can assist the organisations in improving their future training programmes through recognition of the weaknesses in the current training programmes (Goldstein & Ford, 2002; Tannenbaum & Woods, 1992). Quantitative information provided by trainees through their reaction responses can be useful in setting out the performance standards of future training programmes (Kirkpatrick & Kirkpatrick, 2006). Trainee's reaction gives information that is of limited value to the trainer. Henceforth, it is vital to use other levels in measuring the effectiveness of training programmes rather than focusing only on level one of the model. Therefore, in this study, all four levels will be analysed to understand the individual and organisational needs, objectives, and outcomes. The reaction data that is credible can be an

excellent diagnostic tool in the design and delivery of training interventions (Morgan & Casper, 2000). Trainee reactions provide insights about the degree of satisfaction of the trainees concerning the design and implementation of the training programme (Lee & Pershing, 2002). Change in reaction has a significant influence on training effectiveness (Borate, et al., 2014). The training objectives, methods, environment, trainer and training content are important factors related to the training programme design (Nikandrou, et al., 2009). Therefore, in evaluating the reaction of trainees on the training, the participants must be asked to comment on these factors (Kirkpatrick, 1959; Kirkpatrick & Kirkpatrick, 2006, Lee & Pershing, 1999). Thus, one of the study objectives is to investigate the impact of training characteristics on Level one (reaction) of Kirkpatrick's model.

### **2.13.2 Level 2 - Learning**

Kunche et al. (2011, p.3) defines learning as “the extent to which the learners gain knowledge and skills”. Learning is one of the potential training outcomes investigated in training research (Al-Mughairi, 2018). The learning level of Kirkpatrick's model measures the extent to which trainees have acquired new knowledge and skills (Rajeev, Madan & Jayarajan , 2009). In the same line, Saks and Burke-Smalley (2012) posit that evaluating learning assist the trainer in whether or not to adjust the training context or teaching techniques. In other words, this level seeks to identify the results of a training programme with regards to gained skills and knowledge by the training recipients. Hence, for learning to be evaluated, it is necessary to understand if new knowledge, attitudes or skills have been acquired (Kirkpatrick & Kirkpatrick, 2006).

As emphasised by Kirkpatrick (1996), the aim of level two in the model is to assist the trainees in reflecting on the skills and knowledge that they have gained from the training. Whereas learning helps in identifying whether the training was a success or not, it does not provide data on the effects of the training on the organisation or whether the organisation supports the application of newly acquired knowledge or skills (Al-Mughairi, 2018). In other words, level two of Kirkpatrick's model evaluates the learning outcome but not job related-performance (Arthur et al., 2003a). In support of this view, Tannenbaum et al. (2000) affirm that the learning criteria are not useful in measuring the change in trainee's behaviour. However, Kirkpatrick and Kirkpatrick (2006, p. 184) assert that “if learning is assessed separately from other levels, it will not provide appropriate

feedback about whether trainees were satisfied with the training, nor will it determine if the learning was transferred back in the work environment, or if it made any effect on the organisation". Notwithstanding the useful information provided by level two with regards to the advancement of knowledge, skills, and attitudes after a training programme (Tamkin et al., 2002), it is costly to plan and execute (Morgan & Casper, 2000). This level requires more time and money than level one of the Kirkpatrick's model, and greater insight into the evaluation process in developing valid measures of learning is also needed (Abdmouleh et al., 2015). Thus, well-designed and delivered training programmes may reduce the effort and time necessary to conduct training evaluations at level two (Al-Mughairi, 2018).

Learning is a function of the content, methods, and processes used during a training programme (Tannenbaum et al., 1991). This level aims to understand the trainees' comprehension of instructions, principles, ideas, knowledge and skills (Lin et al., 2011). On the other hand, several environmental and situational factors can also affect the learning of trainees (Turner et al., 2017) 2017). Thus, the trainers who are knowledgeable about the training environment and the reactions of trainees, will be able to know how to administer and deliver the training objectives as well as knowing whether the trainees acquire the necessary amounts of knowledge during training or not (Abdmouleh et al., 2015). This study also aims to investigate the impact or effects of training characteristics on learning (level 2). It is essential to evaluate the learning of trainees when evaluating the effectiveness of a training programme because, without learning, no behavioural change will occur (Kirkpatrick & Kirkpatrick, 2006). Velada et al. (2007) assert that retained training content will lead to more knowledge transferred back to the work environment. Furthermore, learning was found to have a significant influence on the change in trainees' behaviour (Homklin et al., 2014).

It is evident from the reviews that evaluating training at the reaction and learning levels will help to identify training requirements and objectives based on the context of the organisations and determine improvements in the knowledge, skills, and attitudes of the trainees. Also, measuring behaviour and results helps to determine if learning has been transferred back on the job, which ultimately leads to the improvement of organisational performance.

### **2.13.3 Level 3 - Behaviour**

Behaviour is defined as “the capability to perform the learned skills while on the job” (Kunche et al., 2011, p. 3); and “Transfer of knowledge” (Olagunju, 2014, p. 23). In other words, the behaviour is through an assessment of knowledge and skills transferability back in the work environment. According to Saks and Burke-Smalley (2012), when evaluating the behaviour, the results can show if any change has happened and if further training is required to enhance the development of skills.

Measuring behaviour can provide an enormous amount of qualitative information about the effectiveness of training as compared to data collected at the results level. The data collected at the results level tends to be quantitative and measured by the ratings from the supervisor or other objective indicators of performance (Arthur et al., 2003a). Management can measure changes or improvements in trainees ‘skills, competence, abilities and relationships by distributing surveys, observing performance, giving performance reviews and listening to comments from the employees ‘line managers and or colleagues (Kirkpatrick & Kirkpatrick, 2006). In determining the success of a training programme, level three should be measured (Velada & Caetano, 2007).

In practice, there are various reasons why the trainees’ behaviour is measured. First, is to assess whether the objectives of the training and the trainees’ needs have been met, then change in behaviour can be observed. According to Attia, Honeycutt and Fakhr (2013), measuring behaviour is the only level that supports the goals and objectives of the organisation. Second, behaviour measures improvement in job performance and this indicate the training effect on trainees ‘performance. In other words, the effectiveness of a training programme can be observed through understanding how much of the skills and knowledge gained from the training have been transferred back on the job (Arthur et al., 2003a). In this level (level 3-behaviour), there is an identification of problems relating to the training programme, and the organisation can identify possible support needed towards the improvement of the training programme (Kirkpatrick & Kirkpatrick, 2006).

Albeit the advantages of measuring the change in behaviour, more time and money are required (Morgan & Casper, 2000), and deep insight into performance interventions and the causes of performance deficiencies. Furthermore, insufficient time, inadequate equipment, lack of peer and

management support are some of the obstacles that prevent the transfer of knowledge back in the workplace (Long, 2005). As a result, there are fewer efforts towards measuring the change in behaviour as compared to reaction and learning levels (Al-Mughairi, 2018). The objectives of this study, however, implies to investigate the impact of training characteristics on learning. Training characteristics play a critical role in the gaining of new skills and knowledge as well as transferring those skills back in the job (Topno, 2012). The methods used, the variety of training stimuli, which is associated with the usage of different instructional strategies, as well as the interactions between trainees and the trainer create the proper learning environment and play a defining role in the transfer of skills and knowledge (Nikandrou et al., 2009).

If the behaviour level is evaluated separately from other levels, trainee satisfaction about the training will remain unknown, and the acquisition of new skills and knowledge does not guarantee transferability. Consequently, it might be challenging to expect positive changes in organisational results.

#### **2.13.4 Level 4 - Results**

According to Topno (2012), level 4 focuses on the effects of improved trainee performance towards the business. Level four of Kirkpatrick 's model measures the results. This level is essential in determining the efficiency of training and development programmes, measuring the impact of training on organisations and measuring the training effectiveness through objective measures, such as sales per trainee (Phillips, 1996). “This level defines the outcomes/results of a training programme, such as increased production, upgraded quality, reduced costs, decreased frequency or severity of accidents, increased sales, condensed turnover, and higher profits” (Kirkpatrick & Kirkpatrick, 2006, p. 73). The level also measures the monetary benefits of training programmes, such as productivity and profits (Arthur, et al., 2003a). According to Saks and Burke (2012), this level measures the degree to which a training programme has improved the outcome of a department or a whole organisation, such as achieving higher profits. Steensma and Groeneveld (2010) argue that different aspects affect the long-term results of training programmes. Van Tiem, Moseley and Dessinger (2012, p. 187) defined a confirmative evaluation as “the process of collecting, examining and interpreting data and information to determine the continuing competence of learner (performers) or the continuing effectiveness of the instructional materials

(performance improvement intervention)”. Therefore, substantial levels of investment and expertise are needed to deliver the results level.

The literature guides us that if the final level of Kirkpatrick is evaluated separately from other levels, it will be impossible to measure trainee satisfaction, estimate the level of learning and demonstrate the transfer of knowledge on the work environment. Therefore, the information gathered from the other preceding levels can be used as a measurement tool at level two of the Kirkpatrick’ model. The following section discusses the relationship between the four levels of Kirkpatrick’s model.

#### **2.14 Relationship between the Four Levels of Kirkpatrick’s Model**

Kirkpatrick’s model assumes that there is a correlation between the four training outcomes: reaction, learning, behaviour, and results (Santos & Stuart, 2003). The levels represent a causal chain such that positive reactions lead to more significant learning, which produces a higher transfer of knowledge and ultimately, more positive organisational results (Bates, 2004). Bramley and Kitson (1994) contend that each level provides different data and evidence. Thus, analysing all four levels will produce useful information about individual and organisational outcomes as a result of the training. According to Saks and Burke (2012), previous studies have investigated the relationship between the four levels of evaluation outcomes. As an example, a meta-analysis by Hauser, Weisweiler, and Frey (2018) using Kirkpatrick’s framework displayed another study that used ‘Happy sheets’ alone to evaluate training effectiveness. The findings indicate that the approach of ‘Happy sheets’ alone was not enough; consequently, the results were insufficient in determining the programme effectiveness. As a result of the lack of proper evaluations of training programs, the objective of the meta-analysis was to investigate the effectiveness of personnel development programs in academia by using level 1 to level 4 (reaction, learning, behaviour, and results) of Kirkpatrick’s model. In this study, the literature search included one-hundred and twenty-three training programs conducted between summer 2012 and 2014; these training programs clustered into 26 primary studies. The study used repeated measurements design to examine the short and long-term effects of the personnel development program, and these measurements were done one week before, directly after the training and six weeks after the training program. The findings of the study found a moderate to high long-term effect and a high

short-term impact on learning. These results meant that the training programs led to significant changes in participants' knowledge immediately after the training, which reflected an immediate knowledge gain. Furthermore, the effect decreased six weeks after the training, indicating knowledge retention and a sustainable effect (Hauser et al., 2018). They further examined effects in terms of participants' behavioural changes and found a small to moderate long-term impact. The discovery meant that the participants exhibited increased desirable behaviour six weeks after the training. These long-term effects on the learning and behavioural levels led to the conclusion that the positive influence of the training programs did not fade out and lasted several weeks after the training (Hauser et al., 2018). This finding is an indication of the sustainability and effectiveness of the training. The meta-analysis also found medium to high levels of heterogeneity among the primary studies concerning both short and long-term effects.

Borate et al. (2014) in their study to evaluate the effectiveness of continuous quality improvement training in a multinational company in India, found the statistical significance of the four levels of Kirkpatrick in evaluating the effectiveness of training. The study surveyed 330 employees of quality departments within companies across different engineering industries. On level two of the model (learning), the results confirmed that change in learning of the trainees has a significant influence on training effectiveness. Level three (behaviour) had a significant influence on training effectiveness. The level four (results) indicates that change in result has a considerable influence on the training effectiveness. The study went further to investigate how the behaviour of trainees affects the other levels in the model. The results showed that the change in trainee's behaviour had a significant influence on learning and positive outcomes (Borate et al., 2014).

Lim and Morris (2006) reported their research findings that the training characteristics, especially the training environment and the trainer, influenced the satisfaction of the learner or trainee about the program. They further developed a model for the relationship between learner characteristics, training characteristics and organisational climate characteristics as independent variables, and learner satisfaction, academic achievement awareness and transition awareness as dependent variables. This model explains that trainee characteristics (self-efficacy, motivation, expectations, and abilities), training characteristics (training design, training environment, training content, and trainer) and organisational climate characteristics (mentor support, peer support and organisation

support) all have a direct influence on learner satisfaction and the achievement of the organisational goals. Yoon (2018) found trainee's characteristics, training characteristics and organisational climate characteristics to all have a direct influence on the training effectiveness. Also, Anderson, Ellwood and Coleman (2017), the trainees' perception of the work environment influences their learning motivation, which in turn influences the degree of his or her learning of the training content. Finally, the learning of the trainee leads to improved organisational results through behaviour change (Yoon, 2018).

The results of the study conducted by Wartenweiler (2018) revealed that learning goes hand in hand with the reaction of trainees. This finding also resonates with the statement by Kirkpatrick (1996), who in his model indicated that reaction criteria could not be separated from the learning criteria. The research findings also confirmed that the program had a significant learning effect as the trainees could well articulate the program. In general, the quantitative findings of the research showed a substantial increase in the survey means scores from program start to program end. In short, students' cognitive knowledge and attitudes, as well as their behaviour, had a positive impact on education for the socialization of the organisation (Wartenweiler, 2018). The pilot study by Ghofranipour et al. (2018) on improving intern's patient-physician communication skills found that a theory-driven educational intervention could alter the knowledge and self-efficacy of the trainees. As a result, interns that increased their level of knowledge and self-efficacy were able to communicate better with their patients. This statement supports the study findings by Wartenweiler (2018). Another study by Stiehl et al. (2015) found training effectiveness to be limited if the trainee's motivation to transfer the learned skills is low. Furthermore, Wartenweiler (2018) found a strong correlation between self-efficacy and communication scores, whereby changes in communication skills score were dependent on the changes in self-efficacy scores of the trainees.

Another study by Calvo et al. (2018) examined the effectiveness of a social enterprise MOOC (massive open online course) program using Kirkpatrick's model. The study invited learners from different cultural contexts across the North and South countries. The findings demonstrated positive reaction, attitude and learning skills (Levels 1 and 2) of the learners, and this showed evidence of positive results from the training program. The findings of the study also indicated that they were useful towards the reaction and learning of trainees as they were able to demonstrate

that they were generally happy with the experience of the courses and would highly recommend it. The respondents in their study also claimed that the training provided them with a multidimensional global context involving training content from different industry organisations across the globe (Calvo et al., 2018). This above statement confirms that indeed, the relevance of the training content plays an essential role in the behaviour and learning of trainees. Additionally, looking at the effectiveness of the program at an individual and organisational level in terms of the transfer of learning to professional practice, the findings indicated a positive impact (Levels 3 and 4). “Most of the learners reported a change of behaviour, sense of confidence and increased in their motivation to continue or start with their organisations” (Calvo et al., 2018, p. 18). Evidence to support these changes in learner’s behaviour was supported by the study findings, which showed that learners were generally doing things differently at an organisational level. These findings support the model of Kirkpatrick and Kirkpatrick (2006), which suggest that change in behaviour and motivation to learn can lead to improved organisational performance. Calvo et al. (2018) advise scholars and evaluators to use mixed-methods approach and training evaluation frameworks such as Kirkpatrick to capture outcomes of training effectiveness and impact.

The findings of the meta-analysis conducted by Turner et al. (2018) in investigating the use of reaction criteria as a method to evaluate training, found a moderately positive relationship between trainees’ reactions and performance. In their concluding remarks, Turner et al. (2018) confirmed that reaction is an indirect measure of learning and performance. Likewise, they cautioned that the moderate relationship found between reactions and learning does not guarantee the sustainability of learning in the long-term. As a result, they recommended that attention should be given to environmental and situational factors as they can have an impact on trainee learning and training transfer.

Another study conducted by Gessler (2009) evaluated 43 training courses with 335 participants to investigate the correlation between the first three levels of Kirkpatrick’s model. The results of the hypothesis testing found no correlation between trainees’ reaction and learning. Because of these results, Gessler (2009) concluded that evaluation of reactions alone is not sufficient to justify the quality of rendered services. These findings are consistent with Holton (1996) critiques about the causal assumptions of levels by Kirkpatrick’s model. Conflicting the results of the studies

mentioned in the paragraph above is the research by Craig, Hall, and Phillips (2016), when they evaluated the outcomes of the interprofessional learning program. In their study, they used all four levels of Kirkpatrick's model to evaluate the outcomes of the program. They used all the four levels of the model to assess 156 medical students' reaction, perceptions and attitudes concerning improved skills and transfer of learning to professional service. The results of the research showed a positive change in attitude and collaborative skills, which demonstrated that the program was effective in improving the skills and attitudes of the students. The study showed evidence of a positive relationship between learner satisfaction and skills development (Craig et al., 2016). Holton (1996) included the trainees' reactions as a measure for the learning environment that affect learning behaviour. He accomplished this through a complex role of moderating the relationship between motivation to learn and the actual learning.

### **2.15 Factors Affecting Training Effectiveness**

Baldwin and Ford (1988, p. 68) in their research emphasised on the importance of training design towards the effectiveness of a training programme. Furthermore, they identified some training design characteristics such as sequencing and the relevance of training content. Training design includes creating a learning environment, applying theories to transfer and using self-management strategies to enhance learning retention (Baldwin & Ford, 1988; Holton et al., 2000). Ma (2018) defined training design factors as principles of learning, sequencing and training content. Nikandrou et al. (2009) argued that the influence of training design on training transfer had not been examined extensively by researchers. According to Velada et al. (2007), the design of the training content should be similar to the work environment, and sufficient time should be provided for trainees to practise any new skills to trainees; this will maximise training transfer. "The concept of perceived content validity holds that training content should be similar to the actual work, and this similarity can motivate trainees to transfer the learned skills to their work." (Muhammad, et al., 2014, p. 54). The design of the training is one of the most critical factors in ensuring the transfer of training. Training design includes creating a learning environment, applying theories to transfer and using self-management strategies to enhance learning retention (Baldwin & Ford, 1988; Holton et al., 2000). Holton et al. (2000) found content relevance, trainee's choice of attendance, the role of trainer, pre-training and post-training determinants, and training materials as determinants variables that leads to transfer of training and results in training effectiveness.

Nikandrou et al. (2009) argued that researchers had not examined the influence of training design on training transfer. Holton et al. (2000) posit that the similarity and relevance of training content to the actual work results in transferring training and consequently, training effectiveness. Similarly, May and Kahnweiler (2000) are of the view that sufficient time should be afforded to trainees to practice what they have learned (new skills and knowledge) back on the job, and the content of the training should be similar to the actual day-to-day work. Different researchers have identified training characteristics that affect training effectiveness (reaction, learning, behaviour, and results). Moreover, the existing literature on training characteristics includes pre-training interventions and activities, trainee readiness, the training environment, training methods, trainer behaviour, training content, and training objectives. A right combination of these factors may lead to training effectiveness (May & Kahnweiler, 2000).

Several training characteristics, trainee's characteristics and environmental work factors affect training effectiveness; therefore, it is necessary to consider their impact on the effectiveness of a training programme. Consequently, examining the impact of training characteristics on training effectiveness (reaction, learning, motivation to transfer, behaviour, and results) is crucial in understanding why specific training outcomes occur.

### **2.15.1 Trainees Characteristics**

Trainee characteristics are through self-efficacy, goal orientation, motivation to learn (Tziner, et al., 2007) and learner readiness and intention to learn (Baldwin & Ford, 1988). It is important to identify individual characteristics of trainees that have an impact on training transfer as indicated earlier in this chapter to measure the effectiveness of a training program, transfer of training must have occurred. Different researchers that understanding the personal characteristics of trainees plays a significant and central role in the learning process, not much training research in the past two decades has included individual differences as an essential determinant of learning and behavioural change (Baldwin & Ford, 1988; Colquitt, Lepine & Noe 2000; Noe, 1986). However, despite this awareness of the critical role that trainee's characteristics play in the training process, numerous gaps in the literature exist. Training institutions have focused limited attention on assessing the individual characteristics, and their learning before the training intervention (Colquitt

et al., 2000). Holton et al. (2000) identified a wide range of trainees' characteristics that may directly influence training transfer, such as (cognitive, psychomotor, and physical ability constructs). The most popular trainee characteristics variables which have been identified and examined in the past research are cognitive ability, self-efficacy, locus of control, motivation, perceived job utility and career utility (Baldwin & Ford, 1988). According to Ma (2018), trainee characteristics consist of the individual's ability, motivation, and personality factors. The results of the study conducted by Paulsen and Kauffeld (2016) on investigating the relationship between positive affection experienced within training and motivation to transfer found a relationship between positive affection and motivation to transfer. This finding means that positive affection experienced by trainees is essential for the successful transfer of training. Similarly, supervisor support, peer support, and transfer motivation are significant predictors of training transfer (Massenberg et al., 2015).

Self-efficacy reflects people's beliefs in their capabilities to conduct a particular task, influences initial behaviour, and enhances individual motivation to devote additional effort (Seo & Ilies, 2009). In other words, people who display self-efficacy hold strong beliefs in their capabilities to perform actions even when facing unpleasant situations. Saito and Miwa (2007) reflection is a cognitive ability that plays a critical role in training effectiveness. (Seo & Ilies, 2009) postulate that trainees with high critical thinking skills can adjust their cognitive processes, and reflect their training experiences during the training sessions. Trainees' reflections about the training experience during the training session is of the essence.

In their study, Lin et al. (2015) found that timely instructor interventions and continuous interactions with trainees strengthen the learning outcomes and the understanding of the training content, which promotes the trainees' self-efficacy. As a result, trainees are willing to devote additional effort to learning and exhibit increased determination in continuing with the training as well as attempting challenging learning tasks. The characteristics aspect of trainees such as cognitive ability, self-efficacy, motivation, personality, perceived utility, career/job variables and locus of control have been identified to affect training transfer and ultimately training effectiveness (Ma, 2018). The study by Tortop (2014), in examining the effectiveness of the in-service training in Turkey, found teachers' self-efficacy to be positively correlating to their positive attitudes

towards the training. The literature suggests that specific trainee characteristics, relating either to personality or motivation, have a direct influence on training transfer and outcomes of the training. Ma (2018), found some trainees who did not want to apply what they learned from the training on the job for monopoly and competitiveness edge, and this hindered the transfer of training.

Furthermore, the results of the study indicate that individuals' attitudes toward training influenced their judgment about the purpose of training, which impacted the application of the training content. In other words, a negative attitude toward training impeded the transfer of training Ma et al. (2018). The results further showed that trainees' self-efficacy influenced training transfer. "When the trainees felt confident and self-assured about applying learned abilities on their jobs and could conquer the obstacles that hindered the use of learned knowledge and skills, a positive transfer might happen" (Ma et al., 2018, p. 4). In exploring the different factors contributing to the effectiveness of training, Yaqoot et al. (2017) found trainee motivation to have a more substantial influence on training effectiveness as compared to the training environment. The findings by Yaqoot et al. (2017) suggest that motivated trainees are most likely to transfer what they have learned back in their workplace.

Ghofranipour et al. (2018) in their pilot study to evaluate the effectiveness of training on improving communication between the medical interns and patients found that interns with high scores of self- efficacy, and knowledge were useful in improved communication. Furthermore, the results of the study found providing feedback to the interns (trainees) on their practice from the peers to be a motivating factor of improved communication. Moreover, the findings confirmed that medical students performed well within their courses which they received the training from, however, transferring the skills back on the job did not occur (Ghofranipour et al., 2018)

### **2.15.1.2 Trainee Readiness**

Trainee readiness represents the characteristics of individuals. The concept of trainee readiness relates to integrated control theory. The integrated theory explains that trainees should be voluntarily and ready to participate in training for learning and skills transfer (Muhammad et al., 2014). In the earlier study by Facteau et al. (1995), trainees who perceived the training to be useful and helpful to the career development showed the most likelihood and readiness for learning new

skills. In other words, training perceived to be contributing to career development can influence the readiness of trainees to learn. Stephen (2008) in his study to measure learner readiness in terms of knowledge retention, motivation to learn and application of skill, found learning transfers to be higher amongst trainees who were confident and motivated about sustaining the new skills. Put merely, trainees who know the training program and motivated to apply their newly learned skills, are more likely to transfer their learning back on the job.

Kirwan and Birchall (2006) in their study to test the Holton's model of training transfer found the transfer motivation and trainees' self-efficacy to have a positive correlation with the trainee readiness, transfer design, perceived content validity, and opportunity to apply the new skills back in the workplace. It is for this reason that the individual characteristics of trainees towards training effectiveness were considered to be essential factors worth exploring in this study. This research proposes trainees' age, occupation in the NPO, qualifications level and years of experience as trainee characteristics that might affect the effectiveness of training. In the study by Kirwan and Birchall (2006), trainee readiness exerted a significant effect on training effectiveness. As a result, they proposed that the readiness of trainees to learn new skills directly affects motivation to transfer skills back in the workplace. Diversity of trainees' demographic characteristics have been studied with regards to transferring learning acquired from the training back on the job. The related personal characteristics such as age, experience, gender and qualifications, with the trainees' ability to acquire and transfer new skills and knowledge were investigated (Walsh & Magley, 2018). Some personal demographics, like education and experience, had a significant positive relationship with learning (Walsh & Magley, 2018).

As stated by Choi, Lee and Jacobs (2015), gender, education level, learning and cognitive style positively affected learning and training transfer which ultimately linked to the training effectiveness. Therefore, for learning to occur and be transferred back on the job, trainee's characteristics, decisions, preferences, and motivation are essential. In these studies, these trainees' characteristics were control variables. Sanjeevkumar and Yanan (2011) in their study found, young, highly educated women to be more vulnerable than other women. They further found that trained adult women tend to retire later, suggesting that more knowledgeable and more skills may lead to the ability to stay longer in the professional community. Trainees with higher levels of

education tend to be more motivated learners and acquire new learning than trainees with lower education levels (Chiaburu & Marinova, 2005). In contrast, the preliminary analyses by Chiaburu, Van Dam and Hutchins (2010), showed no significant relationship between the control variables (age, gender, educational level, organisational tenure, occupation, and job tenure) and transfer of learning back on the job, to training effectiveness. Different researchers showed that understanding the personal characteristics of trainees such as age, experience and qualifications plays a significant and central role in the learning process. However, little research on training has included individual differences as the critical determinants of learning and behavioural change (Baldwin & Ford, 1988).

The most popular trainee characteristics variables which have been identified and examined in the past research are cognitive ability, self-efficacy, locus of control, motivation, perceived job utility and career utility, very little on individual demographic characteristics as possible influencers of training effectiveness has been investigated. The section on trainees ‘characteristics discussed in detail self-efficacy and trainee’ readiness to learn new skills as factors directly affecting the transfer of training. The next section discusses the training environment factors influencing the effectiveness of training programmes.

### **2.15.2 Training Environment and Training Effectiveness**

According to Chaturvedi (2013), the training environment is an area or place to conduct a training intervention or activity. The environment should be conducive in a way that it allows the trainer to achieve the set training goals. In ensuring that the training environment is conducive for learning, various elements have to be considered, such as physical facilities, equipment (Van Wart et al., 1993), accommodation, and classrooms (Iqbal et al., 2011). Haertel and Walberg (1988) argue that these elements influence the feedback from the trainees. Furthermore, Diamantidis and Chatzoglou (2012) assert that if the training environment is conducive, the trainer will be motivated to deliver a successful training programme. The training environment affects the trainee ‘s desire to participate in the training (Brown & McCracken, 2009). Therefore, the training environment and its location support trainees to learn. Diamantidis and Chatzoglou (2012) posit that even if the training programme is well designed, it will fail if the environment does not have the proper facilities. Brown and McCracken (2009) indicate that the restrictions on physical

logistics such as the training climate and time constraints, limit the trainees to have sufficient opportunity to absorb the new skills and knowledge. Charney and Conway (2005) affirm that the training environment is crucial to the usefulness of the training programme and learning outcomes. The training environment significantly influences the learning of trainees (Iqbal, et al., 2011). Furthermore, Iqbal et al. (2011) found a training environment to have a significant mediating effect on the relationship between reaction and learning. In contrast, Diamantidis and Chatzoglou (2012) found that the training environment has an insignificant influence on learning, which is perhaps due to an inappropriate training environment. Kirkpatrick and Kirkpatrick (2006) are of the view that the lack of suitable training facilities may negatively affect the attitudes of trainees about the training intervention they have participated. Charney and Conway (2005), therefore, encourages trainers to create training areas that are similar to the workplace to motivate trainees to gain new knowledge and skills, which will enhance the usefulness of the training programme. Kirkpatrick and Kirkpatrick (2006) recommend using audio-visual aids during training sessions for several reasons: it makes communication with trainees easier, it grasps their interest and amuses them, which creates a positive learning environment. Therefore, the training facilities, equipment and media aids are essential in presenting the training content. As a result, these should be appropriately selected in ensuring that the training programmes are successfully delivered. Trainees are more likely to be satisfied with the training if they perceive the training environment to be conducive and sufficient. Arthur et al. (2003a) indicate that the efficiency of training varies based on the training delivery methods applied and the trained skills. Therefore, in ensuring training effectiveness, it is necessary to include other factors, such as training methods, trainer's understanding of the subject matter and articulation, training content and objectives of the training.

### **2.15.3 Training Methods and Training Effectiveness**

Storr and Hurst (2001) assert that appropriate usage of teaching methods increases the interest of trainees to participate in the training intervention, and the success of the training. Training methods, according to Dean (1994), are the means and instruments for delivering a training programme to accomplish the training objectives. Therefore, the selection of training methods is significant in ensuring that training becomes a success. Nikandrou et al. (2009) suggest that methods of training could affect the perceived usefulness of the training. Moreover, Lim (2000) found that instructional methods promote the transfer of learning, while Bansal and Thakur (2013)

found a significant relationship between the quality of training and intention to transfer learning. Furthermore, perceived usefulness of the training material such as instructional methods mediated the relationship between motivation and intention to transfer learning (Yelon, et al., 2004).

The similarities of the training content and materials to the needs of the organisation may enable the trainees to improve their skills and knowledge (Yamnill & McLean, 2005); which significantly improves the understanding of the training materials (Hutchins, 2009). Lau (2010), asserts that the use of various training methods as opposed to using just one method can lead to better results and outcomes from the training. Arthur et al. (2003a) argue that no single method is better than the other; therefore, no method is more effective than the other in delivering practical training. Training instructors that are unqualified and not skilled enough tend to use traditional methods of teaching such as lectures, presentations because they do not have the right experience for advanced teaching methods such as simulations and games (Lau, 2010). The following subsections provide further details on the effects of other training characteristics relating to the effectiveness of a training programme such as trainer, training content and training objectives on the outcomes of training, which are: reaction, learning, motivation to transfer learning, behaviour, and results.

#### **2.15.4 Trainer behaviour and Training Effectiveness**

A trainer is a person who is responsible for conveying the training objectives to the trainees and plays a critical role in achieving efficacy within the training programme (Latif, 2012). Brown and McCracken (2009) accentuated on the critical role played by the trainer in inspiring participation from the trainees as well as the effective administration of training activities. Furthermore, Ghosh et al., (2012) argue that the role of the training instructor is not only to inspire the trainees to participate in discussions but must have the necessary listening skills to be able to listen to the trainees. Moss (1997) identified the characteristics of a successful training instructor as being able to plan, prepared and showing support and empathy to the trainees. Brown and McCracken (2009) maintain that the trainer must be an effective communicator and a proactive thinker. Since the trainer plays a vital role in ensuring the successful delivery on the training objectives, he/she must have skills ranging from administrative to practical (Latif, 2012). In understanding the assertions in this paragraph, a good trainer must be able to articulate as well as be knowledgeable of the

subject matter. Furthermore, the role of a trainer is to ensure that the right skills and knowledge are learned from the training and transferred back to the work environment.

The knowledge and behaviour of the trainer can influence the reaction of trainees. Therefore, the perceptions of trainees of the trainers 'knowledge and behaviour will either positively or negatively affect the satisfaction levels of trainees. According to Steiner, Dobbins and Trahan (1991), trainees should perceive trainers as facilitators to gain new skills and knowledge. It means that trainers significantly contributes to the effectiveness and success of a training programme. Gauld and Miller (2004) are of the view that a competent trainer may motivate and influence trainees to have a positive attitude towards the training as well as improve their learning levels. The performance of trainers affects trainees 'reactions to training (Kirkpatrick, 1967). According to Kirkpatrick (1967), trainees are more likely to give better assessments to trainers with dynamic personalities and low scores to trainers with less dynamic personalities. Diamantidis and Chatzoglou (2012) revealed an insignificant relationship between trainer performance and change in behaviour of trainees. They recommend consistency and appropriate behaviour in trainers when conducting training. Furthermore, these qualities displayed by trainers may improve the knowledge and abilities of the trainees; as a result, increase the impact of the training intervention.

#### **2.15.5 Training Content and Training Effectiveness**

Training content should involve theoretical and practical aspects, as well as the transfer of new knowledge and skills (Gauld & Miller, 2004). Training content is training materials, such as manuals, handouts, and notes. Schraeder (2009) suggests that the training content by using training methods such as PowerPoint slides, materials, overheads and handouts must all be well-organised to ensure the quality of the training. These materials affect learning outcomes (Kirkpatrick & Kirkpatrick, 2006). Similarly, the effectiveness of the training process is achievable through the efficiency and relevance of the training content that represents the effective use of training resources (AlYahya & Mat, 2013).

According to Giangreco, Sebastiano and Peccei (2009), trainees measure the training to be useful to them based on the balance between theory and practical content. Similarly, when trainees perceive an imbalance between theoretical and practical training issues, their level of satisfaction

with the training will generally found to be little. The perceived usefulness of the training content affects the reaction, learning, and behaviour of trainees (Nikandrou, et al., 2009). As an example, Bjerregaard et al. (2016) in their study sampled 400 care staff working at eight different care homes to gain a better understanding of what motivates them to transfer their learning on the job. This longitudinal study evaluated the effects of two training programs, one who tapped into distal work identities, and the other spoke more to localised work identities of participant's motivation to transfer their learning to the workplace. The observed patterns of the study indicate that style and type of training affect the level of trainees 'attitude and transfer of training on the job.

Furthermore, the findings revealed that "training which is more generic and distal is less likely to tap into, and thereby less likely to support or enhance, meaningful workgroup identification compared to training which is more localised and proximal" (Bjerregaard, et al., 2016, p. 20). Another interesting finding of the study was that training content relatedness to the actual day-to-day work activities revealed a significant influence on reaction, learning and an increase in the motivation of trainees to transfer learning. This finding coincides with the study by Grossman and Salas (2011) . They found a positive relationship of relatedness to the trainees' attitude and perception of the training, learning, and transfer of learning. It also appeared in Bjerregaard et al., (2016) that the training programs undermined the trainees' motivation to transfer their learning into the workplace. Nikandrou et al. (2009) discovered the perceived usefulness of the training content to have a significant effect on the reaction, learning, and behaviour of the training recipients.

The study by Renta-Davids et al. (2016) revealed a significant relationship between training delivery methods and student learning. Given this finding, they emphasised the importance of training delivery methods on ensuring the effectiveness of a training programme. Likewise, Al-Eisa, Furayyan, and Alhemoud (2009) concede that the similarity of training content increases the confidence of trainees to learn and transfer their new skills and knowledge back on the job. Hodge, Wright, and Bennett (2017) posit learning as an essential and desired outcome of most training interventions, and it is generally only substantial changes in behaviour that knowledge becomes useful. They further emphasised that if training recipients perceive the training content to be

irrelevant, then no relevant learning and change in behaviour will occur, and this non-occurrence of learning and change in behaviour will make the training ineffective. These analyses are consistent with other previous studies that the training factors such as training content validity influence the training transfer and success of the training program (Baldwin & Ford, 1998). All the studies reviewed in the section above revealed that the validity, simplicity, and relevance of training content have a significant influence on learning, and change in trainees' behaviour, which ultimately leads to training effectiveness. Similarly, May and Kahnweiler (2000) are of the view that trainees need a sufficient time to practice what they have learned (new skills and knowledge) back on the job, and the content of the training should be relevant and similar to the actual day-to-day work. Warr and Bunce (1995) found the perceived usefulness of the training content to be significantly affecting the trainee satisfaction. Chen et al. (2007). On the contrary, showed that the usefulness of training content and its relevance to the workplace ensure that trainees will be satisfied with the training programme.

Similarly, Nikandrou et al., (2009) support Clark et al. (1993) argument that the perceptions of trainees on the relevance of the training content (job utility) or its usefulness for their work affects the transfer of learning. Furthermore, Bhatti and Kaur (2010) proclaim that the similarity of the training content to the workplace leads to positive reactions and increases the chances of transferring learning back in the work environment. The validity and relevance of training content are fundamental to the transfer of learning back on the job as it enhances the positive reactions of trainees and improves self- efficacy (Bhatti & Kaur, 2010). Therefore, this study explores the effect of training content on learning and transfer of learning back on the job.

The training content affects learning. For example, Holton (2005, p. 41) states, "When trainees feel the training content (material and methods of training) are relevant to their jobs, they maximise their abilities to apply their knowledge to the workplace". Furthermore, Liebermann and Hoffmann (2008) found direct effect between learning and intention to transfer learning. Velada et al. (2007) found trainees who acquired new knowledge and skills from the training to be more likely to transfer them back in the day-to-day jobs. Kirkpatrick (1996) argues that change in behaviour happens if learning has occurred. In Kirkpatrick's model, the change in behaviour which is concerned about the ability of trainees to transfer new skills and knowledge back on the job is used

to measure training effectiveness (Latif, 2012). Furthermore, Grohmann, Beller and Kauffeld (2018) found a significant relationship between training content and transfer of learning back on the job. The following section discusses how the work environment affect the transfer of learning back on the job (behaviour).

### **2.15.6 Work Environment Characteristics and Training Effectiveness**

Cheng and Hampson (2008) posit that the work environment has a strong and positive relationship with training transfer. Research by Baldwin and Ford (1988) in the earlier section of this literature indicates that the work environment influences the proximal factors of training motivation and the distal factor of training transfer to the training outcome. Similarly, Alvarez et al. (2004) emphasised the critical aspects of training transfer and effectiveness as trainee's characteristics, training design, and work environment. Moreover, the study conducted amongst Malaysian Civil service officers by Alias et al. (2017) found three work environment elements that have a significant relation to the change in behaviour and training effectiveness. These work environment factors are manager support, opportunity to perform, peer support, available resources, organisational learning culture. This work by Alias et al. (2017) suggests the importance of understanding the work environment factors that are contributing to the effectiveness of training. Moreover, the work environment supports the transmittal of training to the workplace. Consequently, management should provide the trainees with the opportunity to apply the training content back on the job. The work environment is crucial and is one of the critical factors to determine learning and the application of knowledge and skills back in the workplace (Alias et al., 2017). The findings by Ma et al. (2018) also indicates a strong and positive relationship between work environment factors and training effectiveness.

The results of the tested hypotheses by Alias et al. (2017) found that the support from the manager or supervisor has a positive effect on the reaction of trainees. Similarly, Kjellstrom et al. (2017), found appreciation and support from supervisors or co-workers as contributors to increased motivation to transfer training. Also, Pham, Segers, and Gijsselaers (2013) found supervisory support, job autonomy and preferred support as work environment factors that have a significant relation with the transfer of training. Following this line of arguments, Homklin et al. (Homklin, et al., 2014) found that trainees can have difficulties in transferring the new skills and knowledge

acquired from the training to the work environment if they do not receive support from their supervisors. Another study by Cromwell and Kolb (2004) studied the relationship between the four environmental factors, which are organisation support, supervisor support, peer support, and participation in a peer support network. The results revealed that all four-work environment factors have a statistically significant positive correlation with the transfer of training. Contrary to the results of the studies in the above paragraph, the study by Velada et al., (2007) found no significant relationship between the support from supervisors and the transfer of learning. The supervisor support did not influence the transfer of training transfer on the job.

The learning element, according to Kirkpatrick and Kirkpatrick (2009), is when there is a change of attitudes, improved skills, and knowledge because of training. They further emphasised that no change in behaviour can be expected from the trainees unless there is attainment on one or more of these learning elements. Curado, Henriques, and Ribeiro (2015) accentuate that though trainees might possess skills, knowledge, and attitudes acquired from the training, the application of such cannot be guaranteed. They further emphasised that for training to be considered adequate, learned skills and knowledge from the training should be retained and applied back on the job. In understanding the emphasis by (Curado et al., 2015), it is evident that training organisations should find innovative ways to ensure the application of learning to the job after the training intervention. Many studies investigated the levels and aspects of training transfer, of which some of them have shown results of low transfer of training on the job by the training recipients, an example is Baldwin and Ford (1988) and Kupritz (2002).

Hua, Ahmad and Ismail (2011) established that the transfer of training back on the work environment is essential in enhancing the performance and gaining a higher return on investment for organisations, and as such, training effectiveness can be confirmed. Similarly, Suleiman, Dassanayake, and Othman (2016) perceive training transfer as a multidimensional construct within the training context. Research by Um et al. (2012) randomly sampled 118 college students to investigate whether positive emotions can improve learning and related effective outcomes. The findings of the study indicate that positive emotions increase motivation, satisfaction, and perception toward the training materials (Um et al., 2012). Mediation analyses found motivation and mental efforts to mediate the effect of positive emotions induced externally. However, there

were no mediators for emotion-induced via emotional design. The finding suggested that a positive emotional design has a more direct impact on learning than externally induced emotions (Um et al., 2012). The study suggests that emotions should be considered an essential factor in the design of multimedia learning materials.

The outcome of the exploratory study on factors affecting the training effectiveness of training programs in the Kingdom of Bahrain by El-Hajjar and Alkhanaizi (2018) found that the training program did not meet the training expectations and needs of the trainees. Furthermore, the findings of the study indicate a positive linear correlation between the training content and training effectiveness. The training content validity and relevance is an essential factor contributing to the effectiveness of training. The findings are similar to El-Hajjar and Alkhanaizi (2018), who found a positive relationship between training content and training effectiveness. McNamara (2016) posits that the primary purpose of training employees generally prepares them for any forthcoming changes so that they can adjust and adapt to such changes. Thus, training organisations need to design their training programs in a manner that the training activities and training content are relevant to the job requirements). The selection and relevance to the job requirements of the training content are essential in ensuring and improving the learning and transfer of training (El Hajjar & Alkhanaizi, 2018). The next section explores the motivating factors affecting the effectiveness of training.

### **2.15.7 Intention to transfer Learning and Training Effectiveness**

Literature relating to training transfer and factors impeding the training or learning transfer back on the job has evolved over the years. However, only a few studies focused on the work environment, especially the support from supervisors, managers, and peers as primary factors influencing the transfer from the training. Additionally, no literature focusing on learning transfer by the civil society organisations have been found, especially from an NPO perspective in South Africa. Although there are many definitions of transfer of training, it is generally established that it involves the application, generalizability, and maintenance of new knowledge and skills (Holton, et al., 2000). Positive training transfer, given that training transfer, is considered to be the primary leverage point by which training influences the improvement of organisational performance can be obtained by facilitating training transfer (Ma, et al., 2018). To ensure that the training worked

and was worthwhile, the identification of factors that influence training transfer and ultimately improving training effectiveness is very crucial (Ma et al., 2018). Paulsen and Kauffeld (2016) are also of the view that trainee motivation to transfer is a critical element for a successful training transfer. Training effectiveness is a study of a learning system as a whole that provides a macro view of the training outcomes (Alvarez, et al., 2004). Bhatti and Kaur (2010) assert that the transfer of learning is crucial for training effectiveness criteria and ultimately leads to improvement of performance. Gil, Molina, and Ortega (2016), examined the determinants of training transfer in the wine industry in Spain. The results of their study showed that there is a strong relationship between training transfer and organisational environment. This finding was, however, only found from a perspective of management. In contrast, from the perspective of employees, transfer of training was strongly related to what motivates them to transfer training back on the job (Gil et al., 2016). The comparative approach revealed that perspectives of management on the training transfer are mostly on aspects of strategy and intangible resources such as climate transfer.

The findings differ when it comes to employees as they were found to prioritise motivational aspects like satisfaction as enablers for them to transfer training on the job. Hence, the motivation of trainees was found to be statistically significant and had a strong positive relationship with the transfer of training (Gil et al., 2016). Trainee motivation can be regarded as a significant factor affecting the transfer of training, and ultimately effective training outcomes. Abdulghani et al. (2014) on evaluating the five research methodology workshops assessed the participants' satisfaction, knowledge and skills gain and impact on practices by Kirkpatrick's four-level evaluation model. They found characteristics and reactions of trainees to have a positive relationship with learning, training transfer and ultimately, the desired training outcomes. Furthermore, training participants who showed a positive attitude towards the training and the learning outcomes were the ones who provided suggestions on how the training can be improved. Further to these findings, the content of the training, the approach or method of training motivated the trainees' willingness to learn and transfer the training back in their work environment.

The results of the study by Lim and Johnson (2002) to examine factors influencing the transfer of training in a Korean three-week human resource training program revealed the following factors as influencers of training transfer: lack of opportunity to apply on the job. Approximately 64.3%

did not have the opportunity to transfer training back on the job, whereas 15% did not transfer training because it did not relate to their day-to-day job responsibilities. Nearly 9.3% did not transfer learning due to their lack of understanding of the training content. Only 6.9% planned to use what they have learned in future; just about one percentage did not transfer learning. The lack of transfer was due to the perceptiveness that the training did not apply to the Korean situation. Lastly, the lack of resources, such as equipment was found to be a factor with just below 1% of the respondents. The study further revealed factors such as (organisational commitment, new learning matching with the departmental goals, open communication, supportive work environment, rewarding employees for attending the training, and change-resistant environment) as the factors influencing their non-transferability of learning back in the work environment. The cross-sectional study by Curado et al. (2015) in examining motivation to transfer training by employees in a large insurance company revealed that being voluntarily enrollment showed a higher impact on motivation to transfer than being mandatorily enrolled in a training program.

The training-transfer concepts were discussed based on different researchers. Furthermore, the reviewed studies had similar findings of different factors influencing the transfer of training. Not surprising was that self-motivated to learn, have a higher impact than learning that trainees do not internally desire.

## **2.16 Chapter Conclusion**

This chapter reviewed the existing literature as it relates to the aim of the research, which was to explore and understand the effects of training characteristics and work environment characteristics on training effectiveness (reaction, learning, behaviour and result). This chapter outlined the definitions of training, and then it discussed types of training, training evaluation definitions, training evaluation benefits and the challenges, training effectiveness, training evaluation models and their criticisms. Training methods, training content, training objectives, knowledge and behaviour of trainer, training environment, work environment, trainees' characteristics have somewhat effects towards training effectiveness outcomes (reaction, learning, behaviour and results). The next chapter presents the conceptual framework for this study.

## **CHAPTER 3: CONCEPTUAL FRAMEWORK**

### **3.1 Introduction**

This chapter presents the conceptual framework behind the training and work environment characteristics that influence the effectiveness of training. This chapter intends to address the significant issues that emerged from the reviewed literature in the previous chapter. The reviewed literature specifically discussed the training literature, training evaluation training effectiveness and training evaluation models adapted for this research. The chapter discusses the adaptation of the conceptual framework, independent variables, dependent variables, mediating variables and training characteristics factors when evaluating the effectiveness of a training programme. The chapter further presents the proposed research questions, hypotheses development and research context.

### **3.2 Conceptual Framework**

A conceptual framework brings together the constructs of the study linked to the researched phenomena and the hypothesised relationships between them. According to Voss, Tsikriktsis and Frohlich (2002), a conceptual framework provides an overview of the categories to be explored further in the research. It also helps to relate the current body of knowledge to the ongoing problem explored in the study. The analysis of the extant literature on training evaluation and effectiveness lead to the proposed framework

The reviewed literature revealed the following issues:

- The most commonly used model to evaluate training effectiveness is Kirkpatrick 's four-level model; however, only a few studies confirmed that there is a causal relationship between the four levels of training outcomes (reaction, learning, behaviour and results).
- Most training evaluations are at level one of Kirkpatrick; however, the research on the reaction level is limited.

This research proposes a conceptual framework (Figure 3.1) drawing on Kirkpatrick 's four levels model of training evaluation. It aims to improve, understand and explain the main training characteristics and training environment factors that influence the Governance and non-compliance training effectiveness of the NDA in the trained non-profit organisations based in Gauteng province. The aim is also to enhance the training evaluation efforts of the NDA and also

make its training programmes more effective. Based on different theoretical perspectives, the training characteristics are training environment, training methods, trainer knowledge and behaviour and training content, while training outcomes are the reaction, learning, behaviour and results. Furthermore, the work environment factors are: availability of resources, supervisor and peer support to transfer learning and organisational culture. The proposed framework by this study expands the Kirkpatrick 's model using previous training evaluation research. Extracting from the existing literature (Arthur et al., 2003a; Baldwin et al., 2009; Homklin et al., 2013), this research proposes the inclusion of the training characteristics such as training objectives and training content and their relationship between the four levels proposed by Kirkpatrick 's model.

Furthermore, the framework proposes that training characteristics mediate the relationships between learning and behaviour levels. The intention is that this work will result in new developments in training programmes and also provide the NDA with the knowledge to design its training programmes more effectively. The following section discusses the primary constructs that emerged from the reviewed literature in Chapter 2.

The literature suggests that the training should be evaluated before, during and after the training. Since the NDA evaluate its training only immediately after the training by using Happy-sheets, this study will, therefore, evaluate the effects of training characteristics three years after the completion of the training. This study will also examine selected variables in Kirkpatrick 's four levels. Some theorists and researchers, as indicated in the literature, suggest understanding the influence of training characteristics and work environment characteristics on training effectiveness. As such, this study probes the various antecedent variables to be looked into when evaluating the effectiveness of training programmes, including training characteristics (training objectives and training content). Ordinarily, the consideration of training characteristics is significant when evaluating the effectiveness of training. The existing literature on the characteristics of training includes trainee readiness, the training environment, training methods, trainer and training content. The study proposes two training characteristics as the main focus of in conjunction with the four levels of Kirkpatrick's evaluation model. Previous studies have investigated the impact of training characteristics on trainee reaction while other studies explored the impact of training characteristics on learning.

### ***3.2.1 Direct Relationships***

In this research, the impact/influence or effects of training characteristics (training objectives and training objectives) on reaction, learning, behaviour and training results will be explored. Furthermore, the relationships between the four training outcome levels will also be explored to address the objectives of this study.

### ***3.2.2 Moderating Effects***

The study will include two dimensions (training objectives and training content) to examine their moderating effect on the relationship between learning and behaviour, behaviour and results.

## **3.3 Further Development of the Conceptual Framework**

In addition to the factors mentioned in the conceptual framework above, the study discusses the additional elements mentioned in the literature review chapter, which are necessary when evaluating the effectiveness of training. This study will explore the causal relationships between Kirkpatrick 's four levels: reaction, learning, behaviour and results (as shown in Figure 3.1). Furthermore, the study will explore the impact of the training environment and training content on the intention to transfer learning. It will also investigate the impact of the trainer knowledge and behaviour on reactions and intention to transfer learning. Additionally, the impact of training content on results are examined.

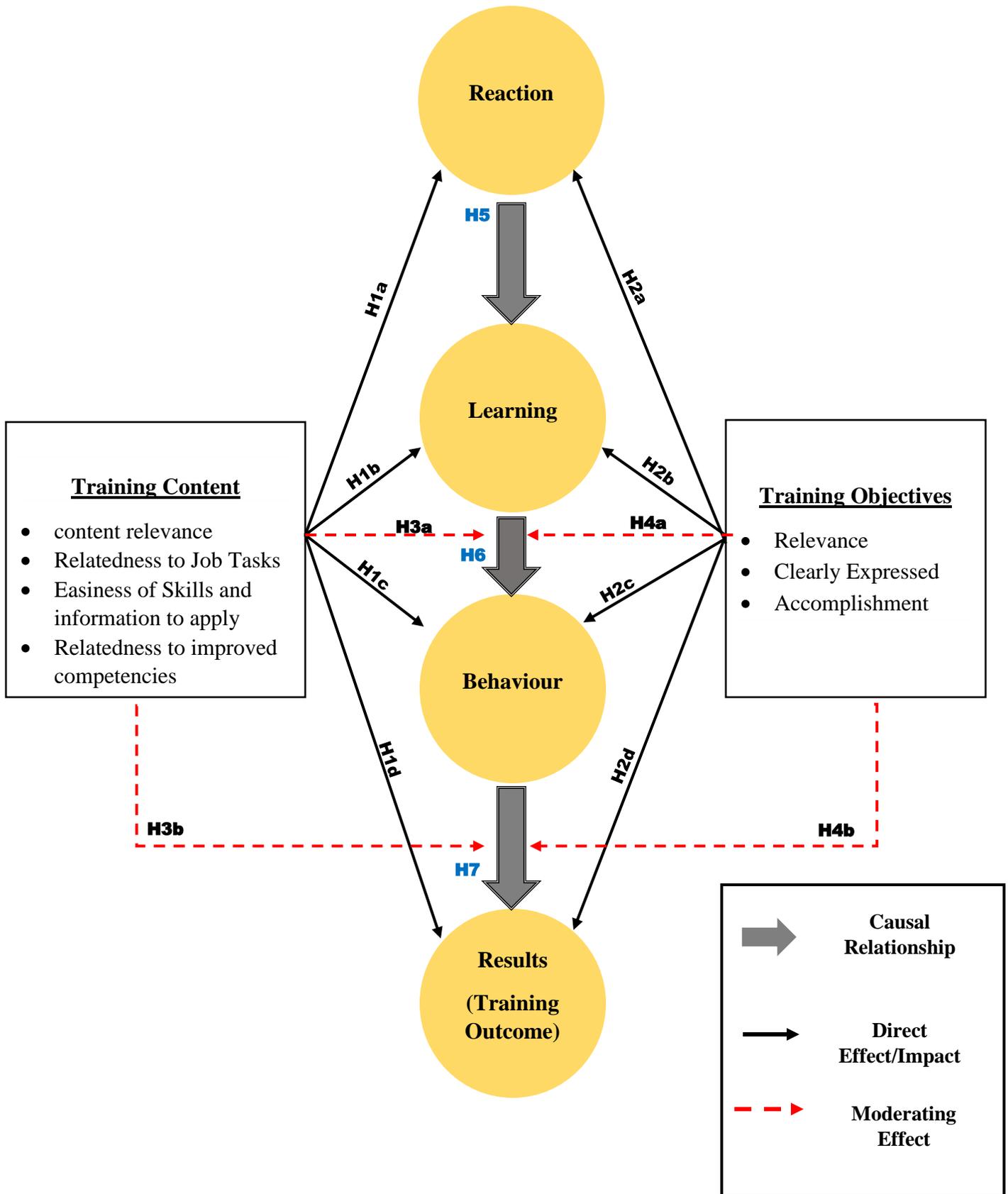


Figure 3. 1Conceptual Framework of the Study

### 3.4 Development of the Study Hypotheses

The primary research questions are as follows:

- a) *What are the effects of training characteristics on training effectiveness (learning and transfer of learning)?*
- b) *What are the moderating effects of training content and training objectives on the relationships between the training outcomes (learning, behaviour, behaviour and results)?*
- c) *What are the learned lessons from the application of this approach to the NDA training of NPOs?*

Hence this study is mainly concerned with achieving the following research objectives:

- To examine the effects of training characteristics (training content and training objectives) on training outcomes, reaction, learning, behaviour and results;
- To investigate the moderating effects of training characteristics (training content and training objectives) on the relationship between learning, behaviour and results;
- To examine the relationships between the four levels of Kirkpatrick's model towards the NDA training effectiveness;
- To develop a conceptual framework and test the hypotheses to expound on the impact of training characteristics on training effectiveness of the NPO Governance and non-compliance training.
- Provide recommendations to maximise the effectiveness of training in practice

The primary research questions informed the hypotheses of the study. The hypotheses are discussed further in the following sections of this chapter.

### 3.5 Dependent Variable: Training Effectiveness

The importance of understanding the effectiveness of training is mainly to improve the process of training so that the set training objectives and goals are accomplished (Homklin et al., 2014) and training evaluations are used to determine if those objectives were met. In this regard, Alliger et al. (1997) affirm that training evaluation is essential to understand the level of success of training

intervention. Noe (2016) maintain that organisations must first identify the criteria for evaluation and training outcomes to be able to determine the effectiveness of a training programme when conducting training evaluations. As such, assessing the training effectiveness as defined by Borate et al. (2014, p. 7) is “the determination of the level of acquired practical skills and any changes in behaviour that result from undertaken the training”. The reaction of trainees to training, acquired learning, behavioural change of trainees and organisational results as described in Kirkpatrick ‘s model, aim to evaluate training effectiveness (Alliger & Janak, 1989). Kirkpatrick’s four levels model assist evaluators in being able to identify complex processes and present the results in a simple and clear format (Goldstein, 1993). As a result, this study uses a reaction, learning, behaviour and results as dependent variables to understand the impact of training characteristics, trainee characteristics and work environment characteristics and their relationships with reaction, learning, behaviour and results.

### **3.6 Training Characteristics Affecting Training Effectiveness**

The training design determines how the programme is developed, organised and delivered (Kirkpatrick & Kirkpatrick, 2006). Training characteristics play a vital role in the design and delivery of training. Training characteristics refer to training content, training objectives, methods, environment, and trainer performance and behaviour (Charney & Conway, 2005; Diamantidis & Chatzoglou, 2012; Kirkpatrick & Kirkpatrick, 2006; Nikandrou et al., 2009).

Previous studies have indicated that the trainees’ reaction to the training, ability to learn new skills and knowledge and to transfer learning back in their jobs is as a result of the perceived efficiency and usefulness of the training (Diamantidis & Chatzoglou, 2012; Lee & Pershing, 2002). The training characteristics, individuals as well as organisation characteristics all influence the effectiveness of training, before, during and after (Ford & Kraiger, 1995; Salas & Cannon-Bowers, 2001; Tannenbaum & Yukl, 1992). The focus of this study is to evaluate the effect of training characteristics, trainees’ characteristics and work environment characteristics on the training outcomes, which are trainees’ reaction, learning, intention to transfer learning, behaviour and results. The study is a post-training evaluation three years later.

### **3.7 Training Characteristics**

The following sections present the hypotheses that were developed based on the relationship between the training characteristics and training outcomes three years after the completion of a training intervention.

#### **3.7.1 Trainer Knowledge and Training Effectiveness**

It is evident from previous studies that the trainer or instructor's performance or knowledge has a significant effect on the perceptions of trainees on training effectiveness (Indira, 2008; Iqbal et al., 2011). A trainer is a person who is responsible for conveying the training objectives to the trainees and plays a critical role in achieving efficacy within the training programme (Latif, 2012). Furthermore, Ghosh et al. (2012) argue that the role of the training instructor is not only to inspire the trainees to participate in discussions but must have specific characteristics. They described such characteristics as clarity in giving instructions, comfort with the subject matter, clarity in responding to questions, ability to keep the sessions lively and exciting, ability to use teaching aids effectively and rapport with trainees. In terms of the influence of the trainer's performance on learning new skills and knowledge by trainees, the behaviour and performance of the trainer such as teaching style, ability to communicate influences the perceptions of trainees (reaction) about the usefulness of the training as well as their ability to learn new skills and knowledge (learning) from the training (Charney & Conway, 2005; Kirkpatrick, 1967). Trainer's knowledge on the subject matter is significantly related to the reactions of trainees to the training (Indira, 2008; Iqbal et al., 2011). Trainer performance in the previous studies had a significant effect on trainees' ability to learn new skills and knowledge from the training (Gauld & Miller, 2004; Iqbal et al., 2011; Nikandrou et al., 2009). Therefore, the study suggests that the trainer's performance and behaviour are more likely to influence the trainee's learning. Since the performance and behaviour of the trainer have a positive effect on learning (Gauld & Miller, 2004; Iqbal et al., 2011; Nikandrou et al., 2009), Nikandrou et al. (2009) add that the performance of the trainer during the training session can affect the perceived usefulness of the training by the trainees.

#### **3.7.2 Training Environment and Training Effectiveness**

Harris and Tessmer (1992) stress that the training environment is one of the essential elements not to be ignored when designing and delivering training as it supports the trainees in their learning.

Iqbal et al. (2011) found a significant relationship between the training environment, training contents, methods, materials, trainer and trainee reactions. Similarly, Towler and Dipboye (2001) assert that training characteristics such as training environment have an impact on the trainees' reaction to the training. Comparably, Diamantidis and Chatzoglou (2012) also are of the firm view that if the training environment fits the aims of the programme, the trainer will be motivated to deliver a successful training. As a result, if trainees perceive the training environment to be sufficient and conducive, then they will more likely react positively to the training.

### **3.7.3 Training Objectives and Training Effectiveness**

Training objectives are imperative for the design of training. According to Glaister et al. (2013), the training objectives are critical for linking training assessments with training design and delivery. Tziner et al. (1991) suggest that setting clear training objectives may contribute towards the improved transfer of learning. Prior research showed a positive relationship between objective and goal setting and transfer of knowledge (Diamantidis & Chatzoglou, 2012; Morin & Latham, 2000). Reber and Wallin (1984) followed up with the worker's use of safe procedures nine months after the training and found a positive relationship between goal achievement and progress. Since training objectives are considered valuable input for the design of a training programme and have shown to have significant effects on results. The absence of training objectives and goals have adverse effects on the training evaluation process (Goldstein & Ford, 2002). Furthermore, training objectives were found to have a significant effect on trainees' reaction and behavioural change (Diamantidis & Chatzoglou, 2012). Other studies found a significant relationship between training objectives and results (Homklin et al., 2014; Lin et al., 2011).

### **3.7.4 Training Content and Training Effectiveness**

Nikandrou et al. (2009) found training content and its relevance to the everyday task to have a significant effect on the transfer of learning. Several studies also have found a relationship between the training content and the transfer of learning back on the job (Bates et al., 2007; Bates & Holton, 2004; Holton et al., 2000; Kirwan & Birchall, 2006;). Similarly, Hutchins (2009) suggest that if the training content and material are similar to the work environment, it will improve the skills and knowledge (learning) of the trainees. According to Farr, Hofmann and Ringenbach (1993), all the outcomes of training (reaction, learning, behaviour and results) are influenced by the relevance

and simplicity of training content. Furthermore, Diamantidis and Chatzoglou (2012) found a significant relationship between training content, learning and training results. Therefore, if trainees perceive that the training content is related to day to day tasks, there are high chances that they will want to learn the new skills and knowledge, and transferring that learning back in their work environment.

### **3.7.5 Trainees' Characteristics and Training Effectiveness**

Based on the stance by different researchers that understanding the personal characteristics of trainees play a significant and central role in the learning process, so individual differences are important determinants of learning and behavioural change (Baldwin & Ford, 1988; Colquitt et al., 2000; Noe, 1986 ). Prior research conducted to investigate factors affecting training outcome, identified a wide range of trainees' characteristics such as cognitive, psychomotor, and physical ability constructs that may directly influence learning and training transfer (Holton et al., 2000). According to Ma et al. (2018), trainee characteristics consist of the individual's ability, motivation, and personality factors. The study by Paulsen and Kauffeld (2017) found a positive effect between trainees' level of education and learning new skills and knowledge. learning relies on the trainee's characteristics, decisions, preferences, and motivation (Choi, et al., 2015). Choi et al., (2015) found gender, education level learning and cognitive style to be positively affecting learning and training transfer which ultimately link to training effectiveness. In these studies, these trainees' characteristics are control variables. Sanjeevkumar and Yanan (2011) in their study found, young, highly educated women to be more vulnerable than other women.

### **3.7.6 Work Environment Characteristics and Training Effectiveness**

Cheng and Hampson (2008) found a strong positive relationship between work and training transfer. Research by Baldwin and Ford (1988) in the earlier section of this literature indicates that the work environment has an influence on the proximal factors of training motivation and also on the distal factor of training transfer to the training outcome. Similarly, Alvarez et al. (2004) emphasised the critical aspects of training transfer and effectiveness as trainee's characteristics, training design, and work environment. Moreover, Alias et al. (2017) found three work environment elements to be positively related to change in behaviour and training effectiveness. The most crucial work environment to be predicting transfer of learning or change in behaviour

were manager support, opportunity to perform, peer support, available resources and organisational learning culture (Alias et al., 2017); and transfer motivation (Massenberg et al., 2015). Based on these findings, work environment factors such as peer support, supervisor support, organisational learning culture and resource availability influences the change in behaviour of trainees.

### **3.7.7 Causal Relationships between the Training Outcomes**

Alliger et al. (1997) found a significant relationship between utility reaction, which measures the perceived utility or usefulness of training, and learning levels of Kirkpatrick 'four levels model. Trainees reactions include enjoyment, utility and difficulty dimensions (Harrison,1992; Warr et al.,1999) Many studies also found the reaction to being positively related or correlated to learning (Homklin et al., 2013; Leach & Liu, 2003; Lin et al., 2011; Tan et al., 2003). The intention to transfer learning to the workplace is considered a training outcome and should be considered when evaluating training programmes (Hutchins et al., 2013). Intention to transfer learning is when trainee intends to be involved in specific behaviours that promote the transfer of newly learned skills and knowledge back in the work environment (Bansal & Thakur, 2013). Kirkpatrick 's four-level model does not consider the intention to transfer; however, prior studies have shown a significant relationship between expectations and training outcomes (Cheng & Ho, 1998; Holton & Baldwin, 2003). Furthermore, several studies found a significant relationship or correlation between learning and behaviour levels (Baldwin & Ford, 1988; Velada et al., 2007; Homklin et al., 2014). Finally, Lin et al., (2011) and Homklin et al. (2014) found a positive relationship between behaviour and results levels of Kirkpatrick's model. The study aims to investigate further the causal relationship between reaction and learning; learning and behaviour; and behaviour and results. The hypotheses of the study were proposed based on the reviewed literature to address the research objectives of this study. Table 3.1 depicts the hypotheses of the study.

**Table 3. 1 Study Research Hypotheses**

<i>Hypothesis</i>	<i>Hypothesis Statement/Description</i>
H1a	The training content has a significant influence on trainees' reaction
H1b	The training content has a significant influence on the learning of trainees
H1c	The training content has a significant effect on trainees' behaviour
H1d	The training content has a significant effect on training outcome/results
H2a	Training objectives has a significant effect on trainees' reaction
H2b	Training objectives has a significant effect on learning (new skills and knowledge).
H2c	Training objective has a significant effect on trainees 'behaviour
H2d	Training objective has a significant effect on training results/outcome
H3a	Training content moderates the relationship between learning and behaviour
H3b	Training content moderates the relationship between behaviour and results
H4a	Training objectives moderates the relationship between learning and behaviour
H4b	Training objectives moderates the relationship between behaviour and result
H5	The reaction has a direct relationship with learning
H6	Learning has a direct relationship with a change in behaviour
H7	Change in behaviour has a direct relationship with training outcome/results

### **3.8 Chapter Conclusion**

It is evident from the reviewed literature in Chapter Two that though Kirkpatrick's four levels model is well known and used for evaluating the effectiveness of training programmes, it, however, does not consider training characteristics and work environment characteristics. Therefore, to thoroughly explore and understand the factors that have a possible influence on the effectiveness of training (reaction, learning, behaviour and results), this research extended the Kirkpatrick 's four levels through the additional factors of training design. Based on the existing literature, the conceptual framework underpinning the study was developed at the post-training level to examine the impact of all the factors mentioned earlier in the above paragraph, towards the effectiveness of NDA training. The hypotheses were also proposed based on the conceptual framework and literature to address the research objectives of this study.

## **CHAPTER 4: CSO DEVELOPMENT FRAMEWORK OF THE NDA**

### **4.1 Introduction**

The previous chapter discussed the theoretical framework putting together the study. In this chapter, the discussion is on the CSO development framework of the NDA. The CSO development framework provides the NDA with a standardised approach in fulfilling its mandatory requirements of developing and strengthening the capacities of Civil Society Organisations in South Africa. The reason why the framework is discussed in this research is to give an overview of how the NDA capacitate the CSOs, including Non-profit organisations which are our focus sector in this study.

### **4.2. Overview of the CSO Development Framework**

The NDA's conceptual Framework addresses vital interventions such as CSOs Mobilisation, Institutional Capacity Building, Grant Funding, Resource Mobilisation and Linkages for Sustainability. These interventions are fundamental to strengthening the capacities of civil society organisations and enhance effectiveness, efficiency and sustainability. Since this framework guides the NDA in its operations, it is, therefore, essential to discuss it and assess its scope in responding to development interventions for community organisations, such as the NPOs. It intends to guide NDA development practitioners in the design of CSOs development interventions to ensure that the provision of interventions by the NDA at a local level is standardised, that there is a fully participatory and inclusive process from CSOs at the local area, special attention is given to the inclusion of those voicing the concerns of the most vulnerable and marginalized CSOs, who are often the poorest and with limited access to information and resources.

The NDA has implemented CSOs support interventions in a fragmented approach, where resource support, through grant funding and institutional capacity building was not integrated within a defined development framework for CSOs programmes. Needs assessment of CSOs were not institutionalised in the planning and execution of interventions. There were no processes outlined, standards set for engagements of CSOs during, and after development interventions are implemented. Platforms at the local level were not created for CSOs to engage with NDA on interventions required for their development. The absence of these engagement platforms has

undermined the value of services the NDA is offering to these organisations. The framework and standards, therefore, provide guidelines and standards that have to be followed by NDA development practitioners as they attempt to implement development efforts for this sector.

### **4.3 CSOs and the NDA**

Civil society organisations are a particularly important partner for NDA in its quest to contribute towards poverty eradication. Made up of women, youth, people with disability, less privileged communities and more, many of whom are NDA beneficiaries, Civil Society Organisations brings together the voices of these groups. They reach the most marginalised groups of society and bring the positions and concerns of people to policy dialogue, normative discussions and community interventions. These organisations can play a catalytic role in improving and furthering the work of NDA, and vice versa, especially in the area of poverty alleviation in disadvantaged communities. CSOs have also increasingly shown their capacities and potential in programme and project design, execution and implementation at local, provincial and national levels. In recent years these organisations have succeeded in implementing development programmes with governments and other actors at all levels. In many cases, they have either consolidated or institutionalised the programmes into governance, thus contributing their capacities and expertise to higher quality policy, normative discussions and interventions aimed at uplifting the standard of living with communities (Magongo, 2017). The NDA acknowledges these achievements by civil society, as well as the effectiveness of new governance models to discuss and implement public policies in the fight against poverty (Magongo, 2017).

### **4.4 CSOs Development Programming Framework**

The CSOs development programme framework also provides a conceptual developmental approach that integrates several interventions elements that need to be implemented to achieve sustainable development for a CSO. It also defines the processes, interventions and integration between NDA programmes as well as functions and the outcomes to be achieved through implementing interventions that support CSOs development. These elements must inform each other at a certain point of implementation. CSOs mobilisation processes must be planned and implemented at an entry-level to achieve the full benefit of CSOs development. Assessments and

dialogues or consultation processes then follow it. The next level is CSOs classification and defining appropriate interventions followed by the implementation of those identified appropriate interventions leading to the holistic and comprehensive development of the organisation. The conceptual framework is critical to guiding how the NDA will implement interventions that result in CSOs development in the country. The figure below depicts the conceptual model of NDA CSOs development.

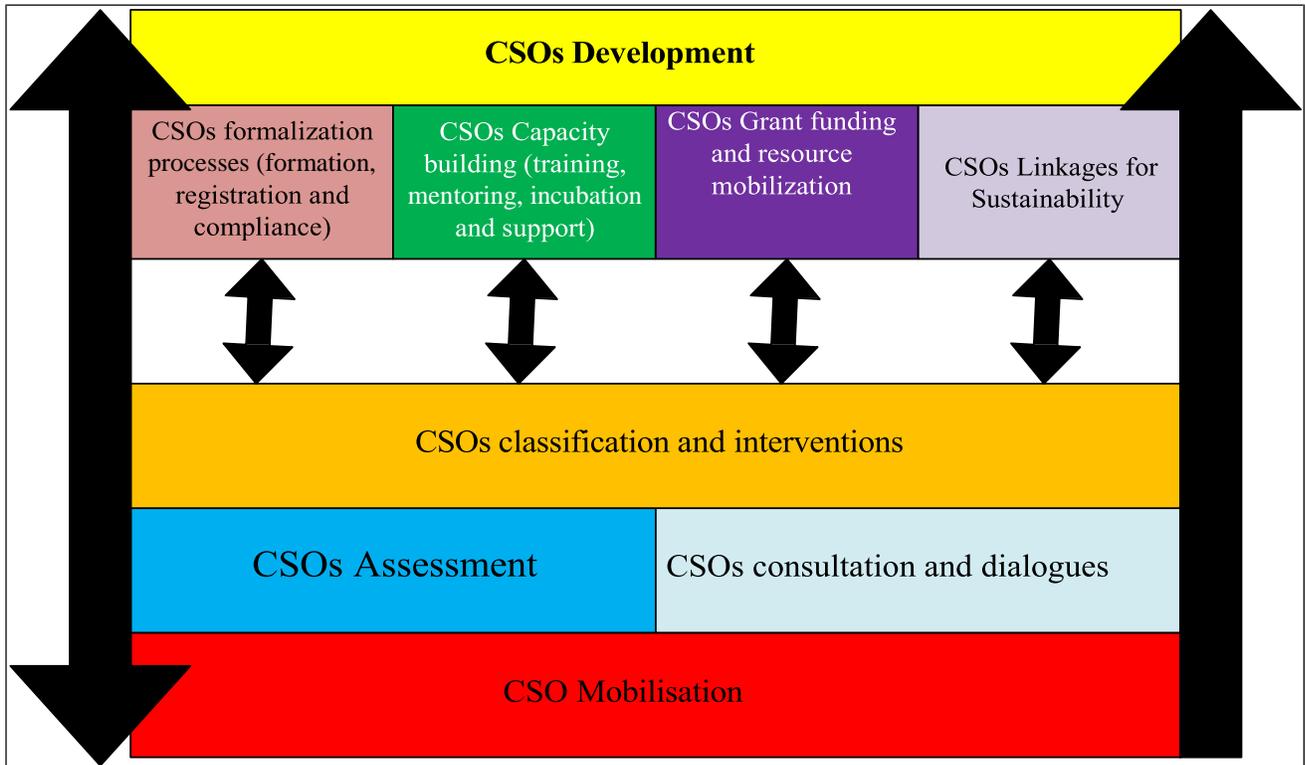


Figure 4. 1 Conceptual Model for CSO Development (NDA CSO Framework, 2017:p9)

Since the primary purpose of this study is to evaluate the effectiveness of the NDA training, only the CSO Capacity building component of the framework will be discussed as it is the most relevant to our study focus.

#### 4.4.1 CSO Capacity Building

The NDA approach to capacity building for civil society organisation intends to provide the NDA and the Department of Social Development with a comprehensive approach towards building capacities of civil society organisations. The starting point of any capacity development planning

process for CSOs is assessing existing capacities to identify suitable capacity needs for the organisation. For any given context, it means starting with the initial definition of capacity, in response to the question '*Capacity for What?*', which is then considered at different levels. Individual, organisational levels are framed in terms of abilities, skills and resources that influence performance and results.

#### **4.4.2 The NDA Capacity Building Package**

The NDA capacity building interventions for CSOs comprise of six elements integrated to form a comprehensive institutional capacity building programme for CSOs. It is important to note at this stage that the capacity mainly informs the combination of these elements of the comprehensive package needs assessment the capacity assessment of organisations. Therefore, the interventions offered to CSOs may vary from one CSO to the other also from sector to sector and skills set in the CSO. The CSOs institutional strengthening training was meant to use different methods of teaching and learning. Training is in the form of skills development, workshops and formal SAQA aligned training. The type of training used is mainly informed by the capacity building assessments that are conducted on organisations and the staff of these organisations. The following areas are the core of the CSOs institutional strengthening stream of this approach:

##### **4.4.2.1 Compliance to Registration Legislations and Requirements**

This area of capacity building capacitates the NPOs on the requirements and compliance to the NPO Act and other legislation governing NPOs.

##### **4.4.2.2 Governance**

This capacity-building area strengthens the capacities of CSOs towards developing constitutions, the role of members of the CSOs, understanding the processes for CSOs registration and mitigation plans to avoid de-registration and cancellations of the NPOs.

##### **4.4.2.3 Organisational Development, Management and Leadership (HR)**

This capacity-building area includes critical points for organisational development which are:

- Developing contracts of employees highlighting the roles and responsibilities and communication lines;
- Developing well-structured organograms reflecting the hierarchy of authority and lines of communication;
- Developing structures for management and operations;
- Running of meetings and having minutes of meetings; and
- Structures for presenting progress and monitoring reports.

#### **4.4.2.4 Financial Management**

Capacity building in this area includes understanding the importance of financial management policies and systems; functional financial controls which include (management accounts, authorisation, delegations and accountability; procurement processes, procedures, banking, bookkeeping, asset management, reporting, record keeping and budgeting).

#### **4.4.2.5 Strategic Direction**

Capacity building in this area focuses on how to develop the organisational vision, mission statement, strategic objectives and strategic outcomes. CSOs will be capacitated to develop strategic planning processes, implement processes for strategy, monitor and report against strategy. This area also includes capacitating CSOs on operational management including the development of operational plans, setting targets; the allocation of resources for operational plans including finance and human resources as well as developing processes and procedures for operational plans.

#### **4.4.2.6 Project Management**

This intervention assists CSOs to manage project plans efficiently and effectively as well as managing any resources allocated to the projects/organisations.

#### **4.4.2.7 Conflict Management**

Assist CSOs to build cohesion between members of the board, management and staff of the organisation to improve teamwork and good organisational relationships.

#### **4.4.2.8 Resource Mobilisation**

Resource mobilisation is a critical area for CSOs strengthening, especially in the current environment where funding is dwindling.

#### **4.5 Chapter Conclusion**

The NDA capacity-building package has the training, mentorship and incubation. However, mentorship and incubation programmes are not done as often as training. This chapter gave a brief overview of the NDA Capacity building intervention by mainly focusing on training component and the packages offered to the Civil Society Organisations. However, for this study, the focus was only on two packages which are: compliance registration and legislation requirement by NPOs; and Governance. The next chapter is the research methodology underpinning this study. The design of the research, sampling methods, data collection, ethical considerations, analysis and interpretation will be unpacked to address the research questions of this study which are in chapter One.

## **CHAPTER 5: RESEARCH METHODOLOGY**

### **5.1 Introduction**

The previous chapters discussed the conceptual framework of the study developed from various studies on training effectiveness and evaluation. The literature focused on the effects or impacts of different variables leading to the effectiveness of a training program, with a specific focus on using Kirkpatrick's four-level to evaluate the effectiveness of training. The primary intention of this study is the contribution to the NPO sector and the NDA on how training initiatives can be improved for it to be considered adequate, by looking at different variables and characteristics that can make training to be effective or ineffective. Furthermore, chapter 4 presented the CSO development framework of the NDA. This chapter discusses the methodological approaches and procedures followed to answer the research questions of this study. The stated research problem, the purpose and objectives of the study are highlighted, and the application of the research procedures for answering the research question are described. The research philosophy, approach and strategy are also defined. The methods and instruments used to collect data are defined in detail, and the subjects from whom data were collected from are also described. Issues of ethics, as well as limitations of the selected research methodology, are also outlined.

### **5.2 Methodological Considerations**

According to Rajasekar, Philominathan and Chinnathambi (2013), a research methodology is a systematic approach to solving a problem. The main aim of the research methodology is to provide the work plan for the research that is being conducted. In summary, the procedures that the researcher chooses to apply to describe, explain and predict the phenomena are called a research methodology (Rajasekar et al., 2013). Research methods, on the other hand, are different procedures, algorithms and schemes that are used in research (Rajasekar et al., 2013). These include analytical procedures, numerical schemes, experimental studies, and statistical approaches. The research methods help the researchers to collect samples, data and to find solutions to the research problem. Rajasekar et al. (2013) emphasised the importance for researchers to not only know the research methods necessary for the undertaken research but must know the research methodology.

In summary, research methods help the researcher to find a solution to the problem, whereas research methodology is more concerned with the explanation of the following (Rajasekar et al.,2013):

- i) Why is the research undertaken?
- ii) How was the research problem formulated?
- iii) What types of data were collected?
- iv) What particular method has been used?
- v) Why was a particular technique for data analysis used?

In any research study, one of the crucial tasks is the selection of the specific research design to be used (Nwokeiwu, 2013). The researcher sought the most appropriate methodology to answer the research questions for this study. The research onion model developed by Saunders, Lewis and Thornhill (2015) was selected as the most suitable and simplified framework for the research methods and strategies needed to answer the research questions of this study. Each layer of Saunders et al. (Saunders, et al., 2015) research onion is deliberated upon to elucidate why each element was selected and how it aided in answering the research questions. Figure 5.1 illustrates the research onion framework.

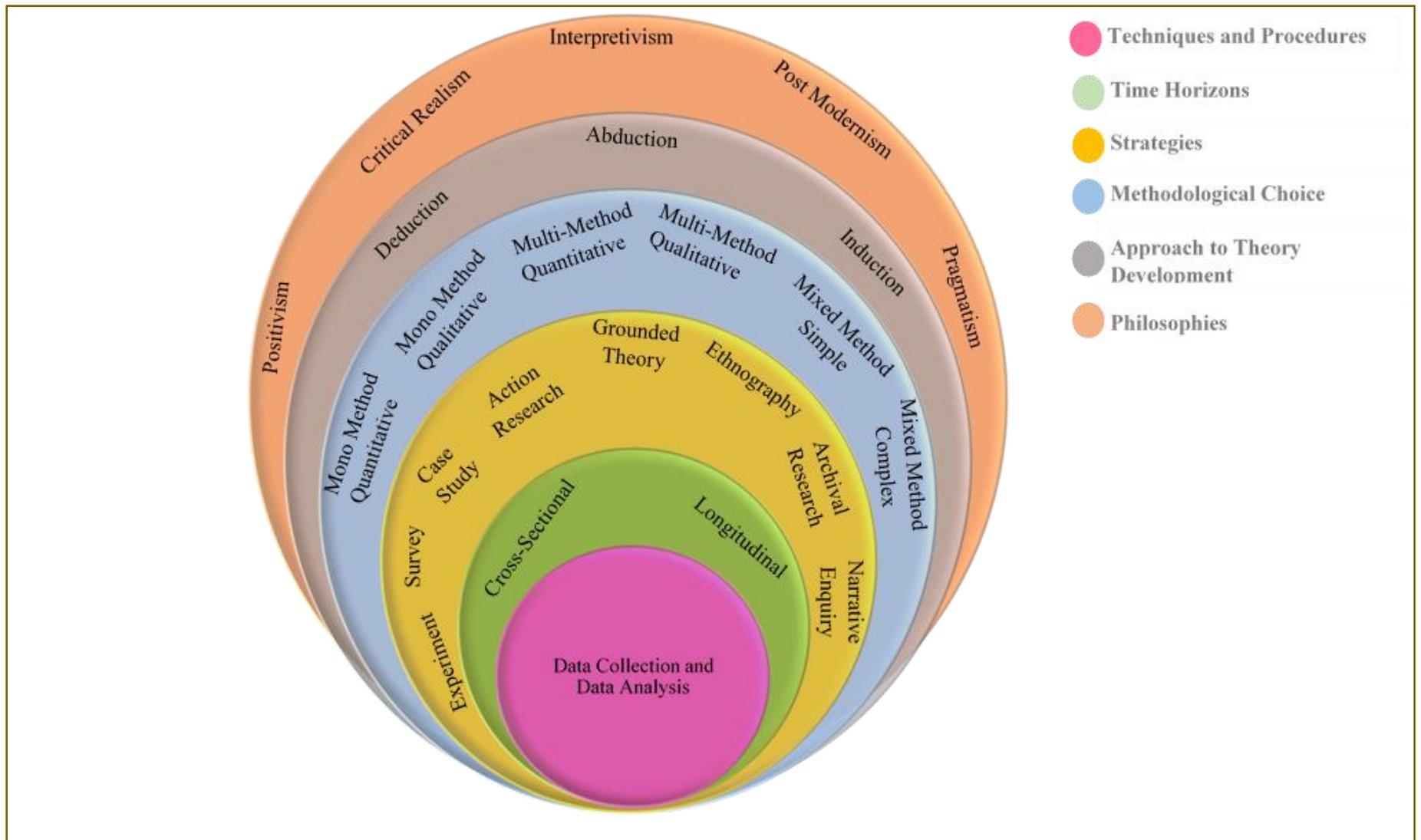


Figure 5. 1 Research Onion Adopted from Saunders et al. (2015, p. 124)

### **5.3 Research Design**

According to Frankfort-Nachmias and Nachmias (2008), research design critically connects the theories and arguments that inform the research as well as the empirical data that are collected. Likewise, Sekaran and Bougie (2013) believe that research design is a structure that holds the research together and enables researchers to address questions in a way that they are appropriate, efficient and effective. According to Saunders et al. (2015), the process of research can be represented as layers of an onion. They further emphasise that when conducting research, several layers are available and must be consistently used. In their onion framework for research, they assert that researchers must take into consideration several issues before they start with the collection and analysis of the data, which are at the central point of the onion. The following subsections expound on the layers of the onion: philosophy, research approach, strategies, time horizons, choice and finally the techniques and procedures, so that the research process followed in this study is understood.

#### **5.3.1 Research Philosophy (Pragmatism)**

According to Saunders et al. (2015), philosophy refers to a system of beliefs and assumptions about the development of knowledge. In other words, it is the researcher's belief while embarking on the research. Burrell and Morgan (1979) assert that whether researchers are consciously or unconsciously aware of the assumptions during the research, they will still make several assumptions. Saunders et al. (2015) describe these assumptions as human knowledge (epistemological assumptions); about the realities encountered in the research (ontological assumptions); and the extent and ways of the researcher own values in influencing the research process (axiological assumptions). They further emphasise that a carefully and well-thought-out

set of assumptions will constitute a credible research philosophy, which will underpin the methodological choice, research strategy and data collection techniques and analysis procedures of the research. Similarly, Clark, Floyd and Wright (2006) advance that every researcher must outline their rationale for choosing a particular research approach. The outlining of the philosophical position better equip researchers to justify and explain the methodological choice, research strategy and data collection procedures and analysis techniques. The reflexive tool developed by Bristow and Saunders (2015) was used to help the researcher to think about her values and beliefs concerning research. The process is illustrated in Figure 5.2.

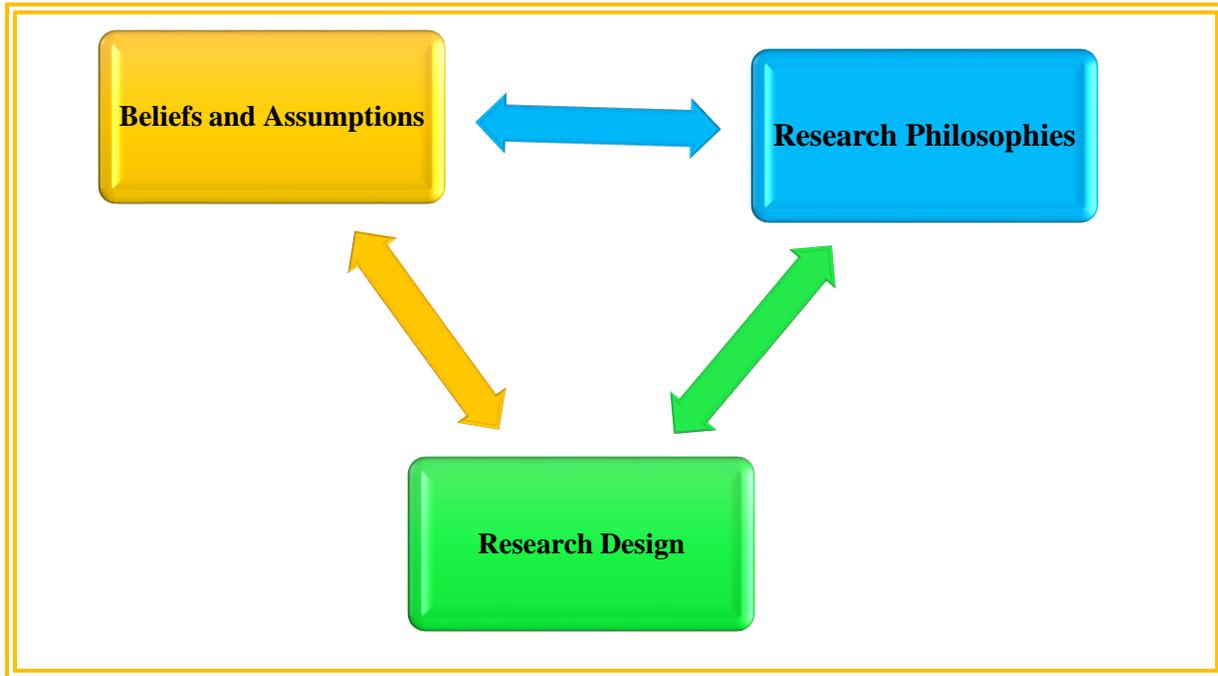


Figure 5. 2 HARP Reflexive tool Developing Research Philosophy Saunders et al. (2015, p. 126)

The HARP (Heightening Awareness of Research Philosophy ) reflexive tool enables for a more informed and empowered approach to designing and conducting research. Three types of research assumptions were identified by Saunders et al. (2015) to distinguish the research philosophies. Ontology, epistemology and axiology are the three assumptions. Everyone has assumptions on ontology, epistemology and axiology. However, they may not necessarily fit together

systematically or coherently. Table 5.1 explains these three research assumptions. The summary of the types of assumptions that research philosophers make has been defined (see Table 5.1). Although this can offer a choice of philosophy and research methodology, Niglas (2010) presume that research philosophies are scattered along with a multidimensional set of continua between two opposing extremes. These are objectivism and subjectivism to the three philosophical assumptions. Objectivism according to Saunders et al (2015) is the incorporation of assumptions of the natural sciences, with the argument that researched social reality is external to the researchers and other social actors.

On the other hand, subjectivism incorporates assumptions of the arts and humanities asserting that social reality is through perceptions and consequent actions of social actors, which are the people (Saunders, et al., 2015). Table 5.1 depicts the philosophical assumptions as a multidimensional set of continua.

**Table 5. 1 Philosophical Assumptions as a Multidimensional Set of Continua**

<i>Assumption Type</i>	<i>Questions</i>	<i>Continua with Two Sets of Extremes</i>	
		<i>Objectivism</i>	<i>Subjectivism</i>
<b>Ontology</b>	<ul style="list-style-type: none"> <li>• What is the nature of reality?</li> <li>• What is the world like?</li> <li>• What is it like being in organisations?</li> <li>• What is it like being a manager or being managed?</li> </ul>	<ul style="list-style-type: none"> <li>• Real, External, One true reality (universalism), Granular (things), Order</li> </ul>	<ul style="list-style-type: none"> <li>• Nominal/decided by convention, Socially constructed, Multiple realities (relativism), Flowing (processes), Chaos</li> </ul>
<b>Epistemology</b>	<ul style="list-style-type: none"> <li>• How can we know what we know?</li> <li>• What is considered adequate knowledge?</li> <li>• What constitutes good-quality data?</li> <li>• What kinds of contribution to knowledge can be made?</li> </ul>	<ul style="list-style-type: none"> <li>• Adopt assumptions of the natural scientist, facts, numbers, Observable phenomena, Law-like generalisations</li> </ul>	<ul style="list-style-type: none"> <li>• Adopt the assumptions of the arts and humanities, Opinions, Narrative, Attributed meanings, Individuals and contexts, specifics</li> </ul>
<b>Axiology</b>	<ul style="list-style-type: none"> <li>• What is the role of values in research?</li> <li>• How should we treat our values when we do research?</li> <li>• How should we deal with the values of research participants?</li> </ul>	<ul style="list-style-type: none"> <li>• Value-free</li> <li>• Detachment</li> </ul>	<ul style="list-style-type: none"> <li>• Value-bound</li> <li>• Integral and reflexive</li> </ul>

Source: Saunders et al. (2015, p. 129)

### **5.3.2 Research Approach (Abductive)**

Both qualitative (inductive) and quantitative (deductive) approaches were used to develop the theory for this study. The reason for using an abductive (inductive and deductive) approaches is because some of the research questions can be answered and analysed qualitatively, whereas others can be best analysed quantitatively. Deductive research involves the formulation of the theory that is exposed to rigorous examination (Saunders, et al., 2007). Hyde (2016) describes inductive reasoning as a theory of building process by starting with observations of specific instances and then seeking to establish generalisation about the phenomenon under investigation. Deductive reasoning is a theory-testing process which starts by first establishing a theory or generalisation, then seek to test if such theory applies to specific instances (Hyde, 2016). In summary, this study used an abduction approach to theory development.

### **5.3.3 Research Method (Mixed-Methods)**

To gain an in-depth understanding of the topic, this study has been carried out using the convergent parallel design, mixed-methods designs. The rationale for choosing mixed-method was to use qualitative findings to compare with the quantitative results. Furthermore, the qualitative method can explain the factors underlying relationships in the quantitative findings. The mixed-methods research design involves the collection or analysis of both quantitative and qualitative data in a single study in which the collection of data is given priority by either concurrently or sequentially and integrating the data at one or more stages in the process of research (Creswell & Plano Clark, 2007). The study used a convergent parallel design to explore and understand the effectiveness of NDA training in improving governance practices by NPOs. In this approach, the researcher concurrently conducted the quantitative and qualitative elements in the same phase of the research process, then weighed the methods equally, analysed the two components independently and interpreted the results together. With the purpose of corroboration and validation, the researcher triangulated the methods by directly comparing the quantitative statistical results and qualitative findings. In the research process, two datasets were obtained, analyzed separately, and compared.

Given this background, literature review, structured questionnaire and interviews were used to collect data. All methods of data collection have their limitations if used alone. However, the use of multiple methods can reduce or cancel out some of the disadvantages of specific methods

(Creswell & Plano Clark, 2007). The qualitative data can provide more useful information that might not be available through general quantitative surveys or the other way round.

Similarly, Greene and Caracelli (1997) assert that mixing different types of methods can strengthen the study. In a mixed-method design, a researcher can start with qualitative data collection and analysis, then follow it up with quantitative data collection and analysis or vice versa. The design is called a mixed-method simple design (Saunders & Tosey, 2012). Another type of mixed-method design is “mixed method complex”, and this is when the researcher chooses to use quantitative analysis techniques to analyse qualitative data quantitatively (Saunders & Tosey, 2012).

### **5.3.4 Research Strategy (Survey)**

A research strategy describes the overall plan on how the researcher will go about addressing the research questions of the study (Saunders et al., 2007). Peeling away the methodological choice of Saunders et al. (2015) onion, the research strategy is revealed (see Figure 5.1). This layer emphasised eight different research strategies that the researcher can select within the research design to answer the research questions of the study. In this study, the researcher used a survey strategy has to collect data from individuals who received training from the NDA on NPO governance. The pragmatic philosophy mainly informed the choice of the selection of the survey strategy of the researcher. According to Saunders and Tosey (2012:59), it is possible to select a research strategy that is informed or linked to a philosophical paradigm. As an example, ethnography is associated with both Interpretivism and realism, whereas both experiment and survey are conversely associated with positivism and used by realists and pragmatists researchers.

A survey research strategy is a descriptive research method, which examines the frequency and relationships between variables (Salkind, 2006), and it also describes the phenomenon that is not directly observed (Hakansson, 2013). In survey research, the selection in the sample of respondents from a population and questionnaire is administered and completed by the person being surveyed either through an online questionnaire, telephone interview or a standardised face-to-face approach (Kawulich, 2012). Survey research strategy has the advantage of having a great deal of information from a larger population, and it can be adapted to obtain personal and social facts, beliefs and

attitudes (Mathiyazhagan & Nandan, 2010). The study design for the qualitative was in-depth interviews.

#### *5.3.4.1 Population and Sample*

Population refers to the entire group of people, events or things that the researcher wishes to investigate (Sekaran & Bougie, 2013). In this study, the population is the total number of individuals that were trained on NPO governance by the NDA only in Gauteng province. The population size of the study is 589 individuals. Since the researcher is evaluating the effectiveness of governance training, the sample included elements that constitute the individuals who are members of the governing body/Board members of the NPOs. Therefore, the unit of analysis for this study were all trained board members of NPOs in Gauteng. The study participants included both male and female, young (youth) and the elderly. A sample, according to Sekaran and Bougie (Sekaran & Bougie, 2013, p. 212) comprises of a subset of the population, in other words, some but not all elements of a population. They further define an element as a single member of the population, and population as the entire group of people, events or things of interest that the researcher wishes to investigate. The researcher used sampling strategy due to the financial and time constraints associated with collecting data, testing or assessing every element of the population. Individuals that are employees or members of the NPOs that received governance training from the NDA are the unit of analysis of this study.

#### *5.3.4.2 Sample Size*

According to Wegner et al. (2015), a sample frame is crucial when applying a sampling strategy to select your sample from the population. The contact list of all the trained individuals in Gauteng was a sampling frame for this study. Some of the critical information on this list is the name, the municipality and the contact details of individuals. The determination of the sample size for the study was 95% level of confidence, with a margin of error of five; this then means that the sample size of the study is 253 respondents (survey system, n.d.). The researcher was able to maintain contact with the study participants because she is directly involved in the training program.

The sample size for the qualitative data was fifteen participants. According to Shetty (2018), a sample size for a qualitative study should be large enough to sufficiently describe the phenomenon

of interest, as well as being able to address the research question. However, if the sample size is large, there are high risks of the sample size having repetitive data. A sample size of ten for a qualitative study to a considerable extent, can be extremely fruitful and still yield relevant results (Malterud, 2016). Furthermore, Creswell (1998) recommends a size of between 5 and 25; whereas Morse (1994) suggests at least six. Sandelowski (1995) recommends that qualitative sample sizes are large enough to allow the unfolding of a ‘new and richly textured understanding’ of the phenomenon under study, but small enough so that the ‘deep, case-oriented analysis’ (p. 183) of qualitative data is not precluded. Additionally, qualitative samples are, selected by their capacity to provide richly-textured information, relevant to the phenomenon under investigation, and this means that they are purposive (Vasileiou, et al., 2018).

#### *5.3.4.3 Sampling Technique (Simple Random and Purposive Sampling)*

Once a sampling frame is in place, the decision is assumed on the sampling size required for the study, then followed by the method of sampling. Sampling can either be probability or non-probability (Sekaran & Bougie, 2015:245). In probability sampling, all elements of the population have an equal and known (non-zero) probability of being included in the sample (Alvi, 2016; Garner et al., 2015). The researcher has access to the whole population and then randomly select the number needed to make up the sample in no particular or intentional order. Table 5.2 illustrates these advantages and disadvantages.

For qualitative data, purposive sampling was used to select the participants for in-depth interviews. According to Vasileiou et al. (2018), purposive sampling, as opposed to probability sampling that is used for quantitative research, selects ‘information-rich’ cases. Purposive sampling has demonstrated the greater efficiency as compared to random sampling in qualitative studies (Patton, 1990), and this supports the related assertions long put forward by qualitative methodologists on adopting purposive sampling for qualitative study (Vasileiou, et al., 2018). “Qualitative inquiry typically focuses in-depth on relatively small samples, even single cases ( $n = 1$ ), selected purposefully, whereas quantitative methods typically depend on larger samples selected randomly” (Patton, 1990, p. 169). In this research, fifteen participants were purposively sampled from the population as the information-rich cases for an in-depth study. The population was precisely defined to cover Chief Executive Officer, Chairperson of Board and Board Secretary of

the NPOs that were trained on NPO Governance between April 2016 and March 2017. The researcher applied a subjective judgement to select the sample for qualitative data.

**Table 5. 2 Advantages and Disadvantages of Probability and Non-Probability Sampling**

<i>Sampling Techniques</i>	<i>Advantages</i>	<i>Disadvantages</i>
Probability Sampling	<ul style="list-style-type: none"> <li>• Reduces the chance of <i>systematic errors</i>.</li> <li>• The methods minimise the chance of <i>sampling biases</i>.</li> <li>• A better representative sample is produced using probability sampling techniques.</li> <li>• Inferences drawn from the sample are <i>generalizable</i> to the population.</li> </ul>	<ul style="list-style-type: none"> <li>• Lots of efforts are needed</li> <li>• Time-consuming</li> <li>• Expensive</li> </ul>
Non-Probability Sampling	<ul style="list-style-type: none"> <li>• The techniques need less effort.</li> <li>• Less time is needed to finish up.</li> <li>• Not costly.</li> </ul>	<ul style="list-style-type: none"> <li>• Prone to encounter with <i>systematic errors</i> and <i>sampling biases</i>.</li> <li>• The sample cannot be claimed to be a good representative of the population.</li> <li>• Inferences drawn from the sample are not <i>generalizable</i> to the population.</li> </ul>

Source: Researcher’s Illustration adapted from (Alvi, 2016, pp. 12-14)

On the other hand, non-probability, as explained by Garner et al., (2015:88) is a non-random sample which involves people because of their ability and willingness to participate in the study. The researcher is aware that both sampling techniques are vulnerable to non-response bias. The researcher used the randomiser approach to eliminate any possibility of sampling biases and to have a sample that is representative of the population. In a simple random sampling technique, every element of the population has an equal chance of being selected in the sample (Alvi, 2016). A sample frame was a training list of all individuals trained by the NDA. The list contains the name and contact information for every element of the population. Figure 5.3 illustrates the process followed in randomly selecting the sample from the entire population.

- Assigned numbers to all the individuals in the NDA training list (sample frame)
- The numbers were assigned from first person to the last person (1-589) on Excel.
- Each record had its own number



- Used computer application to generate random numbers (Research Randomiser)
- Generated 10 sets of numbers based on the required sample size (253)
- Included 24 numbers per set
- Number range (1-589)
- Selected each number in a set to remain unique



Research Randomizer Results:									
10 Sets of 24 Yes Numbers Per Set									
Range: From 1 to 589 -- No									
Set 1	Set 2	Set 3	Set 4	Set 5	Set 6	Set 7	Set 8	Set 9	Set 10
420	547	520	200	278	130	319	508	217	176
264	147	486	117	206	221	234	96	354	37
76	189	324	263	290	138	328	74	270	470
495	480	326	111	285	314	17	86	446	381
354	444	328	23	273	195	539	262	185	282
139	223	160	127	77	144	246	42	463	443
313	232	348	232	328	564	150	97	572	80
587	582	482	312	183	187	414	511	350	318
245	254	209	264	115	347	275	416	473	312
413	281	291	516	224	34	494	551	121	433
142	143	489	480	131	62	84	379	397	415
450	440	417	64	451	88	538	498	435	579
511	531	284	7	26	41	517	391	342	400
18	456	436	541	151	544	577	504	254	249
534	449	425	566	216	8	54	351	517	404
570	350	447	65	269	98	80	122	322	476
155	544	408	118	22	161	283	84	82	101
72	298	452	273	552	297	11	139	396	570
553	302	113	584	233	4	4	195	401	563
16	314	293	97	73	59	94	126	444	327
143	72	385	326	571	158	257	387	197	195
392	516	429	569	438	542	369	542	74	236
532	347	443	582	513	216	349	471	118	194
327	133	565	235	526	182	474	581	135	343

Figure 5. 3 Researcher’s Illustration on the process followed for random sampling

### 5.3.5 Time Horizon (Cross-Sectional)

Time horizon is the final layer of the onion, as applied in this study, just before reaching the centre/core of the onion. Time horizon is the time that the researcher undertakes to conduct the

research. Saunders and Tosey (2013) indicate that if the research is conducted to answer a question or address a specific problem at a particular time, it is said to be a cross-sectional study. Conversely, if the research answers a question or addresses a specific problem where data collection is over a long period, then it is called a longitudinal study. They further assert that cross-sectional studies are likely to use case studies or survey as research strategies, whereas, longitudinal studies use experiment, action research, archival research and grounded theory as the research strategies. Rehman (2009) defines cross-sectional or one-shot research as a study where data are gathered just once for weeks or months to enable the researcher to answer the research question. A survey was adopted as a research strategy. The research is cross-sectional as it addresses a problem at a particular and specific period. Collection of data from the study respondents was over seven months. Both quantitative and qualitative data were concurrently collected over a period.

### **5.3.6 Data Collection and Analysis**

The centre or core of the research onion model is data collection and analysis. It looks at the techniques and procedures applied by the researcher in collecting and analysing data. This research used multiple techniques to collect data. The use of multiple techniques means that more than one technique was used to match different purposes. In this study, online survey and semi-structured interviews were used as data collection techniques.

#### **5.3.6.1 Semi-Structured Interviews**

In an exploratory phase of this study, semi-structured interviews were used to have a detailed understanding description of trainees' feelings, opinions and experiences about the training they have received from NDA. According to Datko (2015, p. 142), semi-structured interviews reveals the subjective theory of the interviewed person on the sophisticated stock of knowledge about the investigated issue based on their subjective experience. Similarly, Chalhoub-Deville and Deville (2008) are of the view that qualitative approaches, such as in-depth interviews or focus groups, help the researcher to achieve deeper insights into the investigated issues. In semi-structured interviews, researcher use an interview guide or framework focused on central themes and suggested questions where the content is not strictly prescribed but can be modified according to how the conversation evolves during the interviews (Gavora, 2006 cited in Datko, 2015:143).

Semi-structured interviews though explained by different authors and researchers that it provides detailed information about the investigated issues, they also have weaknesses. Table 5.3 outlines the strengths and weaknesses of semi-structured interviews.

**Table 5. 3 Strengths and Weaknesses of Semi-Structured Interviews**

<i>Strengths</i>	<i>Weaknesses</i>
<ul style="list-style-type: none"> <li>• Allow interviewees the freedom to express their views in their terms</li> <li>• Provide reliable and comparable qualitative data</li> <li>• Encourages two-way communication, as those who are interviewed can ask questions to the interviewer.</li> <li>• Often the information obtained from semi-structured interviews will provide not just answers, but the reasons for the answers)</li> <li>• Flexibility</li> </ul>	<ul style="list-style-type: none"> <li>• Interviewing skills are required</li> <li>• Need to meet sufficient people to make general comparisons</li> <li>• Preparation must be carefully planned so as not to make the questions prescriptive or leading</li> <li>• Skills to analyse the data can be a problem risk of construing too much</li> <li>• Time-consuming and resource-intensive</li> </ul>

Source: Keller (2018)

***(a) Constructing the Interview Questions***

Based on the purpose of the research and the research questions asked in chapter one of this study, a list of interview questions was prepared for the semi-structured interview. Sapsford and Jupp (2006) assert that answer to the earlier questions can affect the interviewees’ answers to the following questions, so interviewers must organise the sequencing of the interview questions. The research questions were built on the assumptive relationships between independent variables (trainee’s characteristics, training content validity, the reaction of trainees, learning outcomes and their behavioural change after the training), intervening variables (motivation to learn and motivation to transfer training) and training effectiveness outcome (dependent variable). Since the researcher is using semi-structured as opposed to structured interviews, an interview schedule guide was used to guide the interview instead of a rigid interview question list which is used in structured-interviews. By using this type of data collection technique, the researcher worked out a

set of questions beforehand; however, the interview was conversational. The interview schedule was made up of three sections (introduction, body and closing). The body of the schedule focused on the central questions of the study. There were seven main questions with follow-up questions for probing, and these main questions were focused mainly on finding out information like:

- i) What are the issues or challenges faced by the organisation in adhering to good governance and compliance?
- ii) Why did the participants attend the NDA training?
- iii) How did they perceive the training by the NDA in improving learning on the governance of NPOs? What new skills and knowledge have they acquired?
- iv) How have they transferred what they were trained back on the job? What specific factors do they think have influence or impact them to transfer training back in their organisation?
- v) How do they think factors on the design of the training such as (content validity, knowledge of the trainer, duration of the training and simplicity of the training) are affecting the training transfer?
- vi) How would they suggest or recommend to the NDA to improve its future training, especially relating to NPO governance? What specific factors/elements/issues should the NDA improve?

The researcher formulated the above questions into an interview schedule. As part of the materials used, the interviews were administered by the researcher and audio recorded on-site. The interview schedule comprised of nineteen questions in total (**see Appendix D**). The questions were directly asked respondents by the researcher, where field notes were also scribed during the face-to-face interviews.

### ***(b) Selection of the Interviewees***

Since the focus of the research is on trainees' perception about the training they have received from the NDA in improving the governance practices and compliance of their organisations, the inclusion criteria were the Governance structure of different NPOs who have attended this training and were considered the right participants for the study and met every criterion line-item identified from quantitative research sample. The researcher used the list of trained individuals compiled by the NDA to seek the participants. The interviewees were selected based on the relevance of their

job positions to the topic of the study. The research aims to have detailed contextual information about the perception of trainees on the relevance and application (transfer) of the NDA training as well as any new or improved skills and knowledge as a result of the training they have attended. The number of participants who were purposively selected for the semi-structured interviews was fifteen (5 CEOs, 5 Board Secretaries and 5 Chairpersons of the Board). The process building up to the actual interviews started by telephonically calling each participant to explain the study and request for a face-to-face interview with them on specified dates, once the interview date and time were agreed between the researcher and the participants, a formal letter was then emailed to them detailing the purpose of the research, dates, time and place of interviews.

### *(c) Interview Process*

The research conducted eight interviews, following a similar approach. First, the entire selected potential interviewees received an initial letter. The researcher conducted the interviews at the convenience of the participants' preferred place. The participant information sheet (**see Appendix E**) detailing the purpose of the research was shared with the participants before the interviews. All the study participants signed the participants' interview consent form to participate in the study (**see Appendix F**); lastly, the informed consent form for audio recording was signed by the seven participants who agreed to be audio recorded (**see Appendix G**). The collection of data was two weeks from 17 June 2019 till 30 June 2019.

The English language was used to conduct the interviews, with the use of an audio recorder for recording the entire one-on-one interview. Only seven out of eight participants were willing to be audio recorded. Each interview lasted for about approximately one hour. A day after each interview, the researcher sent an appreciation letter via email to express gratefulness for taking part in the research. There were some follow-up questions for clarity via the telephonic medium on some statements or responses that were not clear to the researcher or on the audio recorder.

### **5.3.6.2 Survey**

According to Zikmund et al., (2009), the collection of data through a survey is suitable when the researcher can predict the answers that are likely to emerge. For the quantitative section of this study, the survey was designed to collect data to answer the research questions and objectives of the study. The term 'survey' is a careful list of structured questions, selected after considerable

testing, to elicit accurate responses from a selected sample (Hussey & Hussey, 1997). Furthermore, the survey is “a reformulated written set of questions in which respondents record their answers” (Sekaran, 2003, p. 236). On the other hand, Gray (2017) is of the view that conducting a survey is more than just designing a set of questions and collecting data. In this study, the researcher followed five steps in developing the survey as guided by the research aim and questions. The five steps are based on (Collis & Hussey, 2014; Gray, 2017), as explained below:

### **i) Preliminary Planning and Survey Design**

In this step, the researcher considered the choice of research goals and determining their accomplishment within the defined timeframe and the availability of resources. When designing a survey, specific information that is required, the sample and the survey technique should be determined based on the objectives of the research (Bajpai, 2011). Based on this, the survey and specific information relating to the study were determined based on the research objectives of this study.

### **ii) Questionnaire Design and Pre-Testing**

According to Bajpai (2011), when designing a survey, the following should be considered: the format of the questions, relevance and wording, sequencing, response choice, question layout and the first round of producing the survey. Pre-testing the survey involves the process of testing or piloting certain elements, such as the sampling frame, survey questions and data collection tools (Gray, 2017). At this stage, the aim is mainly to determine if the survey works in the manner intended by the researcher and whether it provides valid and reliable measurements of the attitudes, attributes and behaviours of the study respondents (Blair, et al., 2014).

### **iii) Final Design of the Survey and Planning**

This stage tells the researcher the required adjustments to the various elements, such as the choice and size of the sampling frame, the survey itself or training of the interviewer, data coding and plans on how data will be analysed (Gray, 2017). Accordingly, the researcher will pre-test the survey, revise it based on the outcomes of the pre-test, revise the final survey, administer the survey and finally acquire responses (Bajpai, 2011).

#### **iv) Sample and Data Collection**

This step focuses on data collection from the field and the target sample. In this stage, the aim of the researcher is mainly to monitor the rate of completed surveys or interviews (Gray, 2017). In this study, an online survey was used to collect data. The data collection was from 07 January 2019 till 26 July 2019. The researcher set the opening and final closing dates for receiving responses. The official closing date of the online survey was set for the 26<sup>th</sup> July 2019, and no further responses were accepted after the closing date. The data were also collected through emails using the same cut-off dates for receiving responses as a means of reminders and follow-ups.

#### **v) Data Coding and Analysis**

This stage includes data coding, data file construction and data analysis. This is where raw data that was collected is converted into readily and usable data to be analysed (Bajpai, 2011). In the coding and file-construction stage, a number is assigned to the responses from each survey question then entered into a data record with all the responses from each respondent. Each participant is assigned a unique number to identify them (Gray, 2017). Finally, the data are screened and cleaned before the analysis of the data, and the final report is generated (Bajpai, 2011; Gray, 2017). A web-based survey was used to collect quantitative data to increase the response rate of the research. The following section provides how the survey was developed for the study.

##### **5.3.6.1 Survey Design**

According to Wagner et al. (2012:103), a questionnaire is a predefined series of questions used to collect information from individuals, and they can be either handwritten or completed via email, on-site or the internet. Goodman (2003) assert that questions in a questionnaire should be unambiguous and set out in a manner that they collect information from respondents (human) as honestly as possible. Similarly, Wagner (2012) posit that unintentional ambiguity can lead the respondents to assume that the questions are asking something other than what they are intended to address or ask. He further emphasises that it is crucial to take into consideration the literacy levels and language of the respondents and that short, easy-to-answer questionnaires have a better

participation chance. The design of a survey includes how questions are worded, categorised, scaled and coded, as well as the general appearance of the survey (Sekaran, 2003).

In this study, only one survey was constructed as the study only focuses on evaluating the training effectiveness post-training. The researcher ensured that the questions are easy to read and understand, thus reducing the chances for misunderstanding as well as enhancing the interest of respondents in the subject matter. The survey was personally provided by email and online to increase the response rate. According to Yun and Trumbo (2000), using multi-mode survey techniques improves the representativeness of the sample without biasing the other results. Some of the advantages of using a web-based survey are the faster response rate, quick distribution of the instrument, requires fewer resources, the excellent quality of data due to less data entry time and, flexibility in the designing options (Andrews, et al., 2003). Although there are certain advantages associated with using web-based surveys, researchers should consider several requirements when designing this type of survey. The questions in the web survey should be presented logically or adaptively (Kehoe & Pitkow, 1996) and should be able to provide the respondents with multiple opportunities to save their completed answers (Smith & Stewart, 1997).

Furthermore, web-based surveys must have multiple-choice questions (Yun & Trumbo, 2000) and conclude with feedback and “thank-you “section (Smith, 1997). Ganassali (2008) assert that good design and appropriate length of questions in the survey reduces the occurrence of sample survey error and influence the quality of responses. Furthermore, the development of a web-based survey should consider three essential elements: wording, intensity and length (Ganassali, 2008). Saunders et al. (2015) found that a four to eight pages’ length survey is acceptable for within-organisation and self-administered surveys. The paper presented by Handwerk, Carson and Blackwell (2000) recommended that surveys which take thirteen minutes or less should be considered as they have resulted in higher response rates.

This study used a 10-20 minute time for the survey to address the aim and objectives of the research. An online questionnaire was used to collect quantitative data. The survey was made up

of 33 items (6-demographic information, 27 statements). Based on the approximate value produced by the monkey survey website, the survey took an average of 20 minutes to complete. The first page of the survey included the title of the research and approximately five lines of text explaining the main objectives of the study, offering broad guidelines for filling in the questions and reinforcing confidentiality. The last pages of the survey concluded with words of gratitude for the respondents 'valuable support. In designing a survey, the most common types of questions are closed-ended or open-ended. Open-ended questions allow respondents to answer with sentences, stories and lists, giving deeper and new insights. In contrast, the closed-ended questions, limit to responses which do not allow for describing or narrating (Farrell, 2016); and respondents choose a set of alternative provided by the researcher (Sekaran & Bougie, 2013).

### **i) Measurement Scales**

Sekaran and Bougie (2014, p. 211) define measurement as “*assignment of numbers or any other symbols to characteristics of objects according to a pre-specified set of rules*”. They further emphasise that researchers must standardise the rules for assigning numbers to characteristics (attributes) of objects and consistently apply them. As a result, numbers are significant as they allow us to perform statistical analysis and test the hypotheses that we developed, and most importantly, they facilitate the communication of the research results (Sekaran & Bougie, 2014).

Sekaran and Bougie (2014, p. 212) list levels of measurements scales as:

- *Nominal scale* – Allows the researcher to assign subjects to specific groups or categories. In this scale, there is no third category which the respondents might fall (i.e. Male and Female). In summary, the nominal scale allows to only qualitatively distinguish groups by putting them into categories that are mutually exclusive and collectively exhaustive sets.
- *Ordinal scale* – this scale does not only categorise the variables to denote the differences but also rank them in some meaningful way. In this scale, respondents might be asked to rank their responses in the levels of their importance. This scale provides the researcher with more information as compared to the nominal scale.

- *Interval scale* – this scale allows the researcher to perform operations that are arithmetic in nature on the collected data from respondents. In other words, the interval scales allow for the measurement of the distance between any two points on the scale. It also measures the magnitude of the differences in the individual's preferences.
- *Ratio scale*- this scale not only measures the magnitude of the differences between points on the scale but most importantly it taps on the proportions in the differences. It is said to be the most powerful of the other scales because of its unique zero origins and includes all the properties of the other three scales.

According to Sekaran and Bougie (2014), a more powerful rather than a less powerful scale should be used in measuring the variables of interest. When researchers move from a nominal to a ratio scale, there is a progressively increasing precision in quantifying the data and greater flexibility in using more powerful statistical tests. According to Sekaran and Bougie (2014), these scales are attitudinal and used in business research. Four of the most used and famous rating scales are: dichotomous, which is used to elicit a “Yes” or “No” responses. The category scale uses multiple items to elicit a single response and also uses the nominal scale. Another well-known scale of attitudinal measurement is a Likert scale. In this scale, respondents indicate their responses on how strongly they agree or disagree with a statement.

This study only used structured questions (closed-ended) and rating scale questions. The biographical questionnaire used both nominal (gender, municipality name, job position/occupation) and ordinal (age group, qualification, years of experience) scales. According to Wagner et al. (2012), closed question formats allows the respondents to tick or make a cross to indicate their response. They defined three formats of closed-ended questions formats as ticking boxes, rating scales and contingency questions. The rating scales gives response options known as the Likert response scale. In the Likert response scale, the respondents indicate their response on a scale (usually from 1 to 5 or 1 to 7). Rating scales can either be linear or tabular (Wagner, et al., 2012).

This method assesses the attitude of the respondent by providing a range of responses to a given question or statement (Subedi, 2016). Dawes (2002) found that reliability and validity changed to some extent when using a seven-point Likert scale instead of a five-point Likert scale. According to Hartely and Mclean (2006), the five-point Likert scale does not decrease the response rate in any research. Dawes (2002) further found that using 11-point scale produces the same mean score as a five-point scale. Furthermore, Daw (2007) found higher mean scores generated by five-point and seven-point scales as compared to the 10-point scale.

Furthermore, Johns (2010) found that Likert items and those with similar rating scales become appreciably less accurate when the numbers of points are below five or above seven. Nonetheless, Mertler (2009) recommends the use of a five-point scale, mainly when an attitudinal study is being carried out. All these findings and explanations justified the use of a five-point Likert scale in this study. The study used nominal and ordinal scales. The nominal scales were limited to questions regarding respondents' demographic characteristics, such as gender, and the ordinal scales were used for qualifications and Job position. The Likert scale rating was employed to understand and explore the beliefs and opinions of respondents about the training they have attended from the NDA. A five-point Likert scale was chosen for this research where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree, to measure the level of agreement or disagreement to the statements. A Likert scale is "a summated rating scale whereby an individual's score on the scale is a sum, or average, of the individual's responses to the multiple items on the instrument" (Warmbrod, 2014, p. 38). The researcher used a five-point Likert scale, and the questions were categorised by topic and put in a logical order. The funnel approach was adopted, starting with common questions and narrowing in scope as the survey progressed (Warmbrod, 2014). According to (Saunders et al., 2016), both negative and positive statements should be used in the questionnaire to ensure that the respondents read the questions carefully and think thoroughly about their responses. The statements in this research followed this assertion and used both negative and positive statements.

This research focuses on evaluating the effectiveness of training, which is affected by different variables that ultimately influence the outcome of the training. Therefore, a conceptual framework was developed in Chapter three to explore factors that contribute to the effectiveness of a training

intervention or programme. More specifically, this research focuses on the impact of training characteristics and work environment characteristics on training outcomes (reaction, learning, behaviour and results). Finally, this study scrutinises the moderating effect these factors have on the relationship between some of the training outcomes.

#### **5.4 The Pilot Study**

Creswell (2016) posits that researchers must test the survey questionnaire before using it to collect data for the actual study. He further emphasises that pretesting and piloting can assist the researcher in identifying questions in the questionnaire that do not make sense or are difficult to understand to participants or problems with questions that might lead to biased answers. Similarly, Saunders et al., (2016) assert that the main objective of a pilot test is to make improvements on the questionnaires that are used to collect primary data as well as ensuring that the participants of the study do not encounter challenges in completing the questionnaire. The pilot study also ensures some validity for the questions and reliability of the collected data (Saunders et al., 2016). Validity includes the process of measuring the intended study constructs, whereas reliability determines the consistency of the research instrument (Gray, 2017).

In understanding, if the instrument is measuring the intended construct, the researcher piloted the instrument through an online survey to 65 individuals who had also participated in the same NDA training on improving governance and non-compliance of NPOs in Gauteng under the same period. According to Blumberg et al., (2011), the size of the pilot group can range between 5 and 100 subjects depending on the method used to collect data. The pilot study was from 11 October 2018 to 25 October 2018. Forty-nine out of 65 surveys were returned, which is a response rate of 75.4%. Twelve (24%) surveys were collected from City of Tshwane Municipality, sixteen (33%) Sedibeng, ten (20.4%) from Ekurhuleni and eleven (22.4%) from City of Johannesburg. The pilot subjects/group did not form part of the actual respondents of the study. However, the pilot had similar characteristics with the study respondents.

The response rate of 75.4% in the pilot study was perfect and encouraging for the researcher. Additionally, the size of the sample was large enough to allow the researcher to conduct some analysis. The sample size was large enough to allow for more analysis. The IBM SPSS version 24 was used as the base software to analyse the findings of the pilot study statistically. The following section provides a descriptive analysis of the data collected in the pilot study (returned surveys).

#### **5.4.1 Reliability of the Pilot**

The results from the pilot study indicate that the majority of the respondents were females ( $n = 41$ , 83.7%), and the remaining respondents were male ( $n = 8$ , 16.3%). The pilot study used the internal consistency test (Cronbach's alpha,  $\alpha$ ) to assess the reliability of the measured items. This method is generally used to measure the consistency of the questions. According to Hinton, Brownlow, McMurray and Cozens (2004), the Cronbach's alpha value of  $\geq 0.90$  generally indicates excellent reliability, a value between 0.70–0.90 indicates high reliability, a value between 0.50–0.70 indicates moderate reliability and a value  $\leq 0.50$  indicates low reliability. Furthermore, Cronbach's alpha coefficients of 0.7 and more indicate sufficient and acceptable reliability, as suggested by Nunnally (1978). Similarly, Cronbach's alpha reliability coefficients equal to 0.7 or higher show adequate internal consistency and a 0.60 level can be used in exploratory research (Hair et al, 2006). The pilot showed high reliability of the Cronbach's alpha values, which ranged from 0.701–0.798, which indicate an acceptable level of the instrument reliability.

#### **5.4.2 Validity of the Pilot**

Creswell (2014) asserts that a pilot test is essential in research as it helps to determine the content validity of the scores delivered by the instrument, as well as developing questions, format and the scales. Cooper and Schindler (2014) argue that content validity assesses the comprehensiveness and representativeness of the content in the instrument. They further defined it as “the extent to which the content validity provides adequate coverage of the investigative questions guiding the study” (Cooper & Schindler, 2014, p. 257). Generally, two ways can be used to measure content validity: literature review and expert opinion in the subject matter (Drost, 2011). The content validity of the survey in the pilot study was established through published and peer-reviewed

literature, and some training experts that the researcher has interacted. As a result, the researcher affected a few changes to the instrument according to their recommendations. To detect weaknesses in the design and provide proxy data, the survey of a pilot was shared with some of the colleagues who are involved in training and monitoring and evaluation. Their opinions were sought with regards to the clarity of instructions, layout and understanding of the survey. Only a few changes were received, especially on including both negative and positive statements in the survey. These recommendations were implemented.

### **5.4.3 Comments on the Survey**

After conducting a pilot study, no further suggestions were received from the respondents that would strengthen the survey any further except for few adjustments indicated in the above paragraph. The respondents agreed that the used language and terminology was accessible and understandable, and the format was also easy to follow. The survey was revised by two doctoral supervisors from the University of Fort Hare, four of the training practitioners and two monitoring and evaluation specialists. More than three versions were produced. For example, there was a suggestion that the guidelines on answering questions and the reassurance of confidentiality of information should be stated on the introduction page. The initial survey had a total number of forty questions which most of the pilot indicated that the questionnaire was lengthy, and most statements were being repetitive in different words. The initial survey had different responses, such as satisfaction levels. It was advised that the statements should be revised and written in such a way that it conforms to the scale (strongly disagree to disagree). The instrument initially had three-point Likert scales, which were revised to a five-point Likert scale. All of these changes were effected. Therefore, the questions in the instrument contained proper wording, straightforward language, properly developed response formats and layouts to encourage high and accurate responses, and finally facilitated in the simplifying of analysis to create the final version. The final survey, with all the changes effected, had a total of 33 statements.

## **5.5 Data Analysis**

### **5.5.1 Preliminary Analysis**

In this study, both descriptive and inferential statistics were used to analyse the quantitative data, and thematic content analysis was used for qualitative data analysis. According to Sapsford and Jupp (2006), the level and type of data that the researcher is dealing with can have a considerable influence on the type of analysis that the researcher can be able to undertake. They further posit that researchers must establish as early as possible in their research about which variables are seen as being dependent and independent. In this study, the dependent variable is training effectiveness (learning, behaviour and results) whereas the independent variables are: training characteristics, such as training content and training objectives. Numerical values were assigned to the attributes (number of categories) for classification. In analysing data, it is first essential screen data before data analysis by identifying any missing data or outliers and testing the assumptions of multivariate analysis. It is vital to screen data before data analysis by identifying the missing data or outliers and testing the assumptions of multivariate analysis. The current study used SPSS v.24 software to identify the missing data, outliers, normality and multicollinearity. The next sections present the preliminary analysis of quantitative data before conducting the actual data analysis.

#### **5.5.1.1 Missing Data**

Missing data is “the data value that is not stored for a variable in the observation of interest” (Kang, 2013, p. 402). Furthermore, Bryman and Cramer (2005) put forward that missing data for specific variables indicate problems in the measurements, which requires a solution. Hair et al., (2006) argue that missing data occur because of the problems associated with the responses, mistakes in the data entry or a sample that is too large. There are some solutions in resolving the issues of missing data; however, the selection of an appropriate technique depends on several factors. “If non-ignorable data is missing, or if the missing data is not random, any suggested remedy to treat the problem is likely to yield a biased result. However, if the data are missing at random, any technique used to treat the missing data is likely to generate acceptable results” (Hair, et al., 2010, p. 34). Cohen et al., (2003) accentuates that if the missing data is 3% or below, it can be considered small. However, if it is between 10 and 30%, then it should be considered to be substantial. Similarly, Kline (1998) cited in Byrne et al. (2001, p. 743), points out that missing data should represent less than 10% of the entire data. On the other hand, Kline (2011) suggest that if the missing data is less than 5% of the total data, and the reason for the incomplete data can be ignored,

then following a simple analysis would yield acceptable results. This study adopted the recommendations of missing data proposed by Byrne et al. (2001), which consists of three stages: (a) exploring the amount of missing data, (b) investigating the pattern of incomplete data (c) learning appropriate approaches to handling missing data. Further explanations of these are in Chapter six.

### **5.5.1.2 Outliers in the Data**

Outliers are “scores that are different from the rest” (Kline, 2011, p. 46). An outlier can either be univariate and multivariate. A univariate outlier occurs when there is an extreme value on one variable, whereas multivariate outlier is a combination of unusual or strange scores on at least two or more variables (Kline, 2011). Both types of outliers can influence the outcome of statistical analyses (Statistics Solutions, 2019). Although there is no agreement on extreme scores, a value of more than three standard deviations exceeding the mean is considered to be an outlier (Kline, 2011). In many parametric statistics, univariate and multivariate outliers must be removed from the dataset (Statistics Solutions, 2018). In examining the univariate outliers for continuous variables, standardised values ( $z$  scores) can be used to reveal the outliers faster (Kline, 2011).  $Z$ -scores are “the number of standard deviations (SD) value is above or below the mean” (Schauer & Eckman, 2014, p. 404). Once the univariate outliers have been identified and removed from a dataset, then identification and removal of multivariate outliers can be made afterwards (Statistics Solutions, 2018).

In this research, univariate outliers were checked by transforming the actual scores in the data set to standard scores. According to Tabachnick and Fidell (2013), the cases that have standardised values of more than  $\pm 3.29$  should be considered potential outliers. In this study, the univariate outliers were identified through SPSS by setting the cut point at  $\pm 3.29$  for the standardised scores. The  $z$ -score was computed for all the variables followed by the computation of the  $z$ -score composite to identify extreme outliers outside the  $\pm 3.29$  threshold. The Mahalanobis distance is the distance between a set of variables and the mean of all the variables in a given observation (Hair et al., 2014; Kline, 2011; StatisticsSolutions,2018). Higher Mahalanobis distance scores represent extreme values for one or more variables (Hair, et al., 2014). A conservative statistical significance test measurement, such as  $p < .001$  and the corresponding  $\chi^2$  with the degrees of

freedom equal to the number of variables is suggested with a Mahalanobis distance test (Hair et al., 2014; Kline, 2011; StatisticsSolutions, 2018). For the current study, outliers were not detected by multivariate detection but were rather detected by the univariate outliers method.

### **5.5.1.3 Testing the Assumptions of Multivariate Analysis**

Normality and multicollinearity are essential assumptions required for the multivariate analysis techniques (Statistics Solutions, 2018). The SPSS was used to identify normality and multicollinearity. An explanation of the normality and multicollinearity are explained below:

#### **i) Normality**

Normality is defined as “the shape of the data distribution for an individual metric variable and its correspondence to the normal distribution, which is the benchmark for statistical methods” (Hair, et al., 2014, p. 110). A violation of the normality assumption occurs when the shape of the offending distribution and the sample size are affected (Hair et al., 2014). Such violation of a normality assumption might be biased or might have no relevance to the actual result. Furthermore, a violation of a normality assumption might affect the fit indices and standard errors of parameter estimates, and the chi-square value (Hair et al., 2014). Visual inspection of the distribution may be used for assessing normality, although this approach is usually unreliable and does not guarantee that the distribution is normal (Oztuna, et al., 2006). However, when data are presented visually, readers can be able to judge the distribution assumption by themselves (Bland & Altman, 1996). The frequency distribution (histogram), stem-and-leaf plot, boxplot, P-P plot (probability-probability plot), and Q-Q plot (quantile-quantile plot) are used for checking normality visually (Field, 2009). A distribution is considered normal when the actual data distribution follows the diagonal lines (Gashemi & Zahediasl, 2012). Furthermore, two measures can reveal the shape of the distribution: kurtosis and skewness. Kurtosis shows the peak or flatness of the actual distribution compared with the normal distribution. Skewness represents the balance of the actual distribution with a normal distribution (Hair, et al., 2014).

The normal distribution score is zero with both kurtosis and skewness. However, if the skewness scores fall outside the -1 to +1 range, it shows a substantially skewed distribution (Hair et al., 2014). Conversely, Kline (2005) and West et al. (1995) recommend that a skewness value of more than 3.0 is considered extremely skewed, and kurtosis scores of approximately 8.0 to more than

20.0 are considered extreme kurtosis. However, Pallant (2007) cautions that if the sample size is more than thirty or forty, then the violation of the normality assumption should not cause significant problems, this implies that parametric procedures can still be used even if the data is not normally distributed (Elliot & Woodward, 2007). In this study, the researcher set the maximum acceptable limits of observation values for the skewness value and the kurtosis value between -3 and +3.

## ii) **Multicollinearity**

Multicollinearity is one assumption of multivariate techniques (Hair et al., 2014). The associations between the variables in the proposed conceptual model are assessed using SEM, which is a multivariate technique. Multicollinearity refers to “a situation where two or more variables are very closely linearly related” (Field, 2013, p. 879). Multicollinearity appears with a high correlation between variables that are more than 0.9 (Tabachnick & Fidell, 2013) or 0.85 (Kline, 2005). To components such as tolerance and variance inflation factor (VIF) are used to test the pairwise and multiple variable correlations (Hair et al., 2014). Tolerance is the amount of variability in the independent factors, which is not explained by the other independent factors (Hair, et al., 2010). It assesses multicollinearity with an acceptable value of 0.1, while the other predictors explain 90% of the measured variable (Tabachnick & Fidell, 2013). The variance inflation factor indicates whether a predictor has a strong linear relationship with the other predictors (Field, 2013) and is calculated as the inverse of tolerance ( $1 \div tolerance$ ). The acceptance value for multicollinearity is a tolerance less than 0.10 or a variance inflation factor (VIF) greater than 10 (Field, 2013; Pallant, 2016), or if one or more large variance inflation factors show multicollinearity (Montgomery et al., 2012). Montgomery et al., (2012) cautions that if any of the variance inflation factors are more than 5 or 10, then it means that the associated regression coefficients are poorly estimated because of multicollinearity. In this study, multicollinearity was checked through a variance inflation factor to measure the strength of the correlation between the predictor variables in a regression model. The survey had variance inflation (VIF) below 10 on the coefficient table indicating that the assumption was met.

#### **5.5.1.4 Inferential Statistics**

The descriptive statistics discussed in the earlier paragraph underpinned the inferential statistics used in the study. Sapsford and Jupp (2006) highlight two aspects of inferential statistics as:

- Hypothesis testing; and
- Estimation of population parameters from sample data.

Inferential statistics, in short, is about generalising from the available evidence. The researchers can generalise from the sample to the population, or they can test the hypotheses about relationships or differences in the population by using data from the sample (Sapsford & Jupp, 2006). Since the results are from the sample, the result is prone to sampling error. With the conclusion of either type, inferential statistics allows researchers to indicate what level of uncertainty should the findings be treated.

#### **5.5.1.5 Factor Analysis**

Factor analysis methods are used to analyse the correlation between many variables by describing the underlying factors of variables (Hair et al., 2014). Factor analysis involves combining a large set of variables with a small number of variables or factors (Hair et al., 2014). According to Field (2009, p. 628), the factor analysis aims to:

- Establish the structure of a set of variables;
- Construct a survey measure and underlying variables; and
- Reduce big data set to a more manageable data.

In this study, the latent dimensions of the structure are firstly described before describing the factors. Latent variables are described by McCoach et al. (2007, p. 462) as “unobserved theoretical constructs”. The elementary process of factor analysis mainly involves summarising and reduction of data (Hair, et al., 2010). To achieve this objective, researchers can choose between exploratory factor analysis (EFA) or component factor analysis (CFA) or can use both techniques. The basis of the exploratory factor analysis technique is to “take what the data give you” (Hair, et al., 2014, p. 112), while the CFA technique is based on “the squared multiple correlations for a measured variable” (Hair, et al., 2014, p. 116). In this study, Component factor analysis (CFA) was used to

assess, reduce the data as well as confirming the correlations between the actual data of the variables proposed in the study.

#### **5.5.1.6 Exploratory Factor Analysis (EFA)**

Exploratory factor analysis is “a multivariate statistical technique that analyses data on a relatively large set of variables and produces a smaller set of factors, which are linear combinations of the original variables so that the set of factors captures as much information as possible from the data set” (Parasuraman, et al., 1991, p. 357). It could also be described as “orderly simplification of interrelated measures” (Moutinho & Hutcheson, 2011, p. 115). In performing EFA, the underlying factor structure can be identified (Moutinho & Hutcheson, 2011). Two stages are involved in performing an exploratory factor analysis: extraction and rotation. The purpose of the extraction step is to identify the factors that underlie several variables (Acton, et al., 2009). Based on the eigenvalues and scree plot statistical calculations, the researcher was then able to decide on how many "factors" should be extracted. Exploratory factor analysis (EFA) was not performed in this study as Component factor analysis (CFA) plays the same role of reducing the number of factors that were needed because they are unrelated (Nachtigall, et al., 2003).

#### **5.5.1.7 Structural Equation Modelling (SEM)**

Structural Equation Modelling (SEM) is a mostly used significant technique for analysing data in academic research (Kline, 2011) and SEM has become the dominant analytical tool for testing cause-effect-relationships models with latent variables (Hair et al., 2014). SEM is a collection of related statistical techniques that test the relationships between the constructs of the study (Kline, 2011; Hair et al., 2014). According to Tabachnick and Fidell (2013), the researcher can simultaneously examine the correlation between multiple dependent and independent constructs. According to Tomarken and Waller (2005), structural equation modelling can specify latent variable models that provide separate estimates of the relationships between constructs (the structural model) and estimates of relationships between latent constructs and their clear indicators (the measurement model). Tabachnick and Fidell (2013) presume the usage of SEM as the relevant statistical model when evaluating complex models. SEM is easy to use and allows for the modelling of indirect and total effects of a system of variables, thereby facilitating the development and testing of mediational models (Kline, 2016).

Furthermore, it tests the moderation models. SEM can analyse both observed and latent variables which allow for testing of a wider variety of hypotheses than would be possible with traditional statistical techniques, such as multiple regression or the analysis of variance (ANOVA), which only analyse observed variables (Kline, 2016). However, though SEM is said to be an excellent method to use for complex models, Kline (2011) recommends using a minimum sample size of 200 or ten cases per parameters. However, a sample size requirements ranging from 30 (Simple CFA with four indicators and loadings around 0.80) up to 450 cases (mediation models) was recommended by Wolf et al. (2013).

Hu and Bentler (1999) assert that the sufficient power to reject a model based on the chi-square test of the model should be considered by researchers as well as how alternative fit indices performs with different sample sizes. As maintained by Sideridis et al. (2014), a sample size of 50-70 is sufficient for a model involving four latent variables. Most researchers would agree that fewer than 200 respondents would lead to an unacceptably high rate of Type I error, concerning the omnibus likelihood ratio test (Chen, et al., 2008). Second, the enormous amount of data for the limited number of respondents is associated with the respondents to variable ratios that again are prohibitive of the method (MacCallum, et al., 1996). Third, the properties of the physiological data may violate some of the assumptions required by the model, such as multivariate normality, and there may be a need to apply least known distributions (Rotello & Zeng, 2008). Fourth, issues of power may be of concern as the inappropriate acceptance of a test of close fit due to a small number of parameters and sample size is prohibitive. Lastly, the estimation of the sample size may become increasingly complex issues such as construct reliabilities, variable intercorrelations, several indicators per construct or number of constructs, model complexity, and population heterogeneity need to be considered (Iacobucci, 2010). Therefore, based on all the recommendations above, SEM was used to analyse the data. The dependent variables were: reaction, learning, behaviour and results. The independent variables were training content and training objectives, which were used to validate the hypotheses and test the proposed conceptual framework.

#### **5.5.1.8 Confirmatory Factor Analysis (CFA)**

Confirmatory factor analysis (CFA) is a measurement model that validates and confirms the relationships between factors and their measured variables within the framework of Structural equation modelling (Byrne, 2001). It is “a statistical technique used to verify the factor structure of a set of observed variables” (Moutinho & Hutcheson, 2011, p. 115). According to Kline (2011), confirmatory factor analysis is a highly critical part of SEM. In contrast to the exploratory factor analysis (EFA), a CFA statistically tests a priori hypotheses related to the link between measured variables and the construct (Byrne, 2010). This process involves two approaches: (a) goodness of fit criteria indices and (b) validity and reliability (Hair et al., 2014).

Similarly, Moutinho and Hutcheson (2011) posit that CFA allows the researcher to test the hypothesis that a relationship between observed variables and their underlying latent constructs exist. In applying the CFA, the researcher uses the knowledge of the theory, empirical studies or both to postulate the relationship pattern a priori and then statistically test the hypothesis (Moutinho & Hutcheson, 2011). Since the conceptual framework for this study was developed base on different theories and empirical research to propose a hypothesis for testing, it is for this reason that the researcher performed a CFA rather than EFA. Moutinho & Hutcheson (Moutinho & Hutcheson, 2011) suggested a process to be followed when using the CFA approach:

- The research literature and relevant theory must be reviewed to support the model specification;
- A model must be specified in a diagram or through equation;
- The model identification must be determined (e.g. if unique values can be found for parameter estimation; the number of degrees of freedom, df, for model testing is positive);
- Data must be collected;
- Preliminary descriptive statistics analysis must be conducted (e.g. scaling, missing data, collinearity issues and detection of outliers);
- Estimate parameters in the model;
- Assess model fit; and
- Present and interpret the results.

The research literature has been reviewed in chapter 2, as well as the explanation of the relevant theories in chapter 3. Furthermore, the model was specified in a diagram, and data were collected in this study. Preliminary descriptive statistics were conducted such as scaling, missing data,

outliers and collinearity, of which the results are discussed later in chapter 6 of this study. The next two sections in this chapter discuss how the model fit was assessed and the estimated parameters in the model. The measurement model was used to evaluate the validity, reliability and non-dimensionality of the measures, as explained below.

### **i) The goodness of fit (GOF) indices**

The goodness of fit is a “measure of the goodness of fit of a model to the observed data, including R<sup>2</sup>, the squared multiple correlations in multiple regression, analogues to R<sup>2</sup> in other regression models, and indices of fit in SEM” (Cohen, et al., 2003, p. 637). According to Hair et al. (2014), three to four fit measures should be used to prove the fit of a model. Fit indices should be involved when assessing the proposed model to ensure the fit is acceptable. Traditional statistical methods usually use one statistical test to determine the significance of the analysis. However, structural equation modelling, specifically CFA, relies on several statistical tests to determine the adequacy of the model fit to the data (Moutinho & Hutcheson, 2011). The absolute fit indices assess whether a theory suggested by a researcher fits the sample data. The measures include:

- Chi-square ( $\chi^2$ ) statistic (Hair et al., 2014). The chi-square test indicates the amount of difference between the observed and expected covariance matrices (Moutinho & Hutcheson, 2011). A chi-square close to 0 indicates that there is little difference between the observed and expected covariance matrices. Additionally, the probability level must be greater than 0.05 when the value of chi-square is close to zero (Moutinho & Hutcheson, 2011).
- Comparative fit index (CFI), the CFI is equal to the discrepancy function adjusted for sample size, and it ranges from 0 to 1, with a more significant value indicating better model fit (Moutinho & Hutcheson, 2011)
- The goodness of fit index (GFI).
- Root mean square error of approximation (RMSEA) is related to the residual in the model. The RMSEA value ranges between 0 and 1, with a smaller RMSEA value indicating a better model fit (Moutinho & Hutcheson, 2011). Acceptable model fit is indicated by the RMSEA value of  $\leq 0.06$  (Hu & Bentler, 1999). Moutinho & Hutcheson (2011) posit that if the model fit is acceptable, then the parameter estimates can be examined.
- Root mean square residual (RMR);

- Standardised root mean residual (SRMR);
- The ratio of chi-square ( $\chi^2$ ) to the degrees of freedom for a model (normed chi-square); and
- Adjusted goodness of fit index (Hair et al., 2014; Hooper et al., 2008).

On the other hand, the incremental fit indices evaluate how well the estimated model fits relative to an alternative baseline model, which assumes that all observed variables are not related (Hair et al., 2014). The indices include the Tucker-Lewis index and comparative fit index (Hair et al., 2014). Parsimonious fit indices evaluate completed models, including the adjusted goodness of fit index (AGFI), parsimony goodness of fit index (PGFI) and parsimony normed fit index (PNFI) (Hair, 2014). To check and represent the goodness-of-fit for the observed data, this study used the chi-square ( $X^2$ ) test, normed chi-square ( $X^2/df$ ), the goodness of fit index, root mean square error of approximation (comparative fit index, Normed fit index [NFI], adjusted goodness of fit index, parsimony normed fit index and parsimony goodness of fit index).

**Table 5. 4 Similarities and Differences between CFA and EFA**

<i>Model</i>	<i>Similarities and Differences</i>
<b>EFA</b>	<ul style="list-style-type: none"> <li>• Determines the factor structure (model)</li> <li>• Explains the maximum amount of variance</li> </ul>
<b>CFA</b>	Requires specification of: <ul style="list-style-type: none"> <li>• A model a priori</li> <li>• Number of factors</li> <li>• Which items to load on each factor</li> <li>• The model is supported by theory or previous research error explicitly.</li> </ul>

Researcher's illustration adapted from Moutinho & Hutcheson (2011)

Table 5.4 presents the similarities and differences between EFA and CFA, whereas Table 5.6 presents a summary of the index and their acceptance levels. If the model fit is unacceptable in CFA, then the EFA can be performed (Moutinho & Hutcheson, 2011).

### i) Model Parameters Estimates

According to Moutinho & Hutcheson (2011), significant parameter estimates can be determined if there is a model fit. Several researchers have recommended different estimation methods and their acceptable cut-off. For example, Holmes-Smith et al., (2006) recommended that the value of the load factor to be more than 0.7, and value more than 0.5 is considered good (Churchill, Jr, 1979). Furthermore, the values of the critical ratio are acceptable if they are more than 1.96 (Byrne, 2001; Hair et al., 2014).

Moutinho & Hutcheson (2011) recommend the following conditions for determining the significant parameter fit of the model:

- i) A *t*-value must be calculated by dividing the parameter estimates with the standard error;
- ii) Parameter estimates are significant at 0.05 level if the *t*-value exceed 1.96; and
- iii) Parameter estimates are significant at the 0.01 level if the *t*-value exceed 2.56.
- iv) Equations must be reported with standardised estimates when measured variables have different scales.

**Table 5. 5 Fit Index and their Levels of Acceptance**

<i>Type of fit index</i>	<i>Index</i>	<i>Recommended Criteria</i>	<i>References</i>
<b>Absolute fit</b>	Chi-Square ( $X^2$ )	$p > 0.05$	Moutinho & Hutcheson (2011); Hair et al., (2014)
	Root mean square error of approximation (RMSEA)	<ul style="list-style-type: none"> <li>• RMSEA value between 0-1</li> <li>• &lt; 0.05 Good fit</li> <li>• &lt; 0.08 acceptable Fit</li> <li>• RMSEA value of <math>\leq 0.06</math> acceptable model fit</li> </ul>	Hair et al., (2014); Hu & Bentler (1999) Moutinho & Hutcheson (2011)
	Normed chi-squared ( $X^2/df$ ), the ratio of chi-square ( $\chi^2$ ) to the degrees of freedom for a Model	< 5.00	Kline (2005), Shadfar & Malekmohammadi, 2013, Schumacker & Lomax, (2004)

	The goodness of fit index (GFI)	<ul style="list-style-type: none"> <li>• Range of GFI between 0-1</li> <li>• GFI &gt; 0.90 is good</li> </ul>	Joreskog and Sorbom (1988), Hair et al., (2014)
<b>Incremental fit</b>	Comparative fit index (CFI)	<ul style="list-style-type: none"> <li>• CFI &gt; 0.90 is good</li> <li>• Ranges between 0-1</li> <li>• CFI ≥ 0.90-Acceptable Model</li> </ul>	Hair et al., (2014); Moutinho & Hutcheson (2011); Hu & Bentler (1999)
	Normed fit index (NFI)	NFI > 0.90 is good	Bryne (2001)
<b>Parsimonious fit</b>	Parsimonious normed chi-square (PNFI)	PNFI > 0.50	Bryne (2001), Mulaik et al., (1989)
	Parsimony goodness of fit index (PGFI)	PGFI > 0.40	Bryne (2001), Mulaik et al., (1989)
	Adjusted goodness-of-fit index (AGFI)	> 0.90 is good	Hair et al., (2006)

The measurement model is used to validate and confirm the correlation among indicators and underlying constructs (Hair et al., 2014) Thus, confirmatory factor analysis was performed in this study to determine and confirm the pattern by which the observed variables were loaded onto specific latent variables. According to Kline (2011, p. 145), the maximum likelihood estimation (MLE) is “an estimate that maximises the likelihood (the continuous generalisation) that the data (the observed covariance) were drawn from this population”. Also, the maximum likelihood method is considered to be unbiased under moderate violations of multivariate normality with moderately sized samples and at a minimum of five items for each unobservable variable (Kline, 2011; Hair et al., 2014).

**Table 5. 6 Measurement of Model Parameter Estimates**

<i>Estimates</i>	<i>Recommended Values</i>	<i>References</i>
Factor Loading	<ul style="list-style-type: none"> <li>• 0.5 is acceptable</li> <li>• &gt; 0.7 is good</li> </ul>	Churchill (1979), Holmes-Smith et al. (2006), Byrne (2001), Hair et al., (2014)

Critical Ratio ( <i>t</i> -value)	<ul style="list-style-type: none"> <li>• &gt; 1.96</li> <li>• &gt; 1.96 at 0.05 significance level</li> </ul>	Byrne (2001), Hair et al., (2014); Moutinho & Hutcheson (2011)
Standard Residuals	± 2.5	Byrne (2001), Hair et al. (2014); Moutinho & Hutcheson (2011)

#### Researcher's Summary

The study used MLE to get robust estimates of population parameters (such as the mean and variance) from sample data such that the probability of obtaining the observed data is increased.

#### 5.5.1.9 Structural model evaluation and Testing the Hypotheses

After the development and validation of measurement scales, SEM was used to test the hypotheses. According to Hair et al., (2014), two types of models are involved in SEM processes: CFA and the path diagram. In this study, CFA was conducted on the measurement model to assess the reliability, validity and unidimensionality of the measures. According to Hair et al. (2014), it is imperative to specify the structural in SEM as it converts the measurement model into a structural model and assigns relationships from one construct to another based on the proposed theoretical model so that the hypotheses can be tested. Therefore, the hypothesised model in this study (structural model) as indicated in chapter 3 (conceptual framework), shows the relationship between the latent constructs. According to Byrne et al. (2001), the structural model aims to specify what constructs directly or indirectly influence the values of other constructs in the model. The results of the structural model for the study survey are presented in chapter 6 of this study. The qualitative analysis approach is in the next section.

#### 5.5.2 Qualitative Data Analysis

Wagner et al. (2012, p. 228) assert that since conducting a qualitative research study leads up to lots of data from interviews, focus groups and observations. They further maintain that researchers are required to keep track of all the collected data during the study, and maintaining the data in its original form, not altering of audiotapes, documents and transcripts and finally ensuring that they are secured in a safe place. Furthermore, Kawulich and Holland (2012) recommend that data be

labelled according to its type, the data collected and the source of the data. They further advise that all the interviews should be transcribed, coded, categorised then analysed. The researcher is cognisant of the recommendations above and followed the same process in analysing the qualitative data that were collected through face-to-face interviews. There are different approaches to analysing qualitative data; however, for this study, thematic analysis was selected as the method of analysis. Kawulich and Holland (2012, p. 231), defines thematic analysis as a general approach of analysing qualitative data through the identification of themes or patterns in the data.

In this study, the researcher first transcribed the audio-recorded data. The data were pre-coded first so that the researcher is familiar with the pattern of the data. The NVIVO software was used for data coding and analysis. The interviews were then opened and explored. The words that participants used frequently were coded by making a node to collect all the references. The “Query” command was used to determine the usage and frequency of words used by participants during the interviews. A text query was run to find out if other participants also used common word identified through the coding process. All the query results were gathered in the common node (frequently -used words), and all materials were reviewed in one place. Trees were used to visualise how participants talked about a specific word or term, and then the insights were recorded. Then the second stage was the coding of the data, whereby, the labels were assigned to the codes. Chapter 7 of this research explains the qualitative data analysis in detail and findings. The next section present the ethical considerations followed in this research.

## **5.6 Ethical Considerations**

Sekaran & Bougie (2014, p. 44) state that ‘participants in the research must be assured of confidentiality; no one should be forced to participate in the study and attempts to obtain information through deceptive means should be avoided at all costs’. Furthermore, Cooper and Schindler (2014, p. 29) state that ‘all parties involved in the research should exhibit ethical behaviour just like in any other aspects of the business’. The study adhered to the ethical requirements set by the University of Kwa-Zulu Natal. It is a requirement by the university that all students undertaking the research must comply with the university’s code of conduct for research. In August 2018, the researcher applied for the ethical clearance through the Humanities and Social

Sciences Research Ethics Committee of the University of Kwa-Zulu Natal. The application must indicate if the data collection procedures will involve the interviews to be recorded if the researcher will be using interviews as one of the instruments to collect data, ensuring that the autonomy of participants is protected through the use of informed consent form. Amongst other issues, the consent form must indicate: the nature of the research, participation in the study is voluntary, free withdrawal from the research by participants at any given time and ensuring the anonymity of participants. Another critical section of the ethics application is to obtain informed permission to research gatekeepers and relevant authorities. The NDA is the custodian of the database of trained NPOs, henceforth, permission to use the database was requested from the CEO of the NDA and was formally granted. It is a requirement by the university that a full approval and ethical clearance is granted before conducting any fieldwork. As a result, a full approval was (protocol reference number HSS/1600/018D) on the 05<sup>th</sup> October 2018. The data collection (Field/interviews) were conducted with eight participants between 17 June 2019 and 30 June 2019.

Firstly, the researcher contacted all the selected respondents to request for permission to come and interview them at their place and time of convenience. All the contacted respondents were willing and available to participate in the study. The researcher requested the respondents for permission to audio-record the interviews way in advance before the date of the interviews. All the respondents agreed for the interviews to be audio-taped, and they all signed an informed consent form which assured respondents of anonymity and confidentiality. It was also explained in the letter that the research is purely for academic purposes and was being conducted as part of the researcher's requirement to fulfil her doctoral degree at UKZN. The final section concludes the chapter by summarising the process of data analysis.

## **5.7 Chapter Conclusion**

The study used a mixed-methods approach whereby both qualitative and quantitative data were collected concurrently but analysed independently. This chapter also explained the philosophical stand guiding the entire research. Data collection methods such as structured questionnaire and semi-structured interviews have been presented, and reasons for choosing such instruments have been explained. The piloting process of the questionnaire was also discussed. The criteria for

selecting participants for the study have been discussed in details. In analysing the data, the SPSS software has been used for quantitative data, and the analysis included both descriptive and inferential statistics through different and relevant statistical tests. AMOS software was used to test the model fit of the conceptual framework and test the hypotheses statements. The different statistical tests used have been explained in this chapter. Qualitative data were analysed by using NVIVO software, and the process followed was discussed. The next chapter provides an analysis and presents the findings from the survey (Quantitative data).

## **CHAPTER 6: ANALYSIS OF QUANTITATIVE RESULTS**

### **6.1. Introduction**

The results of the survey in Chapter five are presented and discussed in this chapter. The chapter is divided into thirteen sections. Section 6.2 is a description of data management. Section 6.3 gives an overview of how the data was screened before analysis. Section 6.4 presents the demographic details of the survey respondents. Section 6.5 is the descriptive statistics of the training programme. Section 6.6 exhibit the descriptive statistics for the measured constructs items on the survey. Section 6.7 presents the assessment and results of the scale of reliability measure. Section 6.8 outlines the factor analysis. Section 6.9 is structural equation modelling (SEM). Section 6.10 provides the findings of the exploratory factor analysis for the survey. Section 6.11 reports the SEM and findings from the tested hypotheses of this research. Section 6.12 presents the results of the moderating variables. Section 6.13 is summary of variables relationships, and section 6.14 summarises this chapter.

### **6.2 Data Management**

The data collection for the quantitative study was undertaken from January 2019 to July 2019. The survey questionnaires were distributed to 253 respondents through a web-based survey and email via random sampling. The respondents were all members of the non-profit organisations based in Gauteng province, whom all participated in the NDA training of improving Governance and non-compliance of NPOs. During the data collection, a survey was sent through to the respondents who had provided their contact numbers email addresses during the training. The researcher sent reminders to respondents after 15 days of posting the survey, and the process was followed by an additional ten days afterwards continuously for six months, then the survey was closed down on the set cut-off date (31 July 2019). Participation in the study was voluntary and emphasised on the first page of the questionnaire; none of the respondents was forced to complete the questionnaire. The number of answered questionnaires were 209 by the end of July 2019.

The IBM Statistical Package for the Social Sciences (SPSS) version 24 for Windows was used to perform the descriptive statistics and the exploratory factor analysis of the survey sample. Data were entered, and each row and column in SPSS was improved through coding of all the thirty-

nine questions. The “Values” column in the SPSS on variable views, were set on a five-point Likert scale as: “1– Strongly Disagree”, “2 – Disagree”, “3 - Neutral”, “4 –Agree” and “5-Strongly Agree”. All the quantitative data were managed using SPSS, and all the numeric responses were entered. Furthermore, IBM SPSS Analysis of Moment Structure (AMOS v.25) was used to perform the structural equation modelling (SEM) to test the hypotheses of the conceptual framework of this study.

### **6.2.1 Data Screening**

To ensure that the data are usable, reliable and valid, SPSS was used to clean the data and screen the data by identifying any outliers in the data or missing data. After the identification of data anomalies, a set of procedures were applied for handling outliers to ensure the accuracy of data analysis. Kurtosis and Skewness were used to assess the normality distribution of the data.

### **6.2.2 Data Response Rate**

The quantitative data was conducted using a survey questionnaire, as indicated earlier in this chapter. This section presents any missing or data anomalies as well as the final response rate for the survey sample.

### **6.2.3 Missing Data**

Any research that involves human beings is crucial for the inspection of any missing data as it is not easy to have data that is complete from every subject (case) of the study (Pallant, 2016). Missing data is the unavailable values for one or more variables (Hair et al., 2014). The missing of data is common in survey studies (Bryman & Cramer, 2011). Furthermore, missing data can influence the ability of statistical tests to establish relationships in a data set, and as a result, it causes parameter estimates that are biased (Hair et al., 2014). Similarly, Dong and Peng (2013) caution the severe impact that missing data has on quantitative research. These impacts are “biased estimates of parameters, loss of information, decreased statistical power, increased standard errors, and weakened generalizability of findings” (Dong & Peng, 2013, p. 2).

Different views have been put forward on what constitutes an acceptable percentage of missing data in research studies. The proportion of missing data is directly related to the quality of

statistical inferences (Dong & Peng, 2013). There is no established cut-off from the literature regarding an acceptable percentage of missing data in a data set for valid statistical inferences. However, Tabachnick and Fidell (2016) are of the view that if missing data accounts for less than 5% and follows a random pattern, then this should not be seen as a barrier.

According to Enders (2003), the missing data rate of 15% to 20% is prevalent in educational and psychological studies. Schafer (1999), on the other hand, asserted that a missing rate of 5% or less is inconsequential. However, Bennett (2001) maintains that if the missing data is more than 10%, then there is a likelihood that the statistical analysis will be biased. Furthermore, the amount of missing data is not the sole criterion by which a researcher assesses the missing data problem (Dong & Peng, 2013). Tabachnick and Fidell (2012) assert that the missing data mechanisms and the missing data patterns have a more significant impact on the results of the research than the proportions of missing data. Taking into consideration what Tabachnick and Fidell (2012) cautioned, the researcher investigated the patterns of any missing data and not just the amount of missing data. According to Kline (2005), the deletion of cases with missing observations solves the completely missed data to analyse available data.

The number of returned/completed questionnaires was 209, and there were no missing/blank questions. However, nine cases (responses) were discarded as the respondents selected the same answers for all the statements. These responses could not be ignored as they would affect the reliability of the results. The discarding of the nine response resulted in the response rate of above 70% (n=200) to be used for data analysis.

#### **6.2.4 Outliers**

Identification of outliers is the second phase in the data cleaning process. The occurrence of outliers can lead to the non-normality of data and distorted statistics (Dong & Peng, 2013; Tabachnick & Fidell, 2014). Outliers in the data exist due to: incorrect entry of the data, failure to determine a missing indicator in the computer, a case which is not from the intended population or a member that is from the population but has extreme values from a normal distribution (Tabachnick & Fidell, 2014). As mentioned in Chapter five of this study, outliers can either be univariate or multivariate. Since outliers affect the values of the estimated regression coefficients,

they can also affect the model fit. Hence it is essential to identify them before analysing the data (Field, 2013).

In this study, Univariate detection method through SPSS was used to identify outliers. The detection of univariate outliers assisted the researcher in identifying cases with minimum and maximum values per variable. The data were first converted to standardised scores ( $z$ -scores). According to Tabachnick and Fidell (2014), the cut-off value for potential outliers is  $\pm 3.29$ ; any value exceeding this number is considered a potential outlier. This study adopted a cut-off value of  $\pm 3.29$  for the standardised scores as potential outliers. Field (2009) cautions researchers to pay attention to the potential outliers as they lead to the model fit of the research to be biased. After removing the nine cases (*Case 3,5,8, 102, 18,23, 104, 178 and 194*) that had the same answer throughout, the outliers were computed, and nine cases with possible outliers were detected. These were cases with  $z$ -score of more than  $\pm 3.29$ . As indicated earlier in this section, the nine cases/respondents selected the same responses on a Likert-scale for all the statements in the questionnaire. The cases were removed from the dataset, leaving the number of responses to 200 from the initial 209, which then translated to a sample size of 79% appropriate for further data analysis. The univariate results for outliers are presented in Table 6.1 below.

**Table 6. 1 Univariate Outlier Results**

<i>Study Constructs</i>	<i>Cases with Standardised value exceeding <math>\pm 3.29</math></i>	<i>Standardised Score (<math>z</math>-score)</i>
Reaction (R)	No Cases	-2.12424; 2.60107
Learning (L)	No Cases	-2.22237; 2.79219
Training Objectives (OB)	No Cases	-1.95293; 1.60706
Training Content (TC)	No Cases	-2.36565; 2.68556
Behaviour (B)	No Cases	-1.87719; 1.50513
Results (RES)	No Cases	-2.15837; 2.04284
Valid N (Listwise)=200		

After completing the process of identifying and removing the outliers in the dataset, it is crucial to ensure that data are normally distributed before inferring the results from such data. The next section outlines how the normality of variables was analysed.

### **6.3 Data Normality**

Elliot and Woodward (2007) stressed out the importance of ensuring that data do not show any deviation from normality before inferring the results. Inspecting the distribution for assessing the normality of data can be done visually, although this approach is unreliable in most instances and does not guarantee that the data is indeed distributed normally (Field, 2009; Altman & Bland, 1995; Oztuna et al., 2006). However, Altman and Bland (1996), are of the view that a visually presented data makes it easy for readers to judge the assumptions themselves.

The frequency distribution (histogram), stem-and-leaf plot, boxplot, P-P plot (probability-probability plot), and Q-Q plot (quantile-quantile plot) are used for checking normality visually (Field, 2009). The frequency distribution that plots the observed values against their frequency provides both a visual judgment about whether the distribution is bell-shaped and insights about gaps in the data and outliers outlying values (Peat & Barton, 2005).

In statistical methods, the normality of the data distribution can be assessed by the kurtosis and skewness test, and the Kolmogorov and Shapiro method (Field, 2013; Tabachnick & Fidell, 2013). Therefore, our study used the kurtosis and skewness test, and the Kolmogorov and Shapiro method to assess whether the data are normally distributed. Methods for assessing the normality distribution of data are discussed below.

#### **6.3.1 Kolmogorov and Shapiro (K-S) Method**

The Kolmogorov and Shapiro method examines normality distribution by “comparing scores of the sample to a normally distributed set of scores with the same mean and standard deviation” (Field, 2005: 93). According to Coakes (2012), Kolmogorov and Shapiro (K-S) test is more appropriate for small sample sizes (< 50 samples), but can also handle sample sizes as large as 2000. For this reason, the Kolmogorov and Shapiro (K-S) test was used to test normality distribution for each construct of this study. However, Thode (2002), is of the view that

Kolmogorov and Shapiro is the most and widely used test for assessing the normality distribution of the data. The current study used the K-S test to assess the normality of the data.

The Kolmogorov and Shapiro test compares the scores in the sample to a normally distributed set of scores with the same mean and standard deviation; the null hypothesis is that “sample distribution is normal.” If the test is significant, the distribution is non-normal. For small sample sizes, normality tests have little power to reject the null hypothesis and therefore, small samples most often pass normality tests (Oztuna et al., 2006). For large sample sizes, significant results would be derived even in the case of a small deviation from normality (Oztuna et al., 2006; Field, 2009), although this small deviation will not affect the results of a parametric test (Oztuna et al., 2006). The results of the Kolmogorov and Shapiro (K-S) test for normality are presented in Table 6.2 below.

**Table 6. 2 Results for Kolmogorov and Shapiro (K-S) Test for Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Reaction (R)	.164	200	.000	.832	200	.000
Leaning (L)	.180	200	.000	.916	200	.000
Training Objectives (OB)	.198	200	.000	.893	200	.000
Training Content (TC)	.112	200	.000	.966	200	.000
Behaviour (B)	.109	200	.000	.961	200	.000
Results (RS)	.131	200	.000	.968	200	.000

If the significance value of the Shapiro-Wilk test is greater than 0.05 ( $p > .05$ ), then the data is considered normal. If it is below 0.05, then the data significantly deviate from a normal distribution (Statistics.Laerd,2018). The results of the Kolmogorov and Shapiro test were found to be significant for all the study variables, and no cases were missing. The K-S Test was computed after the removal of the nine outliers in the dataset, and this brought down the number of responses to 200 from the initial 209. The Table indicates a deviation ranges for the 200 respondents from 0.109 to 0.198 at a significance level of  $p < 0.05$ . The findings of this test do not show any departure from normality in the data; perhaps this is due to the large sample of more than 50 ( $n=200$ ), and

only a minor deviation from normality. The results of non-normality are prevalent in samples larger than fifty (Pallant, 2016). According to Field (2013), the non-normality of data may be as a result of small deviations from normality that falls within the accepted range. As a result, skewness and kurtosis should be performed to further assess the normality by describing the distribution shape (Field, 2013). In studies with a large sample, the Kolmogorov and Shapiro (K-S) test should always be interpreted together with histogram, probability plots (P-P) or quantile-quantile (Q-Q) plot, and the result of skew and kurtosis due to its sensitivity to large sample size and minor deviations from normality (Field,2013). The study further examined the skewness and kurtosis to test if the non-normality of data may be as a result of small deviations from normality that falls within the accepted range or not. Skewness and Kurtosis are explained in the next section.

### **6.3.2 Skewness and Kurtosis**

According to Field (2013), if the sample of the data is higher than fifty, then the Kolmogorov and Shapiro (K-S) test should always be interpreted together with histogram, probability plots (P-P) or quantile-quantile (Q-Q) plot, followed by the result of skewness and kurtosis due to its sensitive to large sample size and minor deviations from normality. Two critical elements for assessing normality, especially for a large sample data are skewness and kurtosis (Tabachnick & Fidell, 2014). Kurtosis measures the shape of a distribution, whereas skewness is measuring the lack of symmetry of the frequency curve of distribution. In other words, kurtosis is a measure of the relative peakedness of its frequency curve (Balanda, 2014). If the values for the skewness and kurtosis of the calculated variables are zero, then the data can be regarded as normally distributed (Balanda, 2014). Accordingly, if positive or negative scores are shown, this indicates a deviation from normality (Tabachnick & Fidell, 2014). The sample size contributes to or influences the range of values for acceptable deviations. According to Kline (2005), the acceptable kurtosis or skewness value distribution is  $\pm 3$  for a given normal distribution. The cut-off point value for the critical value of  $z$  for skewness or kurtosis is a distribution of  $\pm 2.58$  (Kline, 2005). Normal distribution was confirmed for the data from the survey through the skewness and kurtosis assessment. Transformation of variables is done to enhance the normality and linearity of distribution (Field, 2013). Transformations are when original values are converted using mathematical procedures into new values that may be more normally distributed (Kline, 2005).

**Table 6. 3 Skewness and Kurtosis Results**

Constructs	N	Min	Max	Mean	Std. Deviation	Skewness		Kurtosis	
						statistics	Std. Error	statistics	Std. Error
R	200	19.00	52.00	42.2250	6.92997	-1.664	.172	2.727	.342
L	200	5.00	19.00	11.2600	3.16584	.706	.172	-.462	.342
OB	200	4.00	15.00	11.0100	2.62380	-1.073	.172	.787	.342
TC	200	4.00	14.00	8.5350	2.21661	.375	.172	-.270	.342
B	200	3.00	15.00	9.7250	2.95347	-.106	.172	-.949	.342
RES	200	3.00	15.00	9.4450	2.53953	-.375	.172	-.308	.342

**Note:** **R**=Reaction, **L**=Learning, **OB**-Training Objective, **TC**=Training Content, **B**=Trainees Behaviour, **RES**=Results

In this study, no transformation was done as all the values were within the  $\pm 3$  skewness and kurtosis acceptance value. All constructs had skewness values between -1.664 and 0.706 and kurtosis values between -0.949 and 2.727. Therefore, all the constructs fall within the acceptable absolute value ( $\pm 3$ ), and the results show univariate normality for the variables. Thus, all the variables were found to be normally distributed. Multi-collinearity test was used for the multivariate analysis of the data in the study. A description and assessment of the data normality based on the multicollinearity assumption are provided below.

### 6.3.3 Multicollinearity Assumption

Ho (2006:248) defines multicollinearity as a “situation in which the independent/predictor variables are highly correlated”. According to Field (2013:674), multicollinearity refers to “a situation in which two or more variables are very closely linearly related”. Raykov and Marcoulides (2006:86) states that “in a regression analysis, the presence of multicollinearity implies that one is using redundant information in the model, which can easily lead to unstable regression coefficients estimates”. Multicollinearity is “the extent to which the other variables in the analysis can explain a variable. As multicollinearity increases, it complicates the interpretation

of the variate because it is more difficult to ascertain the effect of any single variable, owing to their interrelationships” (Hair et al., 2014:2).

Rehman (2018) recommended ways of testing multicollinearity as follows:

*i) Test 1: Correlation analysis*

- The high correlation coefficient among the predictors implies that multicollinearity is suspected. If the correlation coefficient between the two predictors is 1, it means there is complete collinearity. Still, if the coefficient is 0, then it means there is no collinearity at all, however, if it is 0.7 or above then issues of multicollinearity should be suspected, and if it exceeds 0.9, then there are serious multicollinearity problems.

*ii) Test 2: Value of Tolerance*

- Tolerance  $< 0.1$  (Tolerance value greater than 1 means there is multicollinearity).

*iii) Test 3: Variance Inflation Factor (VIF)*

- VIF  $> 10$  (If VIF is more than 10, then there is multicollinearity problem)
- VIF =  $1/\text{Tolerance}$

*iv) Test 4: Condition Index Value*

- $> 15$  = collinearity is suspected
- $> 30$  = serious multicollinearity

According to Hair et al. (2010), test the pairwise and multiple variable correlations are the two main elements that are used to examine multicollinearity. The two elements are tolerance and the variance inflation factor (VIF). Tolerance is the amount of variability in the independent factors that are not explained by the other independent factors (Hair et al., 2010). A Variance inflation factor (VIF) on the other hand, indicate whether a predictor has a strong linear relationship with the other predictors (Field, 2013), and is calculated as the inverse of tolerance ( $1/\text{tolerance}$ ).

According to Field (2013) and Pallant (2016), to show the existence of multicollinearity, the acceptance tolerance value should be less than 0.10 or a variance inflation factor value should not be greater than 10. They further caution that a tolerance value of less than 0.10 or a variance inflation factor (VIF) of greater than 10 indicates that there is a severe multicollinearity problem. Since there are different views and no formal VIF value for determining the presence of

multicollinearity, this study applied the definition by Rehman (2018) to diagnose multicollinearity. The diagnostic results of the collinearity are presented in Table 6.4 below.

**Table 6. 4 Collinearity Diagnostic of the Study Models**

Model	Unstandardized Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
<b>1</b>	(Constant)	29.230	2.451		11.926	.000	
	<b>OB</b>	1.305	.163	.494	7.983	.000	.999
	<b>TC</b>	-.161	.194	-.052	-.833	.406	.999
a. Dependent Variable: Reaction							

Model	Unstandardized Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
<b>2</b>	(Constant)	11.869	1.285		9.240	.000	
	<b>OB</b>	.034	.086	.028	.398	.691	.999
	<b>TC</b>	-.115	.101	-.081	-1.137	.257	.999
a. Dependent Variable: Learning							

Model	Unstandardized Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
<b>3</b>	(Constant)	7.742	1.194		6.484	.000	
	<b>OB</b>	.103	.080	.091	1.290	.199	.999
	<b>TC</b>	.100	.094	.075	1.058	.291	.999
a. Dependent Variable: Behaviour							

Model		Unstandardized Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
4	(Constant)	7.552	1.022		7.388	.000		
	<b>OB</b>	.143	.068	.148	2.099	.037	.999	1.001
	<b>TC</b>	.037	.081	.032	.461	.645	.999	1.001
a. Dependent Variable: Results								

Note: **OB**-Training Objectives, **TC**=Training Content

After the completion phase of cleaning and screening the data as well as applying the techniques of univariate or multivariate analysis to find any patterns and relationships amongst the variables of the study, the data were ready for the next phase of data analysis, reliability and validity testing. According to Mohammed (2016), the actual process of data analysis should not be started until the process of data cleaning and screening is complete. All these preliminary analyses were conducted in this research before the actual data analysis could begin. According to Churchill (1979), after the process of screening data, it is crucial to examine the reliability and validity of the data then. The next section explains the reliability test of the data. The results of the collinearity indicate that the VIF value for all the tested model is less than 10, the tolerance values are all less than 1, and the condition index value of all the models is about 12.036 which are all below 15. As a result, no multicollinearity is suspected.

#### 6.4 Data Reliability

This section presents the results of the reliability test of the instrument. Rovai, Baker and Ponton (2012) recommended the use of Cronbach's alpha to measure the internal consistency and reliability of the instrument. The Cronbach's alpha was firstly computed to test the reliability of the instrument before any other statistical tests could be computed. According to Rovai et al. (2012:385), a Cronbach's alpha score of 0.7 or higher means a high degree of reliability between the items. In other words, all the items are measuring the same thing. The Cronbach's alpha reliability coefficient generally ranges between 0 and 1, and the closer the alpha's coefficient is to

1.0, the more significant the internal consistency of the instrument. George and Mallery (2003:231) provided a rule of thumb for testing reliability and consistency (see Table 6.5).

**Table 6. 5 Cronbach’s alpha Simple Definition**

<i>Cronbach’s alpha</i>	<i>Internal Consistency</i>
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Source: Researcher’s illustration adapted from George & Mallery (2003:231)

The results of the Cronbach’s alpha in testing the reliability of the study instrument, focusing on the constructs of the study is depicted later in this chapter (see Table 6.11).

## **6.5 Demographic Profile of the Respondents**

This section presents the demographic profile of the respondents: gender, age, the highest level of education, NPO location, years of experience within the NPO sector and Occupation in the NPO. As presented in Table 6.6, the following provides the basic descriptive statistics and frequency distributions from the completed questionnaire. The demographic characteristics of the survey respondents are presented in Table 6.6.

### **6.5.1 Gender**

The results of Survey (Table 6.7) indicate that the majority of the respondents were females (70.5%, n=141), while 29.5% (n= 59) comprised of male respondents.

### **6.5.2 Age**

Table 6.6 shows that majority of the survey respondents (51%) were between 40 and 49 years of age. The second-highest percentage of respondents was 20.5% (n=41) who were between 50 and

59 years old, 19.5% (n=39) were between 20 and 39 years old, 5% (n=10) were 60 years or older, and finally, about 4.3% (n=8) were below 20 years of age.

### **6.5.3 Education**

The most significant number of the survey respondents reported that their highest level of formal education that they achieved was Grade 12 (50.0%), this was followed 23.5% (n=47) who reported that they did not possess Grade 12 certificate, 22% (n=44) indicated have a Diploma qualification, 3.5% (n=7) indicated that they have Bachelor's Degree and about 1.1% (n=2) reported to have a post-graduate qualification.

### **6.5.4 Location**

Four categories of NPO location with regards to the municipality were presented to the respondent for them to select the category where their organisations operate. As presented in Table 6.6, the most significant percentage of respondents were based in City of Tshwane with 31.5% (n=63), while the second-largest number of respondents selected Ekurhuleni with 30% (n=60), followed by Sedibeng with 20% (n=40). A slightly small number of respondents indicated that their organisations are based in City of Johannesburg 18.5% (n=37).

### **6.5.5 Years of Experience**

The highest percentage of respondents had between 6-9 years of NPO work experience with 44% (n=88), followed by 2-5 years of work experience with 28% (n=56), then ten years or more with 27% (n=54) while only 1.1% (n=2) of the respondents had one year or less of NPO work experience.

### **6.5.6 Occupation**

The highest percentages of the survey respondents were Board secretaries within their respective NPOs at 41% (n=82), while 35% (n=70) were Board treasurers and 24% (n=48) were Chairpersons of the NPO Board. The next section presents the factor analysis for the study.

**Table 6. 6 Demographic Characteristics of the Survey Respondents**

<i>Variables</i>	<i>Category</i>	<i>Frequency</i>	<i>%</i>
Gender	Female	141	70.5
	Male	59	29.5
Age	Below 20	8	4.3
	20-39	39	19.5
	40-49	102	51.0
	50-59	41	20.5
	60 or Above	10	5.0
Education Level	Below Grade 12	47	23.5
	Grade 12	100	50.0
	National Diploma	44	22.0
	Bachelor	7	3.5
	Post Graduate	2	1.0
Experience in NPO	One year or Less	2	1.0
	2-5 years	56	28.0
	6-9 years	88	44.0
	10 or More	54	27.0
Occupation in NPO	Board Chairperson	48	24.0
	Board Secretary	82	41.0
	Board Treasurer	70	35.0
NPO Location	City of Johannesburg	37	18.5
	City of Tshwane	63	31.5
	Ekurhuleni	60	30.0
	Sedibeng	40	20.0
<b>n= 200</b>			

## **6.6 Factor Analysis**

According to Williams, Onsman and Browns (2010), factor analysis consists of two major classes which are: Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). EFA is exploratory as the name suggests; as a result, the researcher does not know how many number or nature of the variables are extracted to explore the main dimensions to generate a theory, or model from a relatively large set of latent constructs often represented by a set of items (Henson & Roberts, 2006; Pett, Lackey & Sullivan, 2003). In contrast to EFA, Confirmatory Factor Analysis (CFA) which is a form of structural equation modelling, allows the researcher to test a proposed theory and has assumptions and expectations based on priori theory with regards to the number of factors, and which factor theories or models best fit (Williams et al., 2010).

### **6.6.1 Sample Size for EFA**

There have been different opinions and varying guiding rules on the importance of sample size in factor analysis. The lack of agreement is noted by Hogarty et al., (2005:203) who stated that “disparate [sample size] recommendations have not served researchers well”. General guides include Tabachnick and Fidell (2007) rule of thumb that suggests a minimum requirement of 300 cases to conduct factor analysis. Hair et al. (2010) suggested that sample sizes should be 100 or higher. MacCallum, Widaman, Zhang, and Hong (1999), cited in Henson and Roberts (2006) are of the view that such rules of thumb can at times be misleading and often do not take into account complex dynamics of factor analysis. “They illustrated that when commonalities are high (greater than .60), and several items define each factor, sample sizes can be relatively small” (Henson & Roberts, 2006: 402). As can be seen from different views, the required sample size to conduct a factor analysis varies greatly.

### **6.6.2 Correlation Matrix Factorability**

In EFA, the correlation matrix should be used to show the relationships between individual variables. Tabachnick and Fidell (2007) recommended that researchers must inspect the correlation matrix (Factorability of R) for correlation coefficients not less than 0.30. The loadings were categorised by Hair et al. (1995) using another rule of thumb for coefficients as  $\pm 0.30$  as the minimal,  $\pm 0.40$  as being important, and  $\pm 0.50$  as being practically significant. If there are no correlations that are larger than 0.30, then the use of factor analysis as an appropriate statistical

method to be utilised should be carefully thought about (Hair et al., 1995). It means that a factorability of 0.3 indicates that the factors account for approximately 30% relationship within the dataset, or in a practical sense, it would indicate that a third of the variables share too much variance, and as a result, it becomes impractical to determine if the variables correlate with each other or with the dependent variable, this will then lead to multicollinearity (Tabachnick & Fidell, 2007).

### **6.6.3 Kaiser-Meyer- Olkin (KMO) and Bartlett's Test**

Before extracting the factors, few tests should be run to assess the suitability of the respondent data for conducting factor analysis. These tests include Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (Kaiser & Rice, 1974) and Bartlett's Test of Sphericity (Bartlett, 1950). According to Tabachnick and Fidell (2007), The range of KMO index is between 0 and 1, the index of 0.50 is considered suitable for factor analysis, and Bartlett's Test of Sphericity should be significant ( $p < 0.05$ ). However, Pallant (2013) is of the view that sufficient KMO value should be 0.6 and above. Similarly, Hair et al. (2010) recommended the KMO value of 0.60, while Bartlett 's test should have a value of  $p < 0.05$ . Kaiser and Rice (1974) further explained the results of KMO as follows:  $KMO > 0.90$  is marvelous;  $0.90 < KMO > 0.80$  is meritorious;  $0.80 < KMO > 0.70$  is middling;  $0.70 < KMO > 0.60$  is mediocre;  $0.60 < KMO > 0.50$  is miserable; and  $KMO < 0.50$  is unacceptable.

In this current study, the adequacy of the sample was measured by KMO using SPSS. Factor Analysis was computed to ensure that the variables measure are measuring the intended concept. The results indicate that the value of the Kaiser-Meyer-Olkin (KMO) measure for sampling adequacy was 0.830, and according to Kaiser and Rice (1974) this value is meritorious and that Bartlett 's test of sphericity was  $p < 0.05$  ( $p = .000$ ). Based on the recommendations above about the sufficient value of Kaiser Meyer Olkin and Bartlett's test of sphericity, the results of Kaiser-Meyer-Olkin (KMO) and Bartlett 's test of sphericity for this study support the use of factor analysis and suggests that the data may be in a smaller set of underlying factors. Table 6.7 presents the results of the Kaiser-Meyer-Olkin (KMO) and Bartlett 's test of sphericity for this study.

**Table 6. 7 KMO and Bartlett’s Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.830
Bartlett's Test of Sphericity	Approx. Chi-Square	2744.744
	Df	351
	Sig.	.000

#### **6.6.4 Factor Extraction**

There are different types of extracting factors in EFA such as Principal Component Analysis (PCA), Principal Axis Factoring (PAF), Maximum Likelihood (ML), Unweighted Least Scores (ULS), Alpha factoring and Image factoring (Williams et al., 2010). Since the current study also want to run Confirmatory Factor Analysis (CFA) to test a proposed theory and has assumptions and expectations based on priori theory, the Maximum Likelihood (ML) was used as an extraction method for EFA. The Maximum Likelihood maximises the differences between the factors and provides the model fit estimates. This approach is used in AMOS for CFA and structural model (Williams et al., 2010). Hair et al. (1995) point out that multiple criteria for extracting factors should be considered when doing factor analysis.

Furthermore, there are many extraction rules and approaches used which includes: Kaiser’s criteria of eigenvalue > 1 rule (Kaiser, 1960), the Scree plot test (Cattell, 1966), the cumulative percentage of variance extracted, and parallel analysis (Horn, 1965). It is suggested that multiple approaches be used in factor extraction.

##### **6.6.4.1 Kaiser Criteria and Cumulative Percentage**

Different disciplines such as natural sciences, psychology and humanities disagree on the cumulative percentage of variance (criterion) in the factor analysis approach (Henson & Roberts, 2006). There have been specific suggested percentages, although no fixed threshold exists. According to Hair et al. (1995), in the natural sciences, factors should be stopped when at least 95% of the variance is explained, whereas in humanities, the explained variance can be as low as between 50 and 60% (Hair et al., 1995; Pett et al., 2003). Table 6.8 below present a cumulative percentage of the variance of 62.6% and a total of six factors having an eigenvalue > 1.

**Table 6. 8 Kaiser Criteria and Total Variance Explained**

Factor	<i>Initial Eigenvalues</i>			<i>Extraction Sums of Squared Loadings</i>		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.653	24.641	24.641	1.896	7.022	7.022
2	3.756	13.912	38.553	2.904	10.756	17.778
3	2.192	8.119	46.672	6.100	22.593	40.371
4	1.903	7.047	53.718	1.437	5.323	45.694
5	1.234	4.571	58.289	1.454	5.385	51.079
6	1.168	4.326	62.615	.705	2.609	53.688
Extraction Method: Maximum Likelihood						

**6.6.4.2 Scree Plot Test**

As noted by Tabachnick and Fidell (2007) and Thompson (2004), interpretation of the Scree plots is subjective, as it requires the judgement of the researcher. As a result, disagreement on which factors to be retained is often a debate using this approach (Thompson, 2004). Tabachnick and Fidell (2007) assert that these disagreements and subjectiveness can be reduced if the size is large, N: p ratios are (>3:1), and communalities values are high (Pett et al., 2003). Two steps are involved in inspecting and interpreting the Scree plot (Williams et al., 2010):

- Draw a straight line through the smaller eigenvalues where a departure from this line occurs. This point highlights where the debris or break occurs.
- The point above the break (not including the break itself) indicates the number of factors

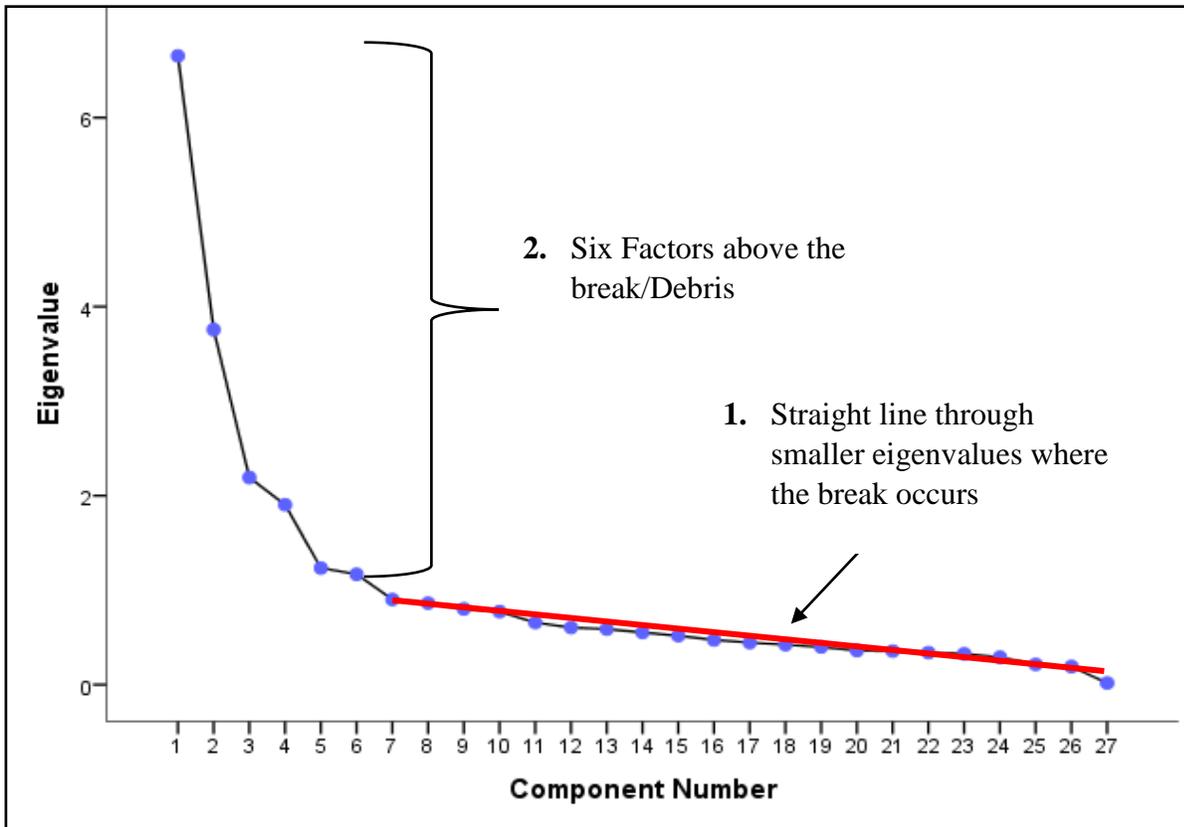


Figure 6.1 Scree Test

In Figure 6.1, the inspection of the Scree plot and eigenvalues produced a departure from linearity coinciding with a 6-factor result from the Kaiser criteria, and total Variance Explained (see Table 6.8 above). Therefore, the Scree Test for this study indicates that six factors should be used for data analysis.

### 6.6.4.3 Parallel Analysis

According to Thompson (2004:34) “parallel analysis appears to be among the best methods for deciding how many factors to extract or retain”. In a parallel analysis, actual eigenvalues are compared with random order eigenvalues. Factors are retained when actual eigenvalues exceed the randomly ordered eigenvalues (Means).

**Table 6. 9 Monte Carlo Parallel Analysis Output**

Raw Data Eigenvalues, Root	& Mean, Raw Data	Percentile Means	Random Data Eigenvalues 95 <sup>th</sup> Percentile
1.000000	19.549148	2.004355	2.116973
2.000000	8.860135	1.889737	1.978617
3.000000	4.341604	1.805329	1.873692
4.000000	2.010711	1.730035	1.792574
5.000000	1.727839	1.664562	1.724336
6.000000	1.490520	1.607079	1.663817
7.000000	1.037534	1.551057	1.603444
8.000000	.751157	1.500004	1.548743
9.000000	.682370	1.449932	1.494639
10.000000	.630940	1.403050	1.448187
11.000000	.545480	1.357514	1.399068
12.000000	.524447	1.314114	1.354592
13.000000	.432242	1.273146	1.310452
14.000000	.317932	1.233873	1.270061
15.000000	.285410	1.193862	1.230814
16.000000	.255768	1.156308	1.191196
17.000000	.238870	1.120678	1.155202
18.000000	.142130	1.085027	1.119038
19.000000	.053829	1.050343	1.086214
20.000000	.050709	1.016192	1.049515
21.000000	.038003	.982550	1.014574
22.000000	.011925	.949636	.982040
23.000000	.010519	.917724	.949827
24.000000	.003566	.887512	.918216
25.000000	.003128	.856373	.886035
26.000000	.001975	.827009	.858650
27.000000	.001371	.796919	.826787

Hair et al., (2016) recommends that items with factor loadings  $< 0.40$  must always be deleted. Parallel processing statistics, usually referred to as eigenvalue Monte Carlo simulation was computed using Brian O'Connor's SPSS syntax to determine the number the factors for extraction. The outcomes of the parallel analysis suggested five factors from the 27 items. Following these analyses, a final number of factors are presented. However, careful judgement on which factors are best-fit and make conceptual sense were extracted. The next section presents the rotation method used in extracting the most appropriate solutions or best-fit factors.

### **6.6.5 Selection of Rotation Method**

The researcher considered the number of factors to be extracted and analysed the data to identify any relationship between variables to more than one factor. Rotation maximises the high item loadings and minimises low item loadings, therefore producing a solution that is simplified and easy to interpret (Williams et al., 2010). Two most common rotation techniques used in factor

analysis are oblique and orthogonal rotation. According to Thompson (2004), though there are several rotation techniques that researchers can select, the most common rotational technique used for factor analysis is Orthogonal.

Orthogonal (varimax) rotation is the most commonly used technique which produces factor structures that are not correlated (Costello & Osborne, 2005). In contrast, oblique (Oblimin/Promax) rotation produce factors that are correlated, and it produces more accurate results for research involving human behaviour (Costello & Osborne, 2005). However, regardless of the rotation technique choice, the main objectives are to provide a more straightforward interpretation of results as well as produce a parsimonious solution (Hair et al., 1995) as suggested by Pett et al. (2003), whichever rotated solution that is producing the best fit and factorial suitability, both intuitively and conceptually, should be used. Once the assessment is complete, the researcher can then examine items that do not load or cannot be assigned to a factor using all the guidelines discussed in the earlier sections.

The decision is taken on which items to discard for analysis, and these can be items that are either loading on several factors (cross-loading), not loading on any factor, or only not conceptually fitting any of the logical factor structure. In this study, for running Exploratory Factor Analysis, the extraction method used was Maximum Likelihood, fixed number of factors to be extracted was computed at five, the rotation method used was Oblique (Promax) and the absolute value for small coefficients was suppressed to 0.3. The results of the EFA are presented in Table 6.10. There was no cross factoring in the test, so no items were removed. After the examination of variables, allocation of factor names was given to the items relating to the same information. For example, items in factor 1 included issues of how the trainees felt about the trainer, training duration language used, so this factor was therefore labelled “Reaction” as it was dealing with the perceptions of trainees about the training. Factor 2 was labelled “Learning”, Factor 3 was labelled “Training Content”, Factor 4 was labelled “Training Objectives”, Factor five was labelled “Behaviour” and Factor 6 was labelled “Results”

**Table 6. 10 Pattern Matrix for the Factor Analysis**

	<i>Factor</i>					
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
Item17	.740					
Item7	.732					
Item19	.697					
Item20	.679					
Item27	.673					
Item9	.652					
Item8	.651					
Item16	.641					
Item21	.636					
Item26	.579					
Item18	.575					
Item5		.818				
Item2		.770				
Item6		.714				
Item3		.625				
Item14			.983			
Item13			.671			
Item15			.599			
Item11				.973		
Item25				.737		
Item12				.364		
Item23					.934	
Item24					.579	
Item22					.551	
Item1						.779
Item4						.735
Item10						.590

According to Henson and Roberts (2006), for a factor to have a meaningful interpretation, at least two items must load on a factor. According to Pett et al. (2003), the labelling of factors is a subjective, theoretical and inductive process. “the meaningfulness of latent factors is ultimately dependent on researcher definition” (Henson & Roberts, 2006:396). Since the researcher carefully analysed the variables and their loadings in each factor, the six extracted factors were then operationalised and descriptively labelled to reflect the theoretical and conceptual intent. The Cronbach alpha of all the items was computed, and the descriptive statistics of the variables after factor analysis labelling. The next section presents the Cronbach alpha results of the items as per their factors.

**Table 6. 11 Reliability Results of the Study Construct**

<i>Constructs</i>	<i>Items</i>	<i>Items Deleted</i>	<i>Cronbach's alpha</i>	<i>Overall Cronbach</i>	<i>Internal Consistency</i>
R	11	0	.893	.812	Good Reliability
L	4	0	.821		
TC	3	0	.751		
OB	3	0	.802		
B	3	0	.726		
RES	3	0	.727		
<b>Total Items</b>	<b>27</b>	<b>0</b>			

**R= Reaction, L=Learning, TC= Training Content, OB=Training Objectives, B=Trainees' Behaviour, RES= Training Results/Outcomes**

The internal consistency of the reliability of the instrument showed a good internal consistency of 0.812 for all the 27 items. All the elements within each construct of the study also met the minimum requirements of Cronbach's Alpha ( $\alpha \geq .70$ ). No items were deleted to increase the Cronbach's score as they all exceeded a minimum acceptable of Cronbach's Alpha score. According to George and Mallery (2003), the internal consistency of 0.7 is acceptable, and the instrument can be deemed reliable to measure what it is intended to if it meets this minimum score. Since the reliability of

the instrument has been determined and met the minimum requirements score, the next section presents the descriptive statistics of the study constructs.

### 6.7 Descriptive Statistics of the Constructs

This section presents the descriptive statistics of the study constructs. Table 6.12 presents the descriptive statistics for the study constructs. All the items were rated on a five-point Likert scale with a score of “1” indicating “strongly disagree” and a score of indicating “5” indicating strongly agree.

**Table 6. 12 Descriptive Statistics of the Study Constructs**

	<i>Mean Statistics</i>	<i>Standard deviation statistics</i>
<i>Items of Trainees’ Reaction (R) Construct</i>		
R1	2.04	.948
R2	3.91	1.043
R3	3.49	.987
R4	3.65	.807
R5	3.99	1.063
R6	3.87	.970
R7	3.72	.952
R8	3.73	1.129
R9	3.82	.972
R10	3.83	.962
R11	3.97	1.041
<i>Items of Learning (L) Construct</i>		
L1	2.93	1.068
L2	2.44	.917
L3	2.85	1.011
L4	3.04	.918
<i>Items of Training Content (TC) Construct</i>		

TC1	2.47	.664
TC2	2.96	.873
TC3	3.11	1.118
<i>Items of Training Objectives (OB) Construct</i>		
OB1	3.76	1.033
OB2	3.71	1.106
OB3	3.55	1.011
<i>Items of Trainees' Behaviour (B) Construct</i>		
B1	3.28	1.291
B2	3.23	1.198
B3	3.22	1.183
<i>Items of Training Results/Outcomes (RES) Construct</i>		
RES1	2.91	1.050
RES2	3.08	.948
RES3	3.46	1.190
Valid N (Listwise) = 200		

The mean score for all the six constructs was as follows: trainee's reaction to the training ranged between 2.04 and 3.97, this means that respondents were in disagreement to being neutral with the items of this construct. The learning construct responses ranged between 2.44 and 3.04, and this means that the respondents were in disagreement with being neutral with items of this construct. The training content ranged between 2.47 and 3.11, and this means that the respondents were in disagreement to slightly neutral with the construct. The training objectives ranged between 3.55 and 3.76, which means that the respondents were neutral to the statements of this construct. The trainees' behaviour ranged between 3.22 and 3.28, which means that the respondents were in disagreement with being neutral with the construct. Finally, the training results/ outcome ranged between 2.91 and 3.96, which means that the respondents were in between disagreement and neutral to the statements of this construct. The next section looks at the Structural Equation Modelling (SEM).

## **6.8 Structural Equation Modelling (SEM)**

As highlighted in chapter five of this study, the structural equation modelling in this study used SPSS AMOS v.25 to validate the hypotheses and to explain the relationships among the specified variables in the proposed conceptual model. Structural Equation Modeling (SEM) is a technique used to specify and estimate models of linear relationships among variables (Hair, Black, Babin, Anderson, & Tatham, 2006). Hair et al. (2006) recommended that the use of SEM to analyse data requires a sample size of more than 250 or more and missing data of less than 5%. However, Sideridis et al. (2014) found a sample size of between 50 and 70 to be sufficient for a model involving a minimum of four latent variables. This study has more than four latent variables, and SEM was used to analyse the proposed conceptual model with 200 respondents (sample size) after the preliminary data analysis process. Furthermore, SEM can accurately test various theoretical models that hypothesise how a set of variables defines the study constructs and how the constructs relate to each other (Schumacker & Lomax, 2004).

According to Hair et al., (2014), the two types of models are involved in the process of structural equation modelling are measurement model (CFA) and the path diagram (structural model). The measurement model uses CFA to validate the relationship between observed and latent variables, whereas the structural model represents the relationship between the dependent and independent variables to test the hypotheses (Hair et al., 2014). In structural equation modelling (SEM), confirmatory factor analysis is used to assess construct validity (Jöreskog, 1969 cited in Alarcon & Sanchez, 2015:3). MacCallum, Browne and Sugawara (1996) assert that the theoretical hypothesis in SEM aligns with the null hypothesis, which specifies that the model fits precisely or at least approximately. As a result, the use of SEM techniques was found to be the most suitable way to evaluate the fit of the conceptual model of this study. The next sections present the results of the confirmatory factor analysis (CFA) and the structural model for the survey questionnaires of this research.

### **6.8.1 Confirmatory Factor Analysis**

In confirmatory factor analysis, convergent and discriminant validity examines the extent to which measures of the latent variables shared their variance and how they differ from each other (Alarcon & Sanchez, 2015). Hair et al., (1995) suggested sample size for conducting factor analysis to be

100 or more; however, different researchers differ with regards to the required sample size for conducting factor analysis. For example, Comrey and Lee (1973) cited in Williams et al., (2010:4), they gave the following guide to sample sizes: 100 as poor, 200 as fair, 300 as good, 500 as very good, and 1000 or more as excellent. In this study, confirmatory factor analysis was conducted on the measurement model using AMOS version 21 software to reject or confirm the measurement theory. AMOS (Analysis of a Moment Structures) is an added module to SPSS software used explicitly for Structural Equation Modeling, path analysis, and confirmatory factor analysis (Statistics Solutions, 2019). It is also known as analysis of covariance or causal modelling software whereby models can be drawn graphically using simple drawing tools, and as a result, it performs the computations for SEM and displays the results in a quicker and more visually pattern.

In confirmatory factor analysis (CFA), the concept of unidimensionality between construct error variance and within construct error variance should be considered. A minimum of four constructs and three items per constructs should be present in the research when considering conducting CFA (Statistics Solutions, 2019). In this study, after the process of exploratory factor analysis, six constructs/factors were extracted, and each factor has a minimum of three items. The next section looks at the goodness of fit indices. According to Hair et al. (2014), in testing the validity of the CFA, two steps should be followed: (i) goodness of fit indices and (ii) construct validity. It is, therefore, that this study assessed the validity of the measurement model by performing the goodness of fit indices and validity evaluation. The next section presents the goodness of fit indices.

#### **6.8.1.1 Goodness of Fit Indices**

In this study, the initial (CFA) for the survey was conducted on the measurement model with six constructs and 27 items as indicated in Figure 6.9, which indicate the hypothesised measurement model of this study. The constructs are reaction (R), training content (TC), training objectives (OB), learning (L), behaviour (B) and results (RES). The goodness of fit for the measurement model of this study was tested using CFA in AMOS. Each of the study constructs was loaded with its measurement items. The maximum likelihood (ML) estimation technique was used to assess the measurement model. According to Kline (2011), the maximum likelihood (ML) represents the statistical principle that underlies the derivation of parameter estimates: the estimates are the ones

that maximise the likelihood that the data were drawn from population parameter. Table 6.13 presents the results of the initial CFA of the study. First, the results of the initial CFA indicate that the chi-square ( $\chi^2$ ) = 406 420, degree of freedom (df) = 309 were significant at  $p < 0.05$  ( $p = .000$ ), this means that there is a poor fit of the model and it should be rejected. Kline (2005) asserts that depending on the chi-square statistics as a sole indicator for model fit is not adequate as the Chi-square measure is sensitive to the size of the sample size and is also sensitive to violations of the assumption of normality. As a result, other fit indices such as goodness of fit index, root mean square error of approximation, normed fit index, comparative fit index, adjusted good fit of index, parsimony normed fit index and parsimony goodness fit index should be performed. The results of the mentioned fit indices for the study were as follows: goodness of fit index (GFI) = 0.871, root mean square error of approximation (RMSEA) = 0.040, normed fit index (NFI) = 0.814, comparative fit index (CFI) = 0.947, adjusted goodness of fit index (AGFI) = 0.842, parsimony normed fit index (PNFI) = 0.716 and parsimony goodness of fit index (PGFI) = 0.712, the results are presented in Table 6.13 below.

**Table 6. 13 Results of the initial CFA Model**

Measure	$\chi^2$	P	df	$\chi^2/df$	GFI	RMSEA	NFI	CFI	AGFI	PNFI	PGFI
Level of acceptance		>.05		<5	$\geq 0.9$	$\leq .06$	$\geq 0.9$	$\geq 0.9$	$\geq 0.9$	> 0.5	>0.40
Hypothesised Model	406.420	.000	309	1.315	.871	.040	.814	.947	.842	.761	.712

$\chi^2$  = **Chi Square**; **df**=Degree of Freedom, **GFI**=Goodness of Fit Indices, **RMSEA**= Root Means Square Error of Approximation, **NFI** = Normed Fit Index, **CFI**= Comparative Fit Index, **AGFI**=Adjusted Good Fit of Index, **PNFI**= Parsimony Normed Fit Index, **PGFI**= Parsimony Goodness Fit Index

The initial results of the model indicate that the chi-square with the degree of freedom ( $\chi^2/df$ ) has achieved an acceptable fit of 1.315 because it is within the acceptable value of less than 5.00 (Kline, 2005; Schumacker & Hutcheson, 2011). Other indices such as goodness of fit index (GFI), normed fit index (NFI) and adjusted goodness of fit index (AGFI) were not within the

recommended values. According to Bentler and Bonnet (1980), NFI value must be greater than 0.90 to indicate a good fit. GFI and AGFI should be greater than 0.9 for a good fit (Hair et al., 2014). Root mean square error of approximation (RMSEA) is acceptable and indicates a good model fit as the value is less than 0.06 (Hu & Bentler, 1999) and 0.05 (Moutinho & Hutcheson, 2011; Hair et al., 2014). The parsimony normed fit index (PNFI) and parsimony goodness of fit index (PGFI) were acceptable as they were both above the recommended criteria. As a result of some of the indices not meeting the recommended level of acceptance values, further refinement of the model was done in the context of finding the most suitable solution of the proposed SEM model assuming that its quality is based on fit indices, parameter estimates and standard errors.

The output of the initial CFA (see Figure 6.2) for the survey was examined to determine if any item was proving to be problematic. The evaluation of results showed that the standard regression weight of some measurement items were less than 0.5 and these were removed and the model was re-run after removal of each item (Churchill, 1979; Byrne, 2001; Holmes-Smith et al., 2006). The factor loading values of R1, R6, R7, R8, R10, R11 and L2 were not within the acceptable level of 0.5. However, the evaluation of standardised residuals revealed that they were within the threshold of  $\pm 2.58$  (Hair et al., 2014). As a result, items that shared a high degree of residual variance were deleted from the model (Hair et al., 2014). Consequently, the items that were found to be problematic from the initial Confirmatory Factor Analysis (CFA) were dropped to achieve a better model fit. The measurement model was then re-run after dropping of the six items from the Reaction (R) construct. Figure 6.2 depicts the initial CFA model before the items were dropped in the context of improving the measurement model fit. The improved model is also depicted in Figure 6.4, which shows the improvement of the fit indices.

After dropping the six Reaction construct items (R2, R6, R7, R8, R10, R11), the CFA was re-run to examine the measurement model fit. Afterwards, the highest values in Modification Indices (MI) were examined for any possible relationship between two items in the same constructs to modify the model fit. As a result, there was no relationship between the items. The results of the new model revealed the improvement in the model fit (see Table 6.14)

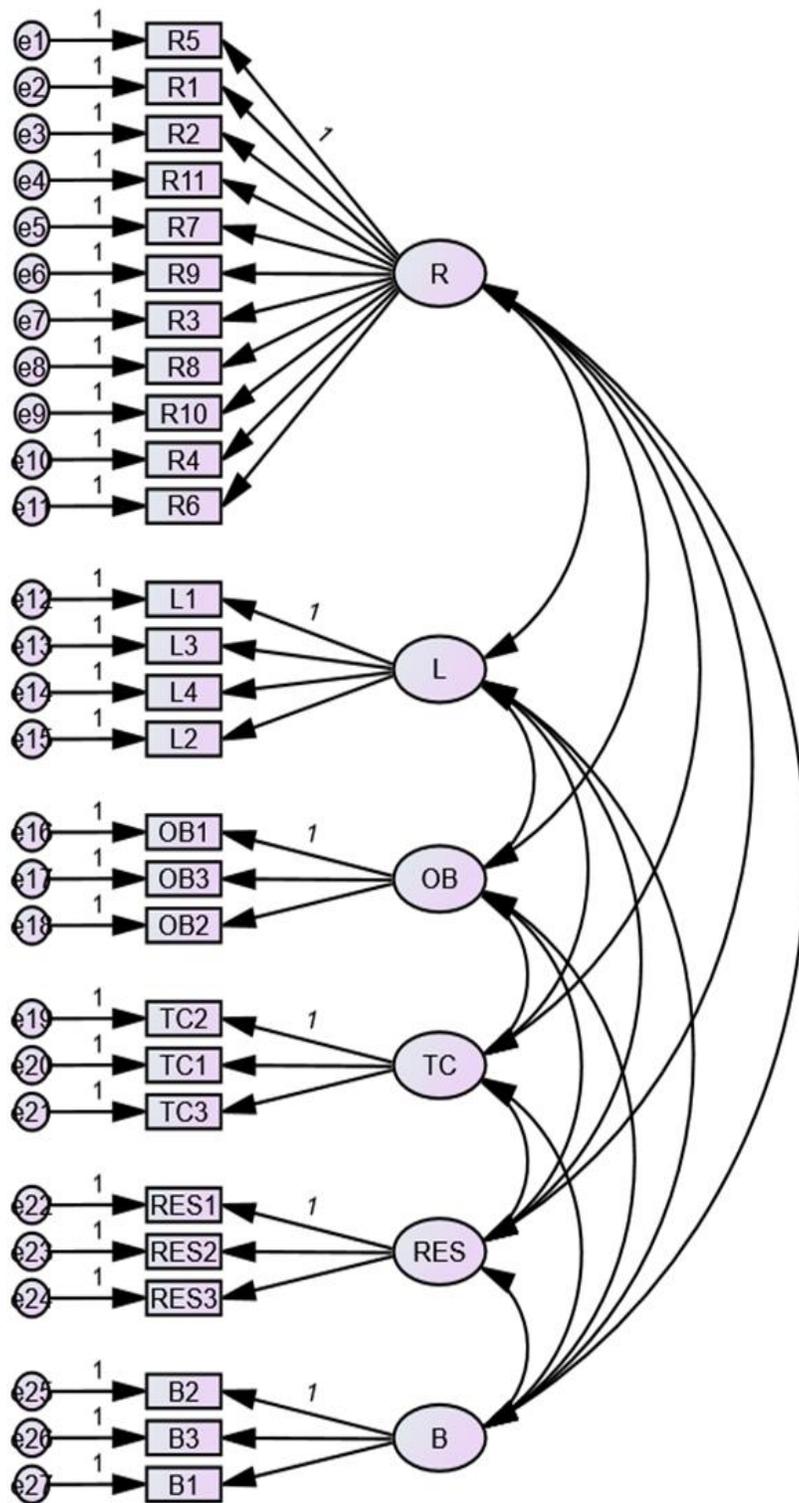


Figure 6.2 The Initial Confirmatory Factor Analysis for the Model

**Table 6. 14 Results of the Improved (Final) CFA Model**

Measure	$\chi^2$	P	df	$\chi^2/df$	GFI	RMSEA	NFI	CFI	AGFI	PNFI	PGFI
Level of acceptance		>.05		<5	$\geq 0.9$	$\leq .06$	$\geq 0.9$	$\geq 0.9$	$\geq 0.9$	> 0.5	>0.40
Hypothesised Model	194.699	.135	174	1.119	.915	.024	.923	.947	.983	.717	.689

$\chi^2$  = **Chi Square**; **df**=Degree of Freedom, **GFI**=Goodness of Fit Indices, **RMSEA**= Root Means Square Error of Approximation, **NFI** = Normed Fit Index, **CFI**= Comparative Fit Index, **AGFI**=Adjusted Good Fit of Index, **PNFI**= Parsimony Normed Fit Index, **PGFI**= Parsimony Goodness Fit Index

The results of the measurement model after the removal of items that were considered to be redundant and problematic shows an improvement in the fit indices. The improved model yielded values for the chi-square ( $X^2$ ) = 194.699, degrees of freedom (df) = 174, ( $\chi^2/df$  = 1.119), and a non-significant p-value of 0.135 ( $p >.05$ ) which means the model fit is good. However, the further refined fit indices yielded goodness of fit index (GFI) = 0.915, root mean square error of approximation (RMSEA) = 0.024, normed fit index (NFI) = 0.923, comparative fit index (CFI) = 0.947, adjusted goodness of fit index (AGFI) = 0.983, parsimony normed fit index (PNFI) = 0.717 and parsimony goodness of fit index (PGFI) = 0.689. All the fit indices met the acceptable thresholds due to the refinement of the model. The results for the goodness of fit indicates that the model fits the data, and no further refinement was required for the model. As a result, the unidimensionality of the data was established (Hair et al., 2014).

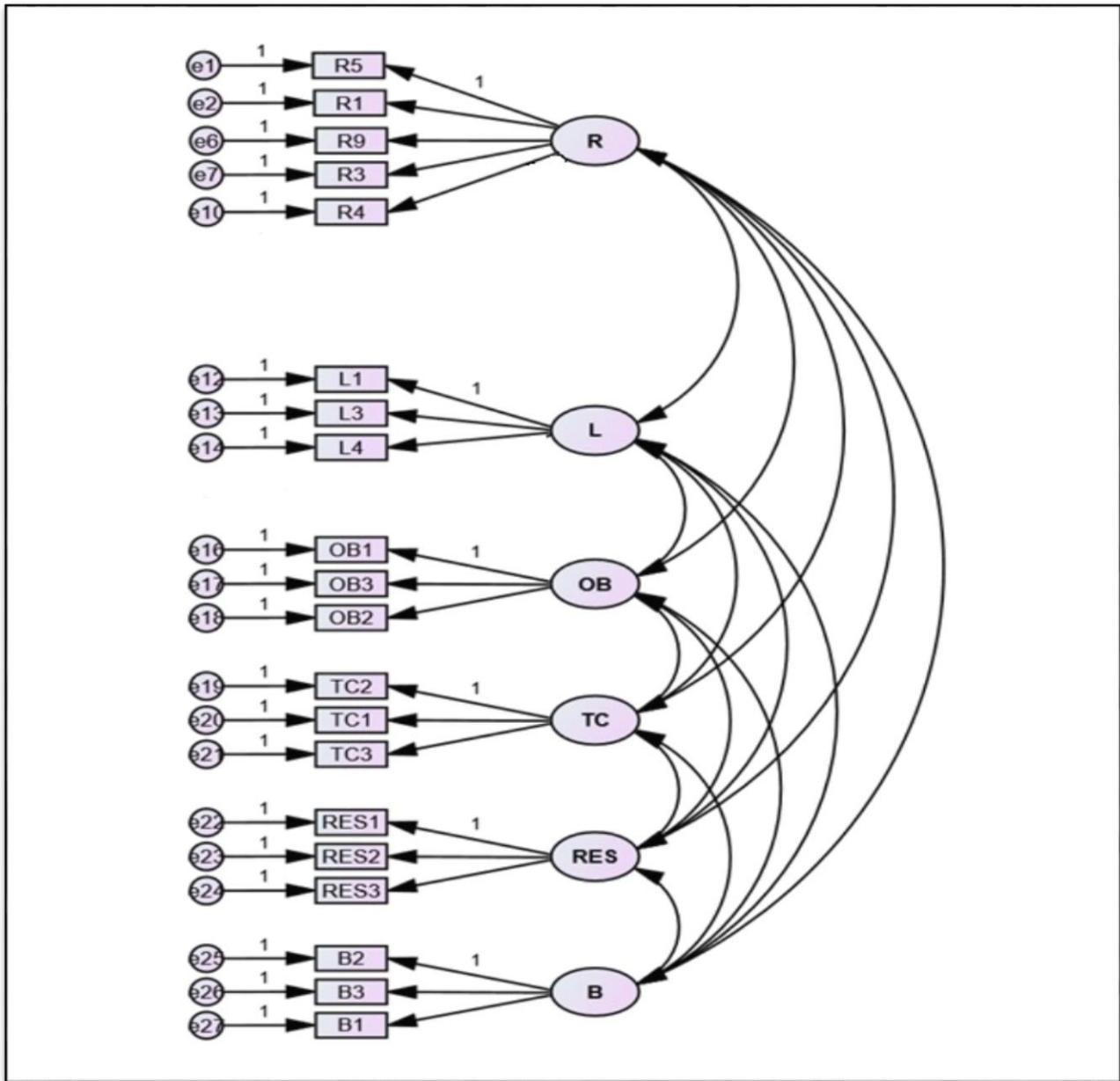


Figure 6.3 The Improved (Final) CFA Model

### 6.8.2 Validity Assessment of the Study Constructs

One of the significant aims of CFA is to assess the validity of the construct of a proposed measurement theory; its ability to determine the accuracy of measurement (Hair et al., 2014). Construct validity can be examined by assessing three components: convergent validity,

discriminant validity and nomological validity (Hair et al., 2014). This study assessed convergent validity and discriminant validity. Normalised validity was not assessed because convergent validity and discriminant validity are the most widely accepted form of validity. This section presents the convergent validity and discriminant validity of the three survey questionnaires.

### **6.8.2.1 Construct Validity**

Reliability and validity are the most two critical elements of the instrument that should be tested for the researchers to confidently report on the results obtained from the survey (Burton & Mazerolle, 2011). Validity refers to the degree at which the instrument is measuring what it was designed or intended to measure (Burton & Mazerolle, 2011). There are four main types of establishing the validity of the instrument, and they are face validity, content validity, criterion validity and construct validity. Confirmatory Factor Analysis can evaluate two aspects of construct validity: discriminant validity and convergent validity (Sun, 2015). After the content validity was established as explained in the research methodology chapter, the construct validity of the instrument was determined before data analysis procedures were computed.

Construct validity is the degree to which the operational measures correlates with the investigated theoretical concept (Burton & Mazerolle, 2011). Since the researcher used confirmatory factor analysis (CFA), one of its significant aims is to assess the construct validity of the proposed measurement theory, and its ability to determine the accuracy of measurement (Hair et al., 2014). In examining construct validity, three components can be assessed; these are convergent validity, discriminant validity and nomological validity (Hair et al., 2014). In this current study, convergent and discriminant validity were examined. The study did not assess the nomological validity as the most commonly used/assessed and widely accepted are convergent and discriminant validity (Hair et al., 2014). The convergent and discriminant validity of the survey questionnaire is presented in the following section.

#### **(i) Convergent Validity**

The convergent validity is evaluated through the assessment of factor loading, average variance extracted, and composite reliability (Hair et al., 2014). According to Hair et al. (2014), the accepted value for standardised loading in confirmatory factor analysis (CFA) is 0.5, and the reliability scale

of 0.7 or more is considered to be good. The most commonly used or well-known criterion for assessing the degree of shared variance between the latent variables of the model is the Fornell-Larcker (1981). According to Fornell and Larcker (1981), the convergent validity of the measurement model can be assessed by the Average Variance Extracted (AVE) and Composite Reliability (CR).

- AVE measures the level of variance captured by a construct versus the level due to measurement error, values above 0.7 are considered very good, whereas, the level of 0.5 is a required minimum value for convergent validity; and
- CR is a less biased estimate of reliability than Cronbach's Alpha; the acceptable value of composite reliability is 0.7 and above.

The Average Variance Extracted (AVE) for construct is defined as follows:

$$AVE = \frac{\sum_{i=1}^n \lambda_i^2}{n} \dots\dots\dots(1)$$

Where AVE = average variance extract,  $\lambda$  = the standardized factor loading,  $i$  = number of items.

Composite Reliability (CR) is defined as follows:

$$CR = \frac{(\sum_{i=1}^n \lambda_i)^2}{(\sum_{i=1}^n \lambda_i)^2 + (\sum_{i=1}^n e_i)^2} \dots\dots\dots(2)$$

Where  $\lambda$  = standardised factor loading,  $i$  = number of items, and  $e$  = error variance. In this study, a minimum of 0.50-factor loading based on recommendations by Hair et al. (2014) was used as the cut-off point. AVE of 0.50 or more rule was applied, and composite reliability of 0.70 or more was used in this study to assess the convergent validity. The convergent validity results of the study constructs used in the survey questionnaire are presented in Table 6.15.

**Table 6. 15 Convergent Validity Results of the Survey Questionnaire**

<i>Construct</i>	<i>Item</i>	<i>Standardised Factor Loading</i>	<i>Average Variance Extracted (AVE)</i>	<i>Composite Reliability (CR)</i>
<b>R</b>	R1	0.836	0.505	0.753
	R3	0.759		
	R4	0.669		
	R5	0.765		
	R9	0.695		
<b>L</b>	L1	0.719	0.569	0.797
	L3	0.679		
	L4	0.7854		
<b>OB</b>	OB1	0.819	0.634	0.837
	OB2	0.684		
	OB3	0.873		
<b>TC</b>	TC1	0.827	0.725	0.887
	TC2	0.926		
	TC3	0.796		
<b>B</b>	B2	0.852	0.636	0.777
	B3	0.739		
<b>RES</b>	RES1	0.964	0.524	0.754
	RES2	0.617		
	RES3	0.513		
<b>Note: R= Reaction, L=Learning, OB=Training Objectives, TC=Training Content, B=Trainees 'Behaviour, R= Training Results</b>				

The results of the measurement model as shown in Table 6.15, reveal that all the standardised factor loadings (standardised regression weights) were above the minimum cut-off point of 0.5, with 0.513 being the lowest standardised factor loading. All the composite reliabilities were significant as they were all above 0.7 (Fornell & Larcker, 1981; Hair et al., 2014), and all the average variance extracted (AVE) values were more than 0.50 (Fornell & Larcker, 1981; Hair et

al., 2014). Thus, the figures demonstrated a high level of convergent validity for the latent constructs used in this study. The next section presents the discriminant validity.

**(ii) Discriminant validity**

In CFA, discriminant validity refers to “the distinctiveness of the factors measured by different sets of indicators” (Kline, 1998:60), and convergent validity refers to the cohesiveness of a set of indicators in measuring their underlying factor. Discriminant validity is the extent to which factors are distinct and uncorrelated (Statwiki, 2018). According to Hair et al. (2014), the discriminant validity can be assessed by comparing the average variance extracted for each of the two constructs with the square of the correlation estimate between these two constructs. Furthermore, Fornell and Larcker (1981) proclaim that the discriminant validity can be demonstrated significantly if the average variance extracted estimate is larger than the squared correlation estimate. According to Kline (1998), with a given estimated model, if different factors are not correlated excessively with each other ( $> 0.85$ ), then there is evidence for discriminant validity and evidence for convergent Validity if a set of indicators all have relatively high structure coefficients with other factors that they are specified to measure. Table 6.16 presents the discriminant validity of the survey questionnaire.

**Table 6. 16 Discriminant Validity**

<i>Latent Constructs</i>	<i>CR</i>	<i>AVE</i>	<i>MSV</i>	<i>MaxR(H)</i>	<i>RES</i>	<i>R</i>	<i>L</i>	<i>OB</i>	<i>TC</i>	<i>B</i>
<b>RES</b>	0.754	0.524	0.130	0.934	0.724					
<b>R</b>	0.753	0.505	0.007	0.759	0.083	0.711				
<b>L</b>	0.797	0.569	0.130	0.822	0.133	0.153	0.723			
<b>OB</b>	0.837	0.634	0.016	0.860	0.128	0.321	0.036	0.755		
<b>TC</b>	0.887	0.725	0.017	0.908	0.019	0.014	0.132	0.119	0.724	
<b>B</b>	0.777	0.636	0.005	0.794	0.004	0.047	0.070	0.052	0.054	0.712

**Note:** **CR**= Composite Reliability, **AVE** = Average Variance Extracted, **MSV**= Maximum Shared Variance, **MaxR(H)** = Maximum Reliability.

Table 6.16 shows that the composite reliability (CR) of all the six latent constructs is higher than 0.70 and average variance extracted (AVE) exceeded also exceeded the minimum acceptable value of 0.50. The next section looks at the analysis of SEM and hypothesis testing. This indicates good construct reliability and convergent validity, respectively (Byrne, 2010).

### **6.9 Structural Model Evaluation and Testing the Hypotheses**

Hair et al., (2010) emphasised the importance and significance of specifying the structural model in SEM as it converts the measurement model into a structural model and assigns relationships from one construct to another based on the proposed theoretical model. The structural model for the study is specified by one correlation relationship between the two exogenous constructs training content and training objectives and the structural relationships by path estimates that link the relationships between the exogenous and endogenous constructs (reaction, learning, behaviour and results). To evaluate the hypothesised structural model, the goodness of fit indices and other parameter estimates were used.

Table 6.17 presents the results of the final SEM on the survey questionnaire and shows an adequate level of fit. The results for the final structural model show that chi-square ( $X^2$ ) = 194. 699, degrees of freedom ( $df = 174$ ), significance level of  $p = 0.135$  ( $p > 0.05$ ). The chi-square with the degrees of freedom ( $\chi^2/df$ ) = 1.119, which is less than 5 as recommended by Kline (2005) and less than 2 or 3 as recommended by Byrne (1989). The ratio  $\chi^2/df$  can be calculated, and a value close to 1 indicates a good model, however, is not a clear cutoff criterion (Sun, 2015). The p-value should not be statistically significant if there is a good model fit; in this study, the p-value was found to be not significant.

However, Schermelleh-Engel et al. (2003), and Vandenberg (2006) asserts that the chi-square ( $X^2$ ) statistic is very sensitive to sample size and is no longer relied upon as a basis for acceptance or rejection. Although the good model fit was established through Chi-square test, other goodness of fit measurements was computed. The goodness of fit index (GFI) = 0.915, adjusted goodness of fit index (AGFI) = 0. 983, normed fit index (NFI) = 0.923 and comparative fit index (CFI) = 0.947. The parsimony normed fit index (PNFI) = 0.717 and goodness of fit index (PGFI)= 0.689 and the

root mean square error of approximation (RMSEA) = 0.024. No difference was found between the measurement and structural (path) model; as a result, the model is acceptable. Since the structural model is acceptable, it can, therefore, be used for testing the hypothesis. Table 6.17 depicts the final structural model that will be used for hypothesis testing.

**Table 6. 17 Structural Model**

Measure	$\chi^2$	P	df	$\chi^2$ /df	GFI	RMSEA	NFI	CFI	AGFI	PNFI	PGFI
Acceptance Level		>.05		<5	$\geq$ 0.9	$\leq$ .06	$\geq$ 0.9	$\geq$ 0.9	$\geq$ 0.9	> 0.5	>0.40
Hypothesised Model	194.699	.135	174	1.119	.915	.024	.923	.947	.983	.717	.689

$\chi^2$  = Chi Square; df=Degree of Freedom, GFI=Goodness of Fit Indices, RMSEA= Root Means Square Error of Approximation, NFI = Normed Fit Index, CFI= Comparative Fit Index, AGFI=Adjusted Good Fit of Index, PNFI= Parsimony Normed Fit Index, PGFI= Parsimony Goodness Fit Index

### 6.9.1 Hypothesis Testing

The goodness of fit indices and parameter estimates were tested to assess the proposed theoretical structural model. According to Hair et al. (2014), if the critical value (CR or t-value) exceeds 1.96 for an estimate (regression weight) with a significance level below 0.05 of the parameter coefficient value, then the hypothesis should be supported otherwise not supported.

### 6.9.2 Hypothesis Testing of the Direct Impact

In the current study, eight hypotheses represented the relationships between the latent constructs. The results of the hypothesis testing are presented in Table 6.18 below. The assessment of parameter estimate results indicates that five out of eleven hypothesis are supported. The critical values of the regression weights as recommended by Hair et al., (2014) were all within the accepted value of CR>1.96 and the significance levels of p<0.05.

**Table 6. 18 Hypotheses Testing Results (Direct Impact)**

<i>Constructs</i>	<i>Hypotheses</i>	$\beta$	<i>S.E.</i>	<i>C.R</i>	<i>p-value</i>	<i>Decision</i>
<b>TC</b>	H1a: TC→R	-.009	.045	-.192	.848	Rejected
	H1b: TC→L	-.072	.046	-1.603	.109	Rejected
	H1c: TC→B	.633	.074	3.807	*** (.000)	Accepted
	H1d: TC→RES	.461	.064	2.260	**(.006)	Accepted
<b>OB</b>	H2a: OB→R	.131	.059	4.768	*(.021)	Accepted
	H2b: OB→L	.022	.047	.480	.631	Rejected
	H2c: OB→B	.076	.069	-.988	.266	Rejected
	H2d: OB→RES	.040	.069	1.585	.266	Rejected
<b>R,L,B,Res</b>	H5: R→L	.145	.036	2.243	*(.033)	Accepted
	H6: L→B	.620	.059	3.743	***(.001)	Accepted
	H7: B→RES	.565	.074	6.248	**(.003)	Accepted

**Note:** TC= Training Content, OB= Training Objectives, R=Reaction, L=Learning, B=Behaviour, RES=Results,  $\beta$ = Standardised Path Estimates (regression weights), S.E= Standard Error, C.R= Critical Value (*t*-value), P=Significance of value, \*\*\* (Significant at 0.001 level-Two tailed), \*\* (significant at 0.01 levels), \*(significant at 0.05 levels)

All the six hypothesis (see Table 6.16) had the *t*-value > 0.05 and *p*-value < 0.05 (*t*-value= 3.807, *p* = 0.004, *t*-value= 4.768, *p* = 0.03, *t*-value= 2.243, *p* = 0.004, *t*-value= 3.743, *p*= 0.001 and *t*-value = 6.248, *p*=.000), as a result they were found to be statistically significant. The remaining five hypothesis found to be not significant as either their critical value was less than the recommended 1.96 or the *p*-value was more than 0.05 (see Table 6.18). As a result, the non-significant hypotheses were rejected/not supported.

**H1c: Training content has a significant effect on trainees change in behaviour.**

The results (see Table 6.18) revealed the significance of the path estimate ( $\beta$ = 0.633, *t*-value = 3.807, *p* = 0.000) between training content and trainees change in behaviour. Therefore, hypothesis (H1c) was supported because of the positive, direct impact from training content on behaviour.

**H1d: Training content has a significant effect on the results.**

The results (see Table 6.16) revealed a significance of the path estimate ( $\beta = 0.461$ ,  $t\text{-value} = 2.260$ ,  $p = 0.006$ ) between training content and training outcome (results). Therefore, hypothesis (H1d) was supported because of the positive, direct impact from training content on results.

***H2a: Training objectives have a significant effect on trainees' reaction to the training***

The results revealed the significance of the path estimate ( $\beta = 0.131$ ,  $t\text{-value} = 4.768$ ,  $p = 0.021$ ) between training objectives and trainees' reaction to the training. Therefore, hypothesis (H2a) was supported because of the positive, direct impact from training objectives on trainees' reaction

***H5: Trainees' Reaction have a direct relationship with learning***

The results revealed the significance of the path estimate ( $\beta = 0.145$ ,  $t\text{-value} = 2.243$ ,  $p = 0.033$ ) between trainees' reaction to the training and their learning. Therefore, hypothesis (H5) was supported because of the positive, direct impact from trainees' reaction on learning

***H6: Learning has a direct relationship with Behaviour***

The results revealed a significance of the path estimate ( $\beta = 0.620$ ,  $t\text{-value} = 3.743$ ,  $p = 0.001$ ) between trainees' learning to change in behaviour (transferring of learning). Therefore, hypothesis (H6) was supported because of the positive, direct impact from learning on behaviour.

***H7: Behaviour has a direct relationship with Results***

The results revealed the significance of the path estimate ( $\beta = 0.565$ ,  $t\text{-value} = 6.248$ ,  $p = 0.003$ ) between trainees' change in behaviour and the training outcome/results. Therefore, hypothesis (H7) was supported because of the positive, direct impact from behaviour on results.

### **6.9.3 Testing the Moderation Effects**

Detecting a moderating influence is significant in social science research because it alters the strength of the causal relationship between the predictors and outcomes variables (Kenny, 2018). In determining the existence of moderation and its strength of moderation (partial or full), specific procedures must be followed before conducting the moderation analysis (Awang, 2012). Thus, the researcher followed the recommended procedures before conducting the moderation analysis for this research. The regression analysis was conducted using AMOS by the maximum likelihood estimation (MLE) to detect moderating effects. The researcher considered the following before conducting the moderation analysis:

- First step: all the variables (predictors, moderate variables and outcomes) were standardised using the descriptive statistics in SPSS (Dunlap & Kemery, 1987) to be able to determine and avoid multicollinearity (Cronbach, 1987; Dunlap & Kemery, 1987).
- Second, the interaction effect(s) was created (independent variable x moderating variable) which is the score of the multiplication between the moderate variable and predictors using a transformation analysis (Awang, 2012; Field, 2013; Hair et al., 2014). The moderation effect exists if the interaction variables are significant. A connection between the predictor and outcome when the moderator levels were low, medium and high was shown after the follow-up analyses on the slopes (Field, 2013).

### **6.9.3.1 Moderator Model Fit Testing**

In assessing the moderating effect of training content and training objectives on the relationships between the training outcomes (learning, behaviour and results), the validated SEM model was tested using AMOS v.25. In this research, the proposed theoretical model has two moderators: the training content and the training objectives. The training content and training objectives are hypothesised to moderate the relationship between learning and behaviour, behaviour and results.

The moderating model for training content with regard to the relationship between learning and behaviour yielded an adequate fit as depicted in Table 6.17. The chi square with degree of freedom ( $X^2/df$ ) = 1.351,  $p = 0.117$ ; goodness of fit index (GFI) = 0.966, adjusted goodness of fit index (AGFI) = 0.937, root mean square error of approximation (RMSEA) = 0.042, normed fit index (NFI) = 0.936, comparative fit index (CFI) = 0.982, adjusted good fit of index (AGFI) = 0.937, parsimony normed fit index (PNFI) = 0.624 and parsimony goodness of fit index (PGFI) = 0.515. The moderating model for training objectives with regard to moderating the relationship between learning and behaviour yielded an adequate fit, chi square with degree of freedom ( $X^2/df$ ) = 1.204,  $p = 0.198$ ; goodness of fit index (GFI) = 0.964, adjusted goodness of fit index (AGFI) = 0.938, root mean square error of approximation (RMSEA) = 0.032, normed fit index (NFI) = 0.945, comparative fit index (CFI) = 0.990, adjusted good fit of index (AGFI) = 0.938, parsimony normed fit index (PNFI) = 0.672 and parsimony goodness of fit index (PGFI) = 0.561. The summary of the model fit results for all the four moderating models is presented in Table 6.19 below.

**Table 6. 19 Moderating Fit Models**

Measure	$\chi^2$	P	df	$\chi^2/df$	GFI	RMSEA	NFI	CFI	AGFI	PNFI	PGFI
<i>Moderating effect of training content on the relationship between learning and behaviour</i>											
Level of acceptance		>.05		<5	$\geq 0.9$	$\leq .06$	$\geq 0.9$	$\geq 0.9$	$\geq 0.9$	> 0.5	>0.40
Hypothesised Model	32.427	.117	24	1.351	.966	.042	.936	.982	.937	.624	.515
<i>Moderating effect of training content on the relationship between behaviour and Results</i>											
Level of acceptance		>.05		<5	$\geq 0.9$	$\leq .06$	$\geq 0.9$	$\geq 0.9$	$\geq 0.9$	> 0.5	>0.40
Hypothesised Model	24.000	.119	17	1.412	.971	.045	.945	.983	.939	.574	.459
<i>Moderating effect of training objectives on the relationship between learning and behaviour</i>											
Level of acceptance		>.05		<5	$\geq 0.9$	$\leq .06$	$\geq 0.9$	$\geq 0.9$	$\geq 0.9$	> 0.5	>0.40
Hypothesised Model	38.535	.198	32	1.204	.964	.032	.945	.990	.938	.672	.561
<i>Moderating effect of training objectives on the relationship between behaviour and results</i>											
Level of acceptance		>.05		<5	$\geq 0.9$	$\leq .06$	$\geq 0.9$	$\geq 0.9$	$\geq 0.9$	> 0.5	>0.40
Hypothesised Model	25.908	.076	17	1.524	.969	.051	.947	.981	.934	.575	.458
$\chi^2$ = Chi Square; df=Degree of Freedom, GFI=Goodness of Fit Indices, RMSEA= Root Means Square Error of Approximation, NFI = Normed Fit Index, CFI= Comparative Fit Index, AGFI=Adjusted Good Fit of Index, PNFI= Parsimony Normed Fit Index, PGFI= Parsimony Goodness Fit Index											

The moderating model for training content with regard to the relationship between behaviour and results (training outcome) yielded an adequate fit and has exhibited high degree of fit with the data,

as depicted in Table 6.19, chi square with degree of freedom ( $X^2/df$ ) = 1.412,  $p = 0.119$ ; goodness of fit index (GFI) = 0.971, adjusted goodness of fit index (AGFI) = 0.939, root mean square error of approximation (RMSEA) = 0.045, normed fit index (NFI) = 0.945, comparative fit index (CFI) = 0.983, adjusted good fit of index (AGFI) = 0.939, parsimony normed fit index (PNFI) = 0.574 and parsimony goodness of fit index (PGFI) = 0.459.

The moderating model for training objectives with regard to the relationship between behaviour and results yielded an adequate fit and has shown a very high degree of fit with the data as presented in Table 6.19, chi-square with degree of freedom ( $X^2/df$ ) = 1.524,  $p = 0.76$ ; goodness of fit index (GFI) = 0.969, adjusted goodness of fit index (AGFI) = 0.934, root mean square error of approximation (RMSEA) = 0.051, normed fit index (NFI) = 0.947, comparative fit index (CFI) = 0.981, adjusted good fit of index (AGFI) = 0.934, parsimony normed fit index (PNFI) = 0.575 and parsimony goodness of fit index (PGFI) = 0.458. The next section looks at how the hypothesis of the moderation models was tested.

### **6.9.3.2 Moderation Models Hypothesis Testing**

In determining the significance of the moderator effect, three tests should be followed: (a) independent and the dependent variables, (b) moderator and the dependent variables, and (c) compound moderator (interaction effect) with the independent and dependent variables (Hair et al., 2014). According to Awang (2012), a significant moderating effect is identified if the following three conditions are met: (a) if the relationship between the interaction effect and the dependent variables is significant, (b) if the relationship between the moderator and dependent variables is not significant, and (c) if the relationship between the independent and dependent variables is not significant (complete moderation) or if the relationship between the independent and dependent variables is significant (partial moderation). To test the moderating effects of training content and training objectives (M) on the relationship between learning (IV) and behaviour (DV), and between behaviour (IV) and results (DV), the three conditions recommended by Awang (2012) were evaluated. The summary of the analysis is presented in Table 6.20.

**Table 6. 20 Hypothesis of the Moderation Models**

	<i>Path</i>	$\beta$	<i>S.E.</i>	<i>C.R</i>	<i>p-value</i>	<i>Decision</i>
<i>Hypothesis testing of the moderating effect of training content on the relationship between learning and behaviour</i>						
1.	Learning→Behaviour	.075	.067	.930	.323	Rejected
	Training Content→Behaviour	.132	.043	2.170	.087	Accepted
	TC * Learning→Behaviour	-.099	.288	2.018	.706	Rejected
<b>H3a: Training content moderates the relationship between learning and behaviour</b>						<b>Rejected</b>
<i>Hypothesis testing of the moderating effect of training content on the relationship between behaviour and results</i>						
2.	Behaviour→Results	.312	.082	.647	.003**	Accepted
	Training Content→Results	.461	.064	.160	.095	Accepted
	TC * Behaviour→Results	.344	.005	.104	.004**	Accepted
<b>H3b: Training content moderates the relationship between behaviour and results</b>						<b>Accepted</b>
<i>Hypothesis testing of the moderating effect of training objectives on the relationship between learning and behaviour</i>						
3.	Learning→Behaviour	.063	.067	.930	.323	Rejected
	Objectives→Behaviour	.076	.069	1.112	.266	Accepted
	OB * Learning→Behaviour	.005	.005	1.034	.812	Rejected
<b>H4a: Training objectives moderate the relationship between learning and behaviour</b>						<b>Rejected</b>
<i>Hypothesis testing of the moderating effect of training objectives on the relationship between behaviour and results</i>						

4.	Behaviour→Results	.368	.083	.637	.002**	Accepted
	Objectives→Results	.202	.069	1.585	.113	Accepted
	OB * Behaviour→Results	.404	.006	-1.009	.005**	Accepted
<b>H4b:</b> Training objectives moderate the relationship between learning and behaviour <b>Accepted</b>						
<b>Note:</b> TC= Training Content, OB= Training Objectives, $\beta$ = Standardised Path Estimates (regression weights), S.E= Standard Error, C.R= Critical Value ( <i>t</i> -value), P=Significance of value, *** = Significant at 0.001 levels (two tailed), ** = significant at 0.01 levels (two-tailed)						

As shown in Table 6.20, is the comparisons between the independent and dependent variables (simple effects), the effects of the moderator on the dependent variables and the interaction effects with independent variables on dependent variables. The results show no moderating significant effects for the three paths: the training content did not moderate the effects on the relationships between learning and behaviour ( $\beta = -0.99$ , *t*-value = 0.930, *p* = 0.706), and training objectives did not moderate the relationship between learning and behaviour ( $\beta = 0.005$ , *t*-value = 1.304, *p* = 0.812); and training objectives did not moderate the relationship between behaviour and results ( $\beta = 0.404$ , *t*-value = -1.009, *p* = 0.005). A significant moderating effect was found for the one path: the training content moderate the effects on the relationships between behaviour and results ( $\beta = 0.344$ , *t*-value = 0.104, *p* = 0.004). The final hypothesised model is illustrated in Figure 8.1 in Chapter 8.

### 6.10 Summary of Hypothesise Testing Results

The result of the final relationship variables and the testing of the influence of the variables are detailed to understand the relationships and degree of influence of training content and training objectives on the outcome of training (reaction, learning, behaviour and results).

**Table 6. 21 Summary of Hypotheses Testing Results**

<i>Hypotheses Statements</i>	<i>Path Coefficient (<math>\beta</math>)</i>	<i>Remarks</i>
<i>H1a: Training content → reaction</i>	—	Rejected
<i>H1b: Training content →learning</i>	—	Rejected
<i>H1c: Training content →behaviour</i>	0.633***	<b>Accepted</b>
<i>H1d: Training content →results</i>	0.461**	<b>Accepted</b>
<i>H2a: Training objectives →reaction</i>	0.131*	<b>Accepted</b>
<i>H2b: Training objectives →learning</i>	—	Rejected
<i>H2c: Training objectives →behaviour</i>	—	Rejected
<i>H2d: Training objectives →results</i>	—	Rejected
<i>H3a: Training content → learning *behaviour</i>	—	Rejected
<i>H3b: Training content →behaviour *results</i>	0.344**	<b>Accepted</b>
<i>H4a: Training objectives →learning *behaviour</i>	—	Rejected
<i>H4b: Training objectives →behaviour* results</i>	0.404**	<b>Accepted</b>
<i>H5: Trainees ‘reaction →learning</i>	0.145*	<b>Accepted</b>
<i>H6: Learning →behaviour</i>	0.620***	<b>Accepted</b>
<i>H7: Behaviour →results</i>	0.565**	<b>Accepted</b>
<b>Notes:</b> Significance levels: *p < 0.05; **p <0.01; ***p <0.001		

### 6.11 Chapter Conclusion

This chapter provided the results from the final filtered scales and fifteen hypotheses testing of the survey questionnaire. Kaiser-Meyer-Olkin (KMO) and Bartlett ‘s tests were performed to determine if the confirmatory factor analysis can be conducted. Before the findings could be inferred, reliability and construct validity tests were computed to measure the reliability and construct validity of the instrument, all the measurement scales from the data were found to be satisfactory. The findings of the data analysis and testing the hypothesis of the final model found a positive, significant relationship between the four levels of training outcome (reaction, learning, behaviour and results). Furthermore, training content was found not to have a significant effect on the reactions of trainees, learning and the training results.

Similarly, training objectives were found not to have a significant effect on learning, behaviour and results; however, a significant effect was found on training objectives and the reaction of trainees to the training. Training content and training objectives were found to have no significant moderation effect on learning and behaviour. On the other hand, training content and training objectives were found to have a significant moderation effect on trainees behaviour and the training outcome/results. In-depth discussions on the results of the analysis will be covered in Chapter 8 of this study. The next chapter (Chapter 7), is the analysis of qualitative data that were collected through the semi-structured interviews.

## **CHAPTER 7: RESULTS OF QUALITATIVE DATA**

### **7.1 Introduction**

The purpose of this chapter is to present the results of the qualitative data collected from interviews with eight participants from different NPOs. The study purposively sampled fifteen participants, but only eight agreed to participate in the study—this translates to 53.3% response rate, with only seven consenting to be audio recorded. Only one participant did not consent to be audio recorded but agreed to participate in the interviews. The field notes were taken for the participant who did not consent to be audio recorded. In this chapter, the characteristics and responses of the participants during the interviews are presented. Since the core of this dissertation is to evaluate the effectiveness of the NDA training program, mainly focusing on one training intervention of NPO Governance. The NVIVO v.12 computer software was used to manage, organise and analyse the data. The main categories or themes for evaluating the effectiveness of the training were the reaction of trainees on the training, learning, job transfer and results of the organisation due to the training.

### **7.2. Demographic Data of Participants**

The participants of the interviews were all serving on the governance structure in their respective organisations; these were Chairperson of the Board, Chief Executive Officers and Board Secretaries. The demographic details of the participants are summarised in Table 7.1.

**Table 7. 1 Demographic Data of the Study Participants**

<i>ID</i>	<i>Age</i>	<i>Education</i>	<i>NPO Experience</i>	<i>Gender</i>	<i>Occupation</i>
P1	Between 20 and 39	BD	6 to 9 years	M	Board Secretary
P2	Between 50 and 59	ND	6 to 9 years	F	Board Chairperson
P3	Between 50 and 59	G12	More than 10 years	F	Board Chairperson
P4	Between 50 and 59	ND	More than 10 years	F	CEO
P5	Between 40 and 49	ND	2 to 5 years	F	Board Chairperson
P6	Between 40 and 49	BG12	More than 10 years	F	Board Secretary
P7	Between 50 and 59	ND	6 to 9 years	F	CEO
P8	Between 40 and 49	G12	10 years	M	Board Chairperson
<b>BD-Bachelor’s Degree    ND-National Diploma    G12-Grade12    BG12 – Below Grade12</b>					

There were some basic similarities and differences in the demographics of the participants, and the demographics included age, education, experience in the NPO, gender and occupation. The similarities and differences are indicated with the Figures below. The project map on NVIVO software was used for case classification to show associated items. The associations of demographics of Chief Executive Officers are shown in figure 7.1 below.

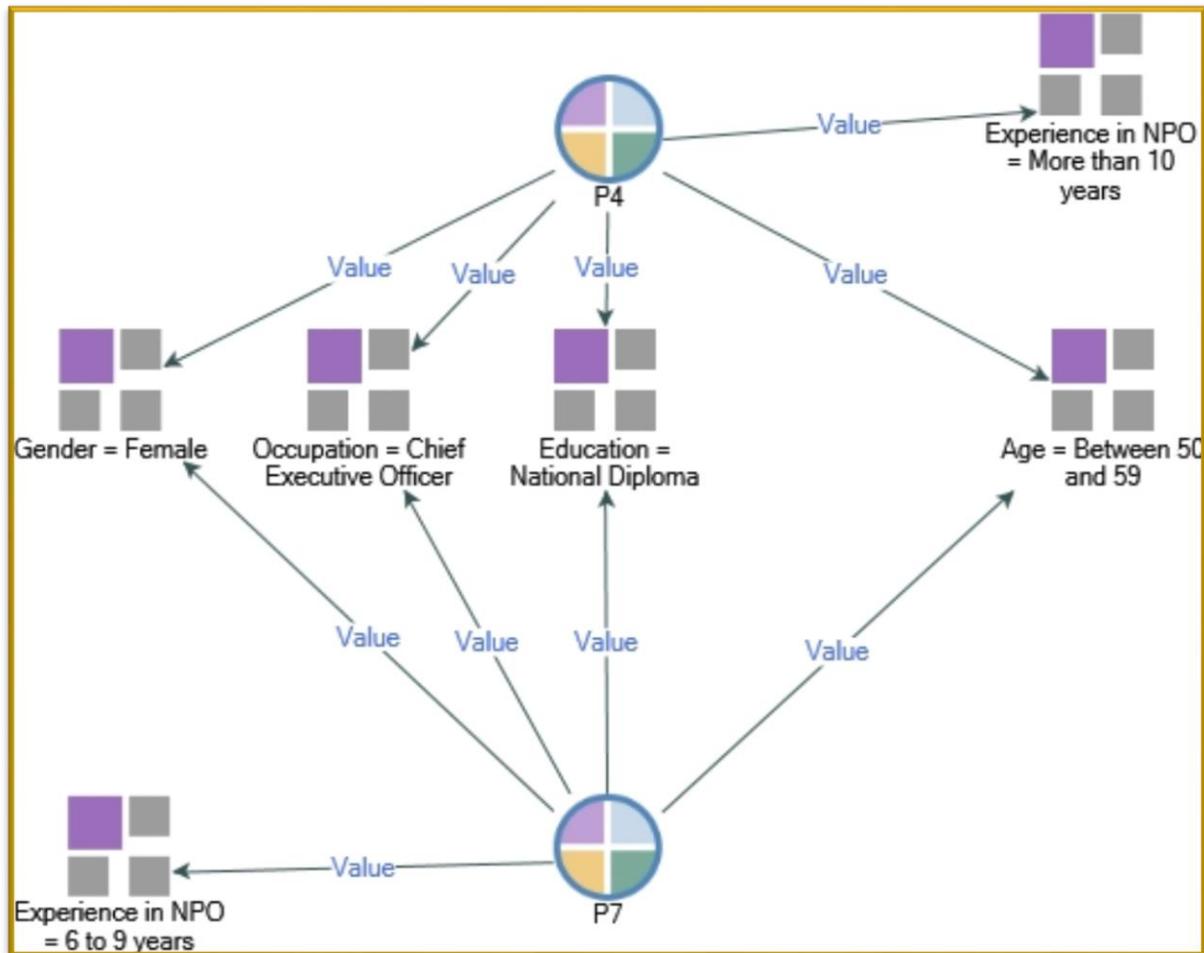


Figure 7.1 Demographic Similarities and Differences of Chief Executive Officers

The figure indicates that participant P4 and P7 had lots of similarities where they are both females, they occupy the position of Chief Executive Officer within their organisations, they both have Diploma as the highest level of formal education and both aged between 50 and 59 years old. The only difference found between these two participants were on their years of experience whereby participant “P7” has between 6 and 9 years of experience, whereas participant “P4” indicated that she has more than ten years of experience in the Non-profit

sector. Figure 7.2 depicts similarities and differences of Board Secretaries found during data analysis process.

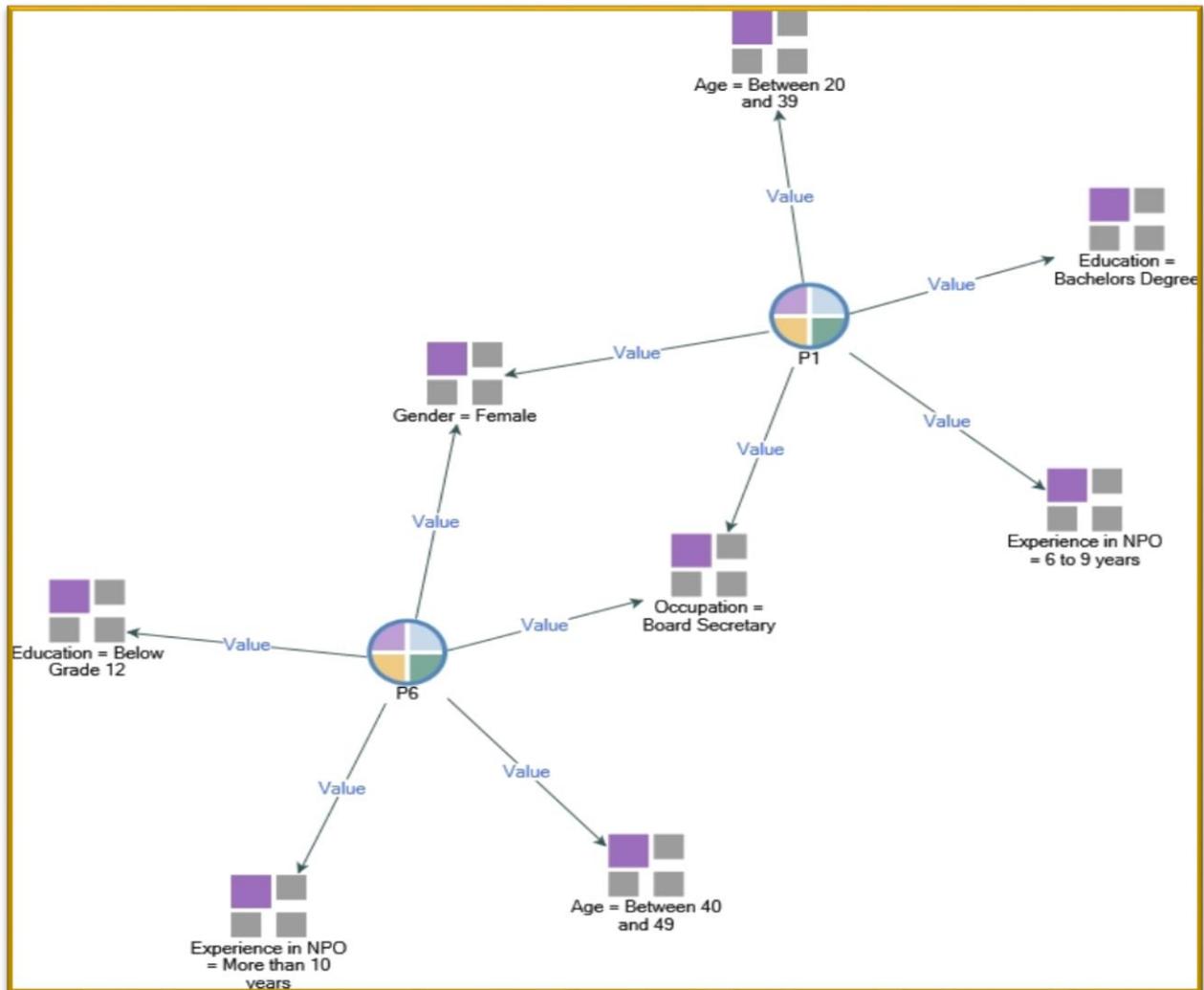


Figure 7.2 Demographic Similarities and Differences of Board Secretaries

The figure indicates that participant P1 and P6 were both females, and this was the only similarity that was found between the two participants. The differences were found where “P6” indicated her level of education as Grade 12, aged between 40 and 49 years old with NPO experience of more than ten years. Participant “P1” indicated that she is between 20 and 39 years old and has a Bachelor’s degree qualification as her highest level of formal education and between 6 and 9 years of experience in the Non-profit sector. Figure 7.3 indicates the demographic similarities of participants who are Chairpersons of the Board.

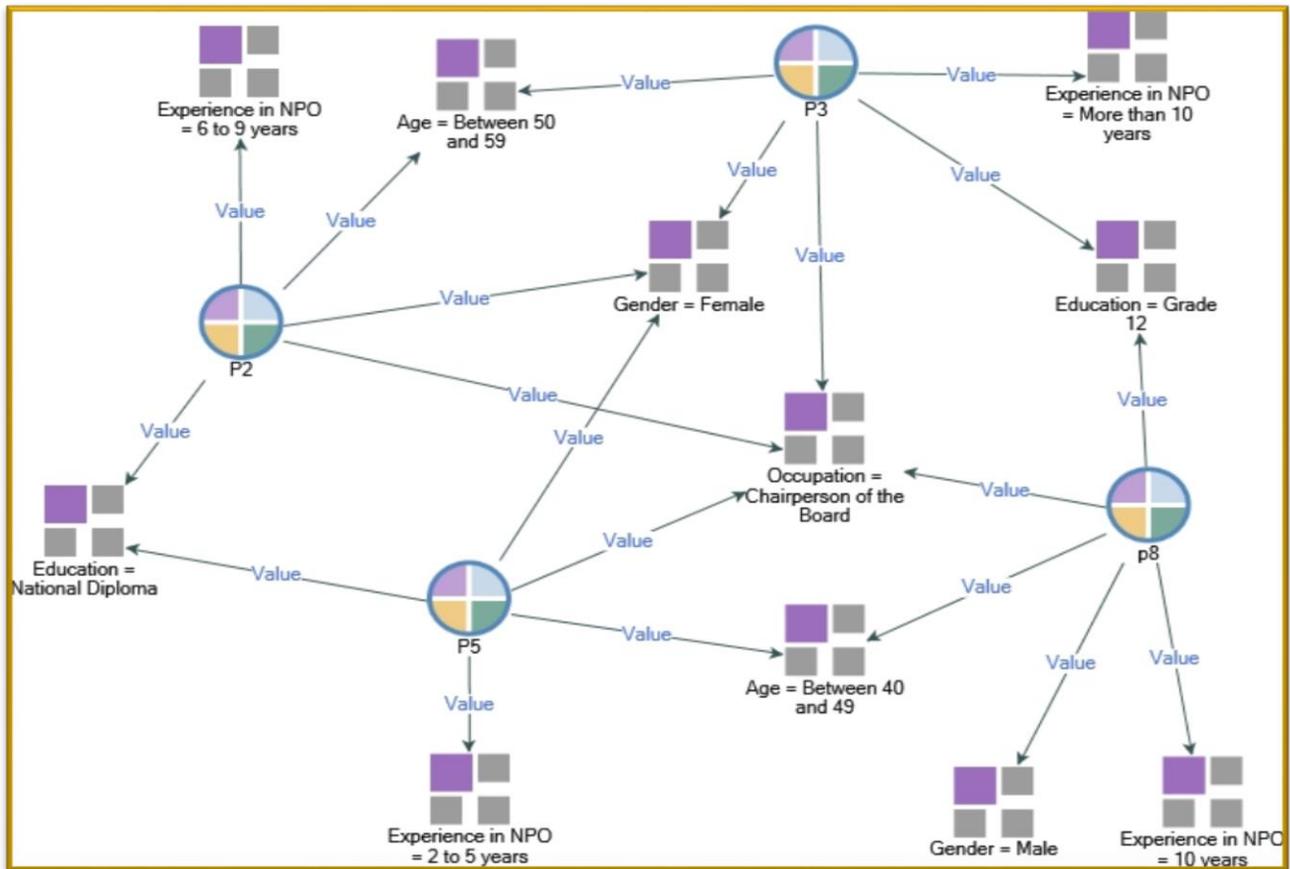


Figure 7.3 Demographic Similarities and Differences of Chairpersons of the Board

Four participants were Chairpersons of the Board (P2, P3, P5, P8). With regards to gender, participants (P2, P3 and P5) were females and participant “P8” was male. Participants “P2” and “P5” both had National Diploma, and participants “P3” and “P8” had Grade 12 as their highest level of formal education. Other similarities were between participant “P5” and “P8” who are between 40 and 49 years of age, and participants “P2” and “P3” who are between 50 and 59 years old. The demographic differences amongst these four participants were mainly on the years of experience of which participant “P2” indicated that she has between 6 and 9 years of experience in the Non-profit sector. Participant “P3” more than ten years of experience, “P5” between 2 and 5 years and “P8” indicated that he has ten years of experience. The next section discusses the findings of the research questions.

### 7.3. RESULTS OF THE RESEARCH THEMES

This section covers the results of the research themes on which the interview questions derived.

Four themes guided the interview questions, and these were:

- Perceptions and attitudes of trainees on the training (Reaction);
- Learning (skills and knowledge);
- Trainees' Behaviour (Learning transfer); and
- Results (Change or Impact in the organisation)

Data were collected through face-to-face interviews with individuals from different NPOs who received the training from the NDA. The brief process on how the researcher arrived at the findings or results is depicted in figure 7.4 below

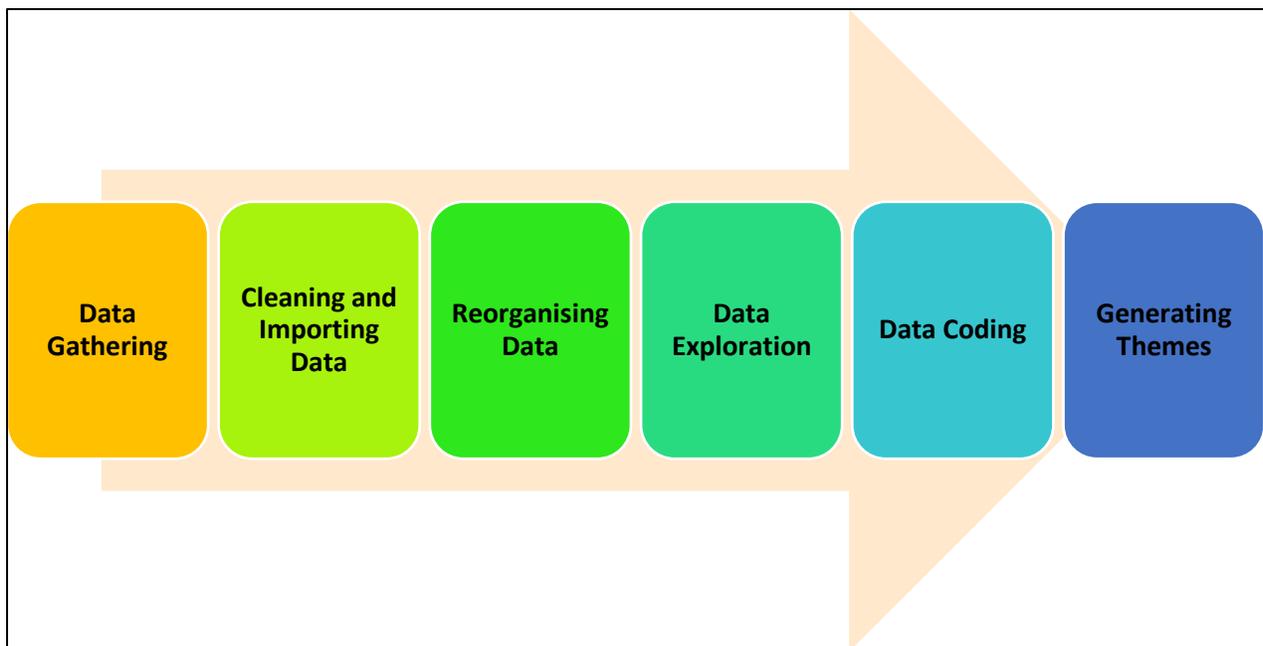


Figure 7.4 Data Analysis Process

Data were gathered through in-depth interviews through audio recording and field notes, then later transcribed in Microsoft Word. The data was first cleaned in Microsoft, and proper headings were assigned before imported to NVIVO software.

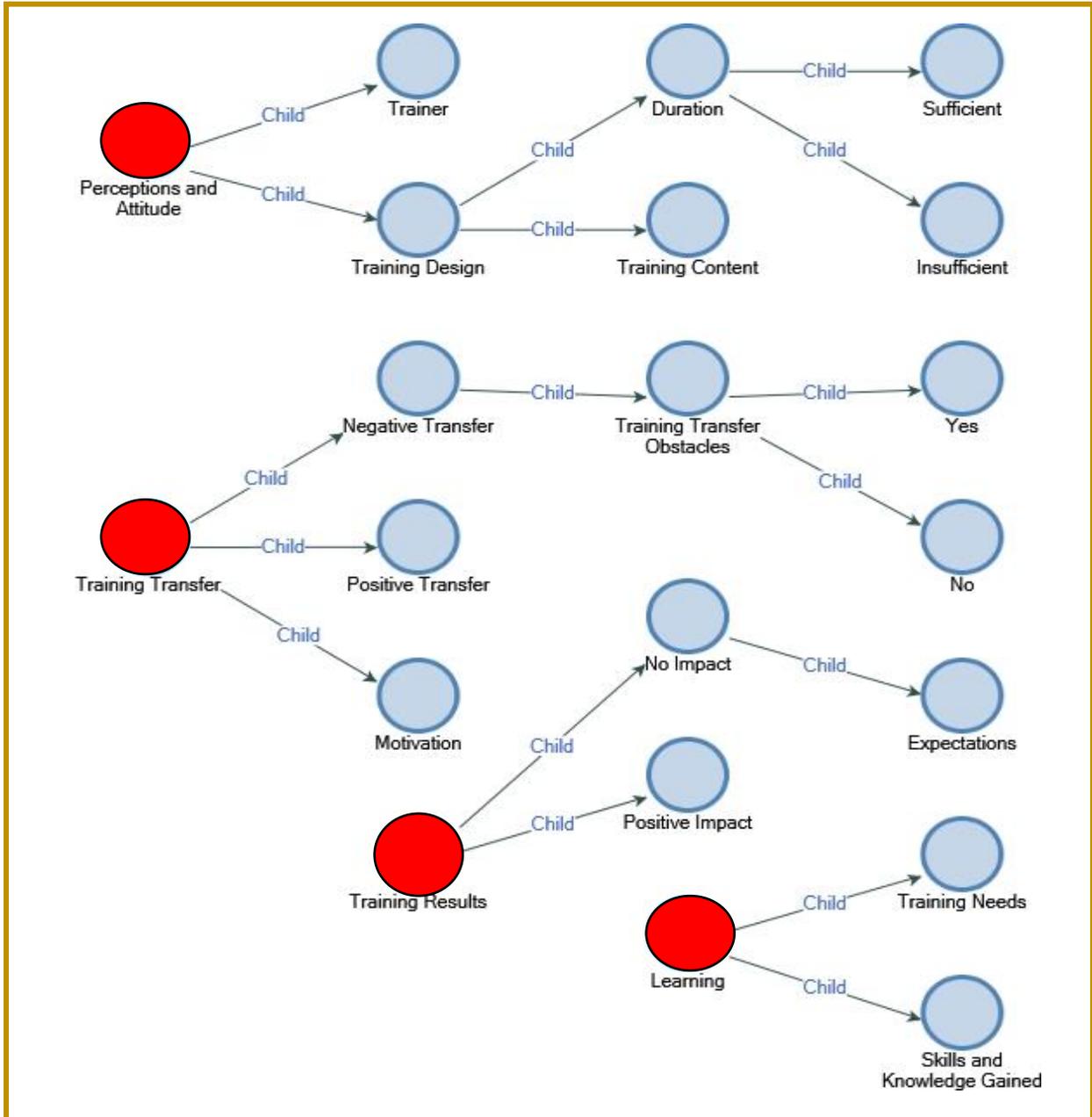


Figure 7.5 Tree Nodes from NVIVO Software

The new project was created in NVIVO, and data were imported as text files. Queries and coding functions were then used for exploration and analysis of data, and graphs were used for visualization of the data. Data exploration is the process conducted before the data analysis to understand what is in the dataset as well as the characteristics of the data. The Nodes enabled the researcher to gather the related information together so that emerging patterns and issues could be easily identified. There are two common nodes, and these are Tree nodes and Free nodes

(AlYahmad & Alabri, 2013). Themes were pre-defined in the interview schedule and were generated as parent node indicated in “Red”; however, sub-themes emerged during the interviews, and these were generated as child nodes indicated in “Blue”. Figure 7.6 below depicts the created nodes in NVIVO.

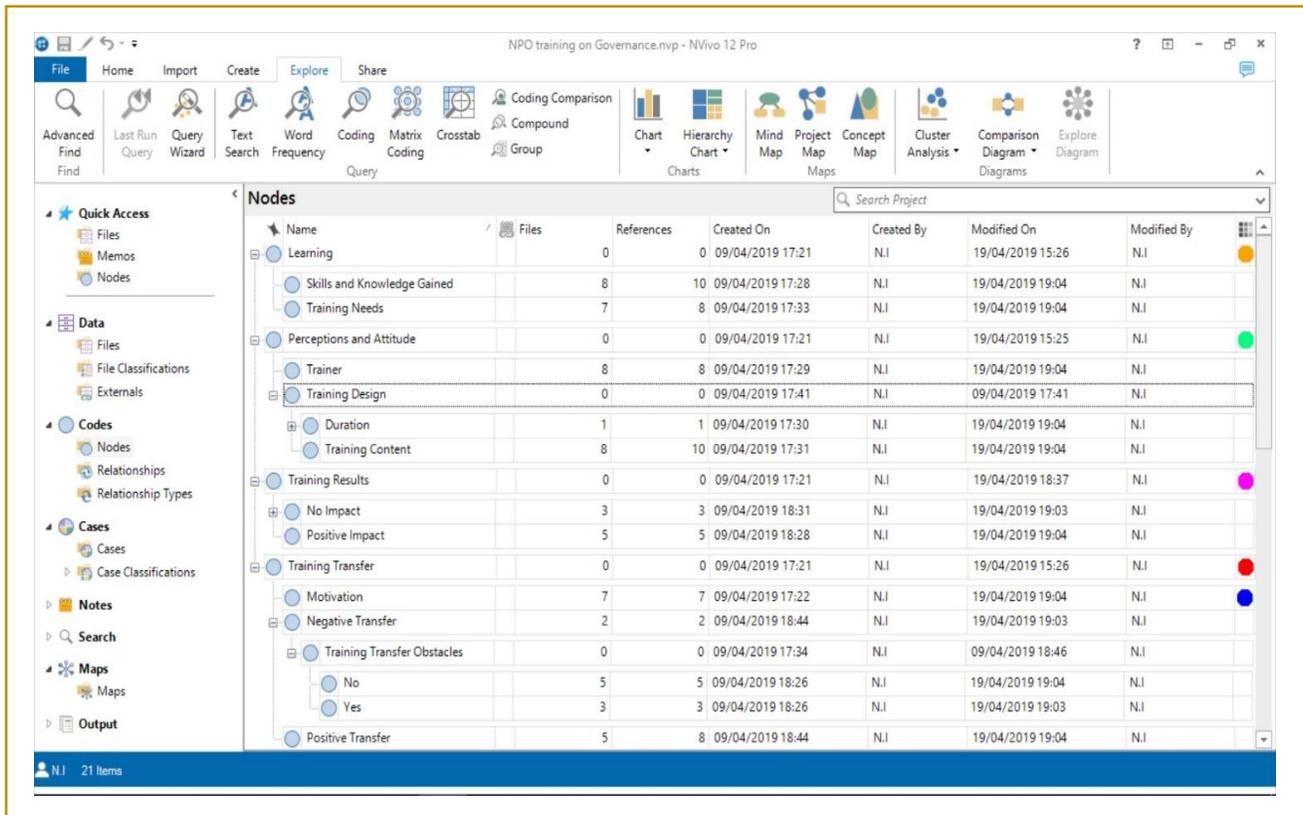


Figure 7.6 Nodes of the Research Themes

The researcher performed the coding, so no coding comparison test was run to compare the coding between two coders or more. The coding comparison query allows for a comparison between two or more groups who coded data separately. This coding comparison intends to test the Kappa Coefficient and percentage agreement of the differences between the coders, and whether such differences vary and acceptable. The screenshot of a coding process is shown in figure 7.7 below:

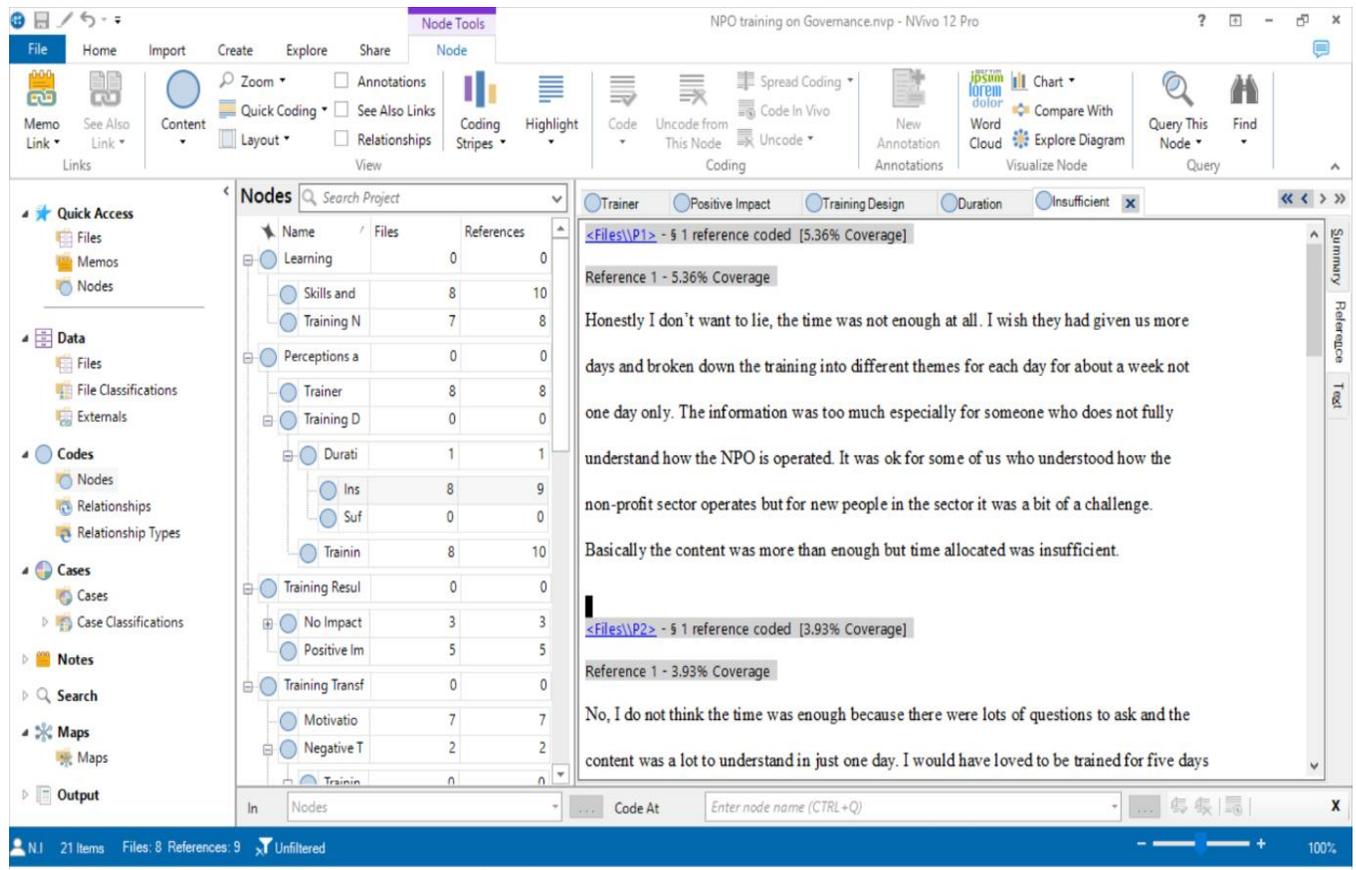


Figure 7.7 Screenshot of the Coding in NVIVO

The researcher highlighted the text in the project document and dragged them to the identified node. The coding stripes were also applied to assist the researcher in the identification and development of concepts, categories, themes, as well as the narrative of this study. The researcher has briefly discussed how the results of the qualitative data were achieved by using NVIVO software. The next section presents the findings of the interviews as per the theme of the research indicated earlier in this chapter.

### 7.3.1 Reaction of the Trainees

In this section, the findings on the reaction of the trainees on the knowledge of the trainer will be presented. The reaction of trainees is based on the perception and attitude of trainees about the training. Three factors are discussed under this section to evaluate the reaction of trainees on the

training design, and these are the duration of the training, the knowledge of the trainer on the subject matter and the relevance of the training content.

### **7. 3.1.1 Reaction of Trainees on the Trainer**

It was interesting to find out that most of the participants found the trainer to be knowledgeable about the issues and challenges faced by NPOs on governance and compliance. Some of the participants indicated that the trainer was flexible in using languages that individuals could understand and easily relate to and that the trainers allowed for participation. One of the participants indicated that the trainer was knowledgeable, but was lost in the middle of the training session because the pace of the training was fast to grasp the content. A point to note is that these are different trainers per municipality even though the perceptions were the same. Some of the responses were:

**P1:** *“If I could rate the facilitator from level one to five, I would give him a four, meaning he was good. He understood what he was talking about. He understood how NPOs work and what the sector is about, what I mostly like about the trainer is that he allowed the free figure of speech, meaning we could express ourselves in the language that we were feeling comfortable with and he was also trying to respond to us in our languages. The training was not fully in English.”*

**P2:** *“I think the trainer was fine but was teaching very fast, there were times when I was completely lost and I had to keep on asking the gentleman who was sitting next to me because he seemed to be knowing and understanding the training more as he was asking a lot of questions”*

Through probing by the researcher on the responses, it was discovered that though some of the participants were saying that the trainer was good, they however, emphasised issues of improvement by the trainer on better understanding of governance issues, an example:

**P6:** *“The trainer was not bad, just ok but he needs more improvement on his facilitation and presentation skills. He also need to empower himself with governance issues in general and Non-profit sector as I picked up some low confidence in addressing the questions posed to him by the class, you see even though I am in the NPO, I was once an employee in few private companies and government before I joined the NPO, and I sat on different Board as Director so issues of governance I know very well and I can tell if someone is confused, but we all learn if we want to”*

It is clear from the findings that though the majority of the participants found the trainer to be good, some did not directly say that the trainer was not good, but through further probing it comes out that the level of knowledge of the trainer was not that satisfactory to some. The next section presents the findings on the perceptions on the duration of the training.

### **7.3.1.2 Reaction of Trainees on the Training Duration**

It was quite surprising to find out that all the eight participants said that the time allocated for the training was insufficient. According to the participants, the training was only conducted in one day to cover the entire manual on governance as well as the NPO Act by DSD. These were some of the responses by the participants:

**P1:** *“Honestly, I do not want to tell a lie; the time was not enough at all. I wish they had given us more days and broken down the training into different themes for each day for about a week, not one day only. The information was too much especially for someone who does not fully understand how the NPO is operated. It was ok for some of us who understood how the non-profit sector operates but for new people in the sector it was a bit of a challenge. The content was more than enough but the time allocated was insufficient.”*

**P3:** *“No, this was a huge disappointment for me. There was so much content, and NDA tried to squeeze all that content in one day. To me, this was impossible for anyone to try and grasp everything that was contained in that manual in one day. I mean the content was from starting an NPO, registration, the appointment of Boards, their assessments, how to report to DSD, the structure of writing the report and so forth, this was just too much content for one day, so the time was very short for such amount of information.”*

**P7:** *“The time was short. I would have loved for us to be broken into groups maybe on day four or five of the training whereby each group will mimic being an NPO, and we are given any materials and reports then we pick up what is wrong about that NPO and what is it that it excels on, something practical so that when we go back, we can visualize those groups imitating NPOs”*

The findings on time allocated towards the training show that participants were not satisfied with the one day that was allocated for the training. Most of them also indicated that the material for the training was a lot to understand in just one day. The participants indicated that they were given the training manual during the training session. The next section will present the findings on the relevance and ease of use of the training content.

### **7.3.1.3 Reaction of Trainees on the Training Content and Objectives**

All the participants indicated that the training was relevant, though some highlighted that besides the relevance of the content, the challenge was understanding most of the content because it was a lot to grasp in one day of training.

**P1:** *“I will say the content of the training was relevant and well-structured from the introduction to the end. It had the right and relevant information, however, there was a lot of content covered within one day where it became difficult to grasp all the information in just one day.”*

**P2:** *“The training was done in a presentation, and we were given the training manual. The training manual was written well with information, but I think the information was too much and we were only given one day for the entire manual”*  
*“The training objectives were explained before the training, but I feel like the objectives were not really met because there was too much to learn in one day only.”*

**P3:** *“The training material was well structured, but I was not satisfied with the articulation. It would have been nice if the materials were also in other languages not just English as we had some old people with low levels of education in class and they a bit lost throughout the training and some of us had to explain to them”*

The findings show that most of the participants found the training content to be relevant, but in the same breath, they also felt that it was a lot to understand in one day. When the researcher probed further around this issue to try and find out if they remembered some of the content, most of them were talking about issues that are not related to governance, only three out of eight could talk about NPO governance issues. The three factors that were intended to be evaluated with regards to the perceptions of trainees on the training design have been presented in this section. The next section looks at the results of the learning theme.

### **7.3.2 Trainees’ Learning**

This section presents the results of the interviews on learning. The learning perspective looked at how far the participants did improve their skills and knowledge as a result of the training. The participants also asked what skills or knowledge (training need) do the participants require to enhance their compliance understanding.

#### **7.3.2.1. Improved Skills and Knowledge**

It was found that all the participants improved either their skills or knowledge because of the training; some of the participants learned new skills that they did not have before the training intervention. This finding is contradicting the quantitative finding where respondents indicated that they did not learn or improve any skills as a result of the NDA training. These were some of the responses on skills and knowledge acquired:

**P1:** *“...Since the training was teaching us how to run the NPO, I can say it helped me to improve more on report writing skills and improved the compliance of the NPO even though our organisation was already complying with the NPO Act from the department of social development...”*

**P2:** *“The training helped me in improving my report writing skills as the Chairperson of the Board. What I have also gained as knowledge is that as the Board, we must ensure that the CEO of the NPO has a performance contract and we must do the performance appraisal. We have never done that in so many years since I have been the chairperson, so I know Board performance appraisal. Another thing on this issue of performance is that the NPO that I work for does not have in place the performance management system, Sisi the training really opened my eyes but the NDA must come back and give us a refresher training because we forget these important things that we are trained on when you only come and train us only once. We were last trained in 2015, and we never saw the NDA again on training.”*

**P3:** *“I really cannot think of any new skill but maybe just an improvement on how to deal with Board related issues better than the way I was approaching things. As an example, I have been the CEO in this NPO for more than seven years, and we have not appointed or rotated for someone else to be the CEO, and I think is because the members do not have the necessary skills and are not confident about themselves to take such responsibility”*

**P4:** *“I have learned about how to resolve conflict in our NPO because it is a serious challenge for us and we have lost so many members in our NPO because of these conflict issues. The problem is the Crèche is operated from the owner’s house, and we do not have much of a say in the running of the crèche.”*

**P6:** *“I did not gain any particular skill as the training was more theoretical than practical, but I can say I gained knowledge on what transparency means and accountability as the NPO. The practical training will help us in improving our skills where NDA can come to our NPO and give us real-life examples for us to solve, then we get tested on what we did wrong. That way we will learn and develop our skills which we can practice on the job...”*

The participants were further asked about the training needs that they think the NDA can provide them with for them to improve the governance challenges that they face as a sector, and these were some of the responses:

**P1:** *“More needed skills for me are on improving compliance reporting. The officials from DSD must discuss all these compliance requirements before funding us because now they expect us to comply when we have been already funded, and we were not really trained on compliance before the actual funding. Most of the NPO members are not really qualified, and they are in the NPOs because of their passion for community development so it cannot be expected from them that they must know these compliance requirements.”*

**P7:** *“I need training on project management so that we can be able to run the project well and identify challenges.”*

The findings from the interviews on training need indicated different types of training that each participant highlighted. The participants were allowed to name any training needs they require for them to improve governance and compliance of their organisations. Multiple training interventions emerged from this question, and they are depicted in Figure 7.8.

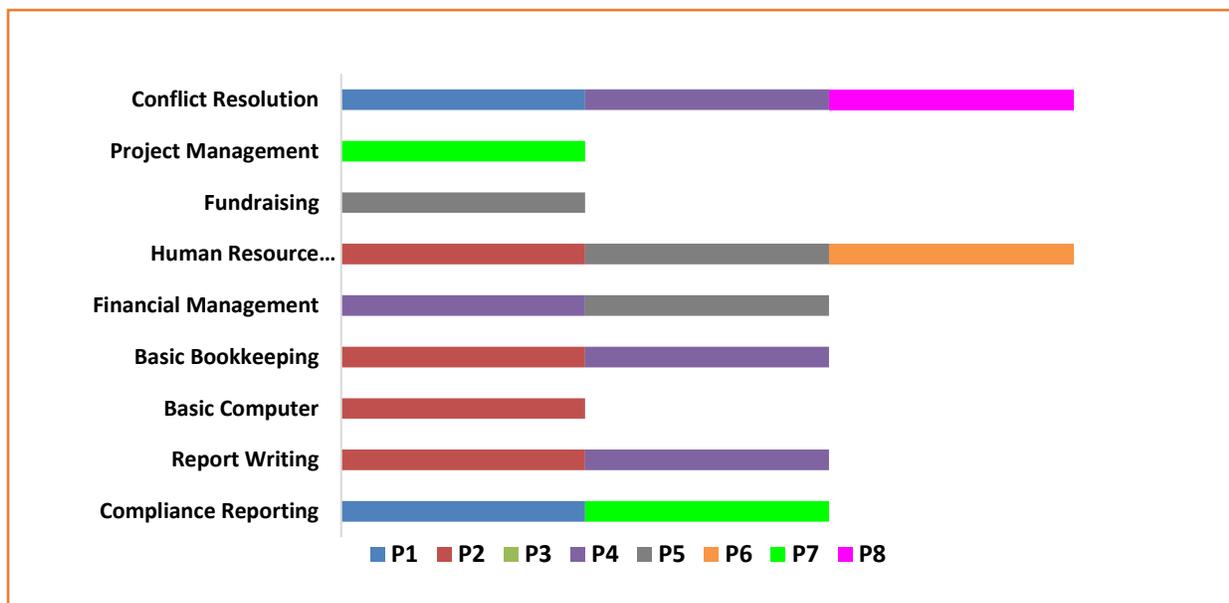


Figure 7.8 Respondents’ Training Needs

Nine training needs were indicated by the participants as presented in the Bar chart above. Participants (P1, P4 and P8) indicated that they need training on conflict resolution. Participant “P1” also indicated the need for compliance reporting. One participant “P7” indicated the need for project management training and another one “P5” fundraising training need. Another strong need was found to be on Human Resource Management by three participants (P2, P5 and P6). Other common training needs that were found to be needed by more than one participant were Financial Management, Basic Bookkeeping, Report writing and Compliance reporting. This section presented the findings on the skills and knowledge improved or gained by the participants as a result of the training. The section further presented the results of the training needs that were highlighted by the participants. The following section looks at the results of the participants’ behaviour.

### **7.3.3 Behaviour of the Trainees**

This section presents the findings on the behaviour of participants. The behaviour of participants evaluated the degree to which the participants have applied what they learned during the training back in their work environment. In this section, the researcher sought to understand if learning transfer has occurred, motivation for transferring learning and any obstacles in transferring learning back on the job.

#### **7.3.3.1 Learning Transfer**

It was found that out of the eight participants, only five (64%) transferred what they have learned from the training back in their working environment. These were some of the responses:

**P1:** *“When I came back from the training I organised a meeting with all the colleagues in a boardroom on a Friday where I shared with everyone what I was trained on, especially issues of compiling the reports, keeping financial records of all expenditures, selection of the board and the importance of minute-taking during meetings.”*

**P2:** *“The skill that I shared with my peers was on how to resolve conflict matters in the NPO when there are issues.”*

**P4:** *“How to be transparent in finances of the NPO, I am saying this because we are not transparent in running the organisations and this is not only in the sector but also the private sector, and government and these are the things that end up leading to corruption. The reason is that if we did not perform or spend the money well, we are afraid to account and report; hence, we fail as NPOs. Transparency is essential not only for us as Board members but for all the employees.”*

About three (34%) of the participants indicated that they did not transfer any learning from the training back in their work environment. These were some of the responses after further probing:

**P5:** *“I did not transfer any skills as the work environment in my NPO is not accommodating for us to share the knowledge. The problem is our NPO is that supervisors or Managers of the NPO think that when you develop yourself, you are in a competition with them, which is not the case. I think there is a stereotype thinking that young people are there to compete with the older members and take control and it is not true, we as the young generation are passionate about community development and are willing to share the knowledge and innovation ideas that our elders did not have the opportunity to know them. I am only 33 years old and have been with the NPO since 2012, I have a degree in Community Development, and I am passionate about community issues. I am not sure how this issue can be addressed by the government, but it is a challenge and creates a lot of uncertainties and conflict amongst members of the NPO.”*

**P7:** *“I honestly did not transfer any skills back on the NPO after the training, but this is not because I did not want to, I was afraid that what I will transfer might not be correct. So I wanted to have time to go through the training manual on my own once more so that I can understand it better because it was a lot in one day. In short, I was uncomfortable and not confident to transfer training back on the job.”*

**P3:** *“Genuinely speaking, I did not transfer any learning back on the job because I felt like this training was just like any other training I have attended before with no value to me. We attend these pieces of training just for the heck of it, and it is just a waste of government money and our time. So it is important for you as the NDA to do your research before you train us and not come and present to us and you call it training, that is not training. We should be able to sit with other organisations and share what we have learned, write exams to test our knowledge, not those forms we were given after the training and you called them a post-training assessment, I even wrote in that form that the training was a waste of my time and Tax money, the only good thing that was better not even good was the food...nothing else.”*

Factors arising for non-transferability were work environment factors of not having resources such as equipment and time. It also emerged that conflict arises due to the NPO managers feeling intimidated by the young members. This is an indication of the weaknesses in the approach used by the NDA when selecting members to attend trainings. The next section presents the findings on the obstacles that prevented the participants from transferring the learning from the training back in their respective work environments.

### **7.3.3.2 Obstacles in Learning Transfer**

It was found that the participants that had transferred learning back in their work environment did not indicate any obstacles in transferring learning. On the other hand, the participants that did not transfer learning indicated the following obstacles as factors that prevented them from transferring learning back on the job. These were some of what they said:

**P5:** *“The owner of the NPO does not allow us to transfer what we have learned back on the job. I am the Board Secretary, and I wanted to assist on having a workshop with the members of the NPO on conflict management, and the CEO told me that it is her job and my role is just to take minutes of the Board meetings, this has demoralized me, and I asked myself why am I attending the training but not allowed to apply it where I work.”*

**P7:** *“There were time constraints. I did not have enough time to transfer what I have learned back on the job because I am always busy and attending lots of meetings. By the time I had some time on my hands, I could not remember most of the things that I was trained on. Another obstacle that I was faced with was that I could not apply the skills back because the training content was too much for me to remember.”*

The findings showed that some participants were able to transfer learning, whereas some could not transfer learning back in their workplace. The next section presents the results of the organisation after the training.

### **7.3.4 Training Results**

In this section, the findings on the training result are presented. This looked at what has improved in the organisation as a result of the training. As part of the results, participants were further asked to indicate what their expectations were when they attended the training. The section will start with the findings on expectations, then followed by the organisational results/impact.

#### **7.3.4.1 Participants’ Expectations**

It was interesting to find that most of the participants had specific expectations before the training, though also surprised at the same time that others did not have any expectations and just attended the training because they were informed that they need such training. Only two participants out of the eight expressed high expectations and goals for the training, and the rest of the participants said they expected to learn more skills, with some indicating compliance reporting by DSD as the expectation. Another interesting finding was that about 90% of the participants said they were expecting the NDA to give them an accredited certificate of attendance or completion after the training.

**P1:** *“For me, I wanted to improve and learn new things, especially around the issues of NPO Act and Policy because I thought that the policy and Act were revised as per the resolutions of the NPO Summit that we attended organised by DSD. I was so excited that we were going to be informed and trained on revised NPO framework*

*that was discussed at the NPO summit by DSD as one of the resolutions, but that was not the case.”*

**P2:** *“What motivated me on to attend the training was when I saw the content that the NDA said they were going to cover in training, especially issues of Board structures and how to appoint them was exciting for me to understand better as I had never attended a governance training before even though I serve on the Board of the NPO. I was, however, expecting that we will be awarded certificates after attending the training.”*

**P3:** *“I did not have any specific goal, I only had expectations to improve on my skills and have a certificate.”*

**P5:** *“I wanted to improve my knowledge and understand issues of governance further, If I know more about governance I think I will open my own company someday and also teach other people on the skills that I would have learned. My goals were just to learn and learn and learn new things.”*

**P8:** *“For me, the training alone does not motivate me, so I think that is why I was not motivated and did not have any specific expectations. Personally what would motivate me is to be acknowledged by the supervisors or my colleagues, that will motivate me, but how can we be motivated when the government institutions like yourself the NDA train bus and do not even award us with certificates or accredit us with any unit standards...”*

When asked what has changed in their organisations as a result of the NDA training, these were some of the responses:

**P1:** *“Our organisation has been operating since 2007, so we never really had issues on compliance or governance, so the training was more to improve small issues in this corner and that corner. So I wouldn’t say the training brought any change in the organisation, as I said earlier in this interview that my expectations for the training were more on discussions of NPO frameworks and policies as well as the NPO Act and how the training can bridge those gaps.”*

**P6:** “Because of the NDA training, we put together a policy for dealing with conflict issues, we never had a policy, and now we do even though issues of conflict cannot be resolved overnight, we still have them, but they are now minimal because we have policies and processes now in place.”

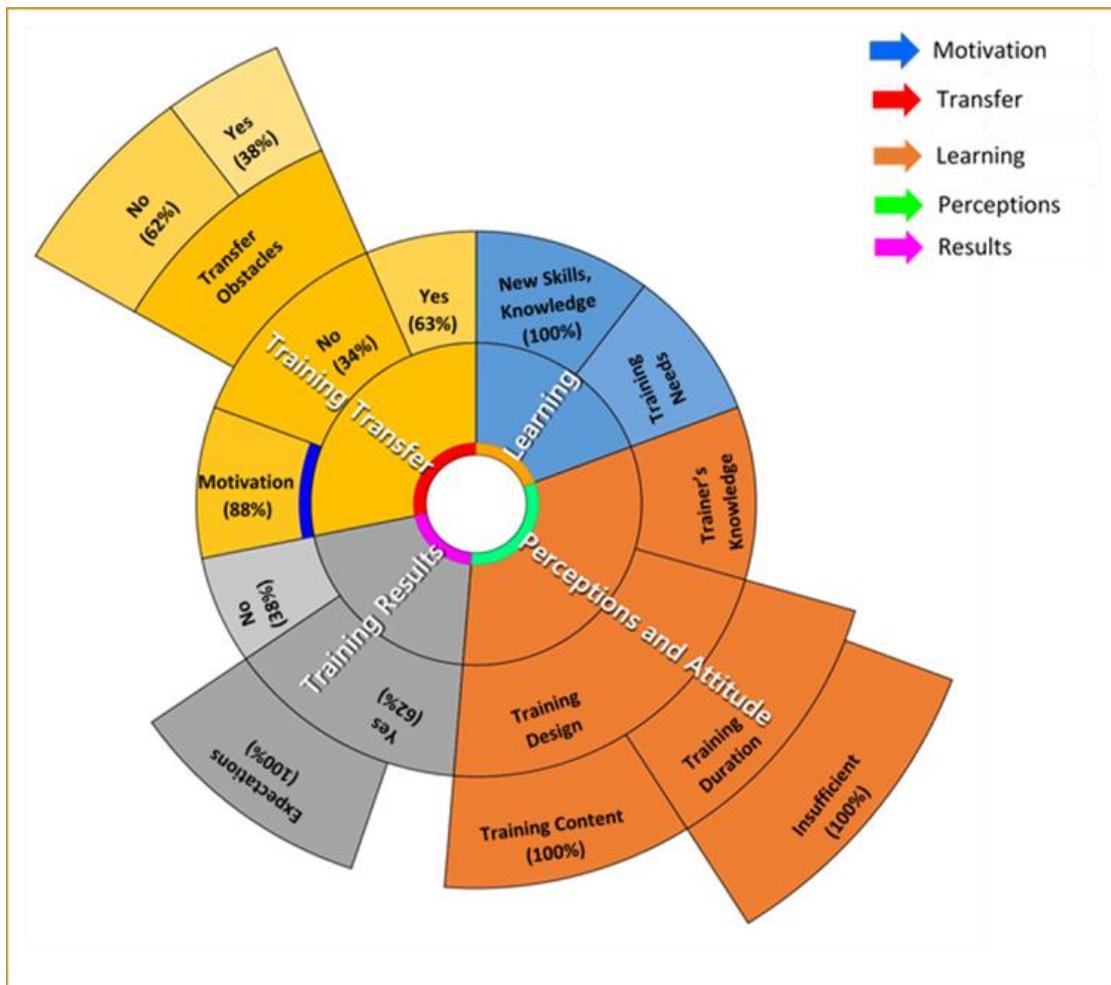


Figure 7.9 Sunburst Hierarchy of Codes

The findings on the results and expectations were presented in this section. The next section summarises the entire chapter on the results of qualitative data. Furthermore, the visualisation on

the findings of the research themes coded in NVIVO as narrated in the earlier in this chapter, are visually presented in the diagram below.

Interesting in the diagram, the findings show that 100% of the participants said the time allocated for the training was insufficient as well as training content that was found to be relevant though followed by some comments as indicated in the preceding sections that it was a lot to grasp in one day. The graph also shows that about 62% had expectations for the training, and only 38% said they did not have any training goals or expectations. Concerning transferring of learning back on the job, about 62% said they did not have any obstacles to transfer, whereas 38% said they had obstacles that prevented them from transferring the learning from the training back in their work environment.

#### **7.4 Chapter Conclusion**

By using the NVIVO software, the data collected from interviews were coded and categorised into themes using Nodes. The major categories were trainees' perceptions and attitude on the training, the learning, trainees' behaviour and results. The chapter started by defining the characteristics of the study participants to give the readers demographic data on the participants. In the section of trainees' reaction, the perceptions about the training design with regards to the duration, content relevance and trainer's knowledge were first presented. The learning aspects was also presented where finding looked at the skills and knowledge of trainees from the training, followed by the transfer of learning back on the job and finally the impact that the training has made in the organisation as a result of the training. The summary of the findings is shown in Table 7.2 below. The discussions on the findings of both quantitative and qualitative data will be discussed in the next chapter.

**Table 7. 2 Summary of Interviews Key Findings**

<i>Theme</i>	<i>Meaning</i>	<i>Findings from Interviews</i>
<b>Reaction</b>	Perceptions and Attitude of participants on the training design (Trainer, Duration, Content)	<p><i>“I think the trainer was fine but was teaching very fast” (P2)</i></p> <p><i>“...The trainer was good, he understood what he was talking about” (P1)</i></p> <p><i>“The trainer was not bad, just ok ...more improvement on his facilitation and presentation skills (P6)</i></p> <p><i>“Honestly I do not want to tell a lie; the time was not enough at all” (P1)</i></p> <p><i>“... so the time was very short for such amount of information” (P3)</i></p> <p><i>“I will say the content of the training was relevant and well-structured...” (P1)</i></p> <p><i>“I think the information was too much and we were only given one day...” (P2)</i></p> <p><i>“The training material was well structured, but articulation was a bit not so satisfactory...and the training objectives were nicely explained, but I feel they were not met at the end of the training...I expected more” (P7)</i></p>
<b>Learning</b>	Improved Skills and Knowledge due to the training intervention	<p><i>“...it helped me to improve more on my report writing skills” (P1)</i></p> <p><i>“The training helped me in improving my report writing skills... I have knowledge on Board performance appraisals” (P2)</i></p> <p><i>“I really cannot think of any new skill...” (P3)</i></p> <p><i>“...how to resolve conflict in our NPO because it is a serious challenge ...” (P4)</i></p> <p><i>“I did not gain any particular skill as the training was more theoretical than practical...” (P6)</i></p>

		<i>“I really do not know what to say to you because the time was not enough and I was confused most of the time in the classroom and was feeling ashamed to raise my hand and ask questions...”(P7)</i>
<b>Behaviour</b>	Behaviour means the transfer of what the participants learned from the training back in their work environment (application) as well as obstacles in transferring the learning back on the job.	<p><i>“...I shared with everyone what I was trained on ...especially issues of compiling the reports, keeping financial records of all expenditures, selection of the board and the importance of minute taking...” (P1)</i></p> <p><i>“The skill that I shared with my peers was on how to resolve conflict...” (P2)</i></p> <p><i>“I did not transfer any skills as the work environment in my NPO is not accommodating for us to share the knowledge... I think there is a stereotype thinking...” (P5)</i></p> <p><i>“Genuinely speaking, I did not transfer any learning... this training was just like any other training ...no value to me ...just a waste of government money and our time ...” (P3)</i></p> <p><i>“The owner of the NPO does not allow us to transfer what we have learned back on the job” (P5)</i></p> <p><i>“There were time constraints. I did not have enough time to transfer what I have learned back on the job...I would have loved if the training was covering the issues that we experience every day when we have to compile the annual narrative reports because it is difficult to write such reports...I was afraid that I would share the wrong information with colleagues as I did not understand the training that much” (P7)</i></p>
<b>Results</b>	The results looked at what has improved in the organisation	<i>“For me, I wanted to improve and learn new things, especially around the issues of NPO Act and Policy...this was not the case” (P1)</i>

	<p>because of the training. This also looked at the participants' expectations and goals for the training</p>	<p><i>“What motivated me...the content that the NDA said they were going to cover in training, especially issues of Board structures ... I was, however, expecting that we will be awarded certificates after attending the training” (P2)</i></p> <p><i>“I did not have any specific goal, I only had expectations to improve on my skills and have a certificate” (P3)</i></p> <p><i>“I wanted to improve my knowledge and understand issues of governance further... the goals for me was just to learn and learn and learn new things” (P5)</i></p> <p><i>“For me, the training alone does not motivate me, so I think that is why I was not motivated and did not have any specific expectations” (P8)</i></p> <p><i>“... we never really had issues on compliance or governance ... the training was more to improve small issues in this corner and that corner, I would not say the training brought any change in the organisation” (P1)</i></p> <p><i>“Because of the NDA training, we put together a policy for dealing with conflict issues, we never had a policy and now we do even though issues of conflict cannot be resolved overnight, we still have them, but they are now minimal because we have policies and processes now in place” (P6)</i></p>
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## **CHAPTER 8: DISCUSSION OF RESULTS**

### **8.1 Introduction**

This chapter discusses in detail the qualitative and quantitative results based on the analyses. The objective of this study was to explore or investigate the effectiveness of NDA training by understanding the possible relationships and predictive effects of the independent variables (i.e., training content and training objectives) on the dependent variables (i.e., reaction, learning, behaviour and results). This study also investigated the moderating effect of training content and training objectives as training characteristics on the relationship between the outcomes (i.e., reactions, learning, behaviour and results). The time horizon of this study is cross-sectional whereby data were collected from the NPOs in Gauteng province in a single study three years after the NDA training. This chapter aims to bring together the results that emanated from both the online questionnaire and the interviews into a coherent whole. The two previous chapters provided quantitative data analysis (chapter 6) and qualitative data analysis (chapter 7).

This chapter is divided into three sections (8.2, 8.3 and 8.4). The first section presents issues relating to the population and sample for both quantitative and qualitative data. The second section reviews the results and makes a comparison between them and the reviewed literature, whereas the third section discusses the objectives of this study based on the findings from the data analysis process.

### **8.2 Population and Sample**

This research was conducted on one occasion (once-off) by examining the effectiveness of NDA training across the NPOs that were trained on NPO governance and non-compliance. The simple, random sampling strategy was used for data collection. The population size for the study was 589 as highlighted earlier in Chapter 5. The quantitative data collection was conducted by distributing a total of 253 questionnaires for the quantitative study, and fifteen interviews were requested for qualitative data. The questionnaire was distributed online, and by emails to the individuals who attended the NPO governance and non-compliance training, furthermore, interviews were conducted face to face and on-site with each participant. Out of 253 questionnaires that were sent, 209 were filled and returned. Out of fifteen sampled interview requests, only eight agreed to be interviewed. The sample

size was sufficient to be used in this research to represent the total population, establish test reliability as well as employing the structural equation modelling (SEM) to analyse the proposed conceptual framework of this study.

According to Collis and Hussey (2003); Tabachnick and Fidell (2001), a sample size of 100 is considered weak, 200 is reasonable, 300 is considered good, 500 is very good, and more than 1000 is excellent. Although this research sampled a reasonable sample size of 253 based on the population size and the design of the study (survey), it gave a substantive representation of the total population of the NPOs who attended the training in Gauteng. The response rate for the questionnaire was moderate to good (8 out of 15) because participation was voluntary, as mentioned in the research methodology (see Chapter 5). Preliminary data analysis such as data screening to identify missing data or outliers should be conducted before the actual data analysis to ensure the accuracy of the data. According to Kline (2011), if the missing data is less than 5% of the total data and the reason for the incomplete data is ignorable, then a simple analysis should yield acceptable results. The survey of this study showed no missing data; however, out of the initial 209 returned questionnaires, nine of them were discarded as the respondents selected the same answers on a five-point Likert scale. The univariate outliers were examined by using frequency distributions which revealed these nine mentioned cases as extreme outliers in the survey. This translated to about 4% discarded questionnaires. After the questionnaires were discarded, the final cleaned sample size for analysis was 200 cases.

### **8.3 Validation of the Instrument**

In ensuring the accuracy of the measurements, this research used convergent and discriminant validity. According to Hair et al. (2014), factor loading, average variance extracted, and composite reliability can be used to evaluate convergent validity. The minimum cut off point for factor loading is  $<0.5$ , the average variance extracted is greater or equals to 0.5 ( $AVE \geq .5$ ), and composite reliability is greater than 0.6 ( $CR > .6$ ). All the figures showed a high level of convergent validity as the instrument of convergent validity exceeded the minimum threshold for factor loading, average variance extracted, and composite reliability.

Hair et al. (2014), further assert that contrasting the average variance extracted values for any two constructs with the square of the correlation estimates can be used to evaluate the discriminant validity. Discriminant validity is significant if the average variance extracted of any construct is greater than the squared correlation. The results of this study indicate that the average variance extracted values are greater than the squared correlation estimate for all the constructs, which means that the level of discriminant validity of this study is significant. (see Chapter 6, Table 6.13). The study further used Cronbach 's alpha ( $\alpha$ ) to assess the internal consistency and reliability of the questionnaire. The constructs of this study have a reliability of between 0.726 and 0.812, which demonstrated good internal reliability of the instrument. Overall, the survey sample in this study exhibits high levels of internal reliability and validity. The next section discusses the hypothesis testing results.

#### **8.4 Hypothesis Testing**

This study examined the potential effects of training content and training objectives on training outcomes (reaction, learning, behaviour and results), to determine if the training was effective in improving skills and knowledge of the trainees as well as the governance and non-compliance of the organisations. The results of the hypothesis testing revealed that training content has a significant positive influence on trainees change in behaviour. Training objectives also have a strong influence on how the trainees perceive and react to the training (reaction). On the other hand, training content did not have a direct impact on trainee's reaction to the training as well as their learning and improvement of governance and non-compliance in their organisations (results). Similarly, training objectives did not have a direct impact on learning, behaviour and results. Trainees reaction to the training showed a substantial effect on learning, and learning also had a strong effect on change in behaviour. Both the training content and training objectives did not moderate the relationship between learning and behaviour. Similarly, behaviour showed a positive impact with training outcome (results); furthermore, training content and training objectives moderated the relationship between behaviour and results.

## **8.5 Discussions on the Results**

The revised model consists of six constructs and fifteen statements, seven of the statements were accepted, and eight rejected (see Table 6.19). The hypotheses tested by the Survey are discussed below. Further details on each hypothesis are discussed next.

### **8.5.1 Training content, objectives and reaction of trainees**

The findings of this study do not support the hypothesis that training content has a positive influence on the trainee's perceptions and attitudes (reaction) to the training. Therefore, the results of the study are inconsistent with the findings by Nikandrou et al. (2009) who found the perceived usefulness of the training content to have a significant effect on the reaction, learning and behaviour. On the other hand, training objectives positively influenced trainees' reaction. Grossman and Salas (2011) found the relatedness of training content to day to day duties to influence the trainees' attitude and perception about the training, learning and transfer of learning.

Furthermore, the results are inconsistent with Farr et al., (1993) who found relevance and simplicity of training content to have a significant influence on training outcomes (reaction, learning, behaviour and results). However, the results of this study are consistent with Diamantidis and Chatzoglou (2012) who found training content and objectives to have no significant influence on trainee's reaction and learning. Accordingly, the trainees' reactions to the training will not always be supported by the training content as uncovered by this study.

The results of this study support the hypothesis that training objectives have an influence or effects on trainees' reaction to the training. These results are consistent with the findings by Diamantidis and Chatzoglou (2012), who found a significant positive relationship between training objectives and trainee's reaction, behavioural change. Table 8.1 summarises the research studies on reaction and training content, objectives on training effectiveness.

**Table 8. 1 Summaries of Studies of Reaction and Training Content, Training Objectives**

<i>Researchers</i>	<i>Dependent Variable</i>	<i>Independent Variable</i>	<i>Major Findings</i>
Nikandrou et al. (2009)	Reaction, learning	Training Content	Perceived usefulness of training content has a significant positive effect on the reaction.
Grossman & Salas (2011)	Reaction, learning & behaviour	Training Content	Relatedness of training content to day to day duties have a positive influence on trainees' attitude and perception about the training
Farr et al., (1993)	Reaction	Training Content	Relevance and simplicity of training content have a significant influence on training outcomes (reaction, learning and behaviour)
Diamantidis & Chatzoglou (2012)	Reaction	Training Content, training objectives	The training content has no significant influence on trainee's reaction and learning.

### 8.5.2 Training Content, Objectives and Learning

The findings of this study do not support the hypothesis that training content and training objectives have a positive influence on learning. Therefore, the results of this study are inconsistent with Mara (2015), who found a positive relationship between training content and learning. Similarities of the training content and materials to the needs of the organisation was found to have a significant impact on trainees' improvement of skills and knowledge (Hutchins, 2009); and perceived content validity of the training was found to have a strong positive effect on trainees' learning (Yamhill & Mclean, 2005). Furthermore, Namasivayamn et al. (2005) found a significant relationship between trainees' acquisition of learning and the training design factors such as training content and training objectives amongst others. Diamantidis and Chatzoglou (2012) who found a significant relationship between training goals/objectives and learning. In contrast, Diamantidis and Chatzoglou (2012) found no significant relationship between training content and learning. This finding is consistent with our results that training objectives will not always lead to learning of trainees. Table 8.2 below

summarises the research studies on training objectives and training content and objectives on learning.

**Table 8. 2 Summaries of Studies of Training Content and Objectives on Learning**

<i>Researchers</i>	<i>Dependent Variables</i>	<i>Independent Variables</i>	<i>Major Findings</i>
Diamantidis & Chatzoglou (2012)	Learning,	Training content, training goals/objectives	Training content had an insignificant effect on learning. Training goals/objectives had a significant effect on learning.
Mara (2015)	Learning	Training Content	Training content had a significant effect on learning and transfer of learning.
Hutchins (2009)	Learning (improved skills and knowledge)	Training Content, Materials	Similarities of the training content to the needs of the organisation had a significant impact on trainees' learning.
Yamhill & Mclean (2005)	Learning	Training Content Validity	Perceived content validity had a positive effect on trainees' learning
Namasivayamn et al., (2005)	Acquisition of learning	Training Design Factors	Training design factors such as training content had a significant effect on the acquisition of learning.

### **8.5.3 Training Content, Objectives and Behaviour**

The findings of this study do not support the hypothesis that training objectives have a positive influence on behaviour. However, the hypotheses that training content have a positive effect on behaviour was supported. Therefore, the results of the study are consistent with the findings by (Holton & Baldwin, 2003) who found training content validity to have a positive influence on the

transfer of learning (behaviour) back on the job. Similarly, EL Hajjar and Alkhanaizi (2018) found a positive linear correlation between training content and transfer of learning back on the job. However, results from the interviews in this study were inconsistent with the questionnaire findings as they revealed that trainees did not transfer learning back on the job because of different factors such as lack of time to transfer, lack of support from supervisor and not knowing what exactly to transfer back on the job (lack of content understanding). The outcome of our interviews was consistent with the study by (Pham, Segers & Gijsselaers, 2013) which showed that supervisory support, job autonomy, content understanding and preferred support were significantly associated with the training transfer. Velada et al., (2007) found retained of training content over time to have a significant positive impact on behaviour.

On the other hand, training objectives were found not to have a significant impact on trainee's motivation to learn and change in behaviour (Yamnill & Mclean, 2005). On the contrary, Al-Mughairi (2018) found a significant positive relationship between training objectives and trainees 'change in behaviour. These results of this study are consistent with the findings by (Yamnill & Mclean, 2005). Training objectives did not have significant impact on transfer of learning or behavioural change ( $\beta = 0.076$ ,  $p > 0.05$ ,  $t = -.988$ ).

#### **8.5.4 Training Content, Objectives and Results**

The findings of this study support the hypothesis that training content has a positive influence on training results ( $\beta = 0.461$ ,  $t\text{-value} = 2.260$ ,  $p = 0.006$ ). Therefore, the results of this study are consistent with previous studies by Bates et al. (2007), Velada et al., (2007), and Grohmann et al., (2014) who found a significant relationship between training content, behaviour and training results. Diamantidis and Chatzoglou (2014) also found a significant positive relationship between the training content application and training results (employee job performance). On the contrary, the results of this study are inconsistent with Diamantidis and Chatzoglou (2012) found training content to have no significant influence of training on training results. Thus, the results will support the hypothesis that training content has a significant influence on the training outcome (results) as revealed in this study.

**Table 8. 3 Summaries of Studies of Training Content and Objectives on Behaviour**

<i>Researchers</i>	<i>Dependent Variables</i>	<i>Independent Variables</i>	<i>Major Findings</i>
Holton & Baldwin (2003)	Transfer of learning	Training content	Content validity has a significant positive impact on the transfer of learning (behaviour)
EL Hajjar & Alkhanaizi (2018)	Learning Transfer (Behaviour)	Training Content	Positive linear correlation between training content and transfer of learning back on the job
Velada et al., (2007)	Transfer of learning	Training Content,	Retained training content over time have a significant positive impact on behaviour.
Morin & Latham (2000)	Learning Transfer	Goal setting/training objectives	Goal setting of the training has a positive impact on the transfer of learning.
Brown (2005)	Training Transfer (Behaviour)	Training objectives and goals	Training objectives/goals setting goal setting have a positive impact on the transfer of learning.
Yamnill & Mclean (2005)	Behaviour	Training Objectives, Training content	Perceived content validity have a strong positive effect on change in behaviour and clearly understood objectives have a positive effect on motivation to learn and transfer training content.
Diamantidis & Chatzoglou (2012)	Behaviour	Training Design factors	No significant relationship between training content, objectives and learning.
Al-Mughairi (2018)	Behavioural Change	Training Objectives, Training content	Training objectives and training content had a significant relationship with behavioural change.

The results of this study do not support the hypothesis that training objectives have a significant positive influence on results ( $H2d$ ,  $\beta = 0.110$ ,  $p = 0.266$ ,  $t = 1.585$ ). This result is inconsistent with previous studies by Morin and Latham (2000), Richman-Hirsch (2001), Brown (2005), and Diamantidis and Chatzoglou (2012), who found a significant positive impact of training objectives or goals on the training outcome (results). Therefore, the training outcome (results) will not always be supported positively by training objectives, as revealed in this study. Table 8.4 summarises the studies on the effects/impact/relationship between training content, objectives and training outcome (results).

**Table 8. 4 Summaries of Studies of Training Content and Objectives on Training Results**

<i>Researchers</i>	<i>Dependent Variables</i>	<i>Independent Variables</i>	<i>Major Findings</i>
Bates et al., (2007)	Behaviour, Results	Training content	Training Content had a significant positive impact on the transfer of learning and results (training outcome).
Diamantidis & Chatzoglou (2014)	Training Results	Training Content	Training content application had a significant positive relationship with training results (employee job performance).
Velada et al., (2007)	Training Results	Training Content	Retained training content over time had a significant positive impact on behaviour.
Al-Mughairi (2018)	Results	Training Objectives, content	Training objectives and training content had an insignificant relationship with training results.

### **8.5.5 Relationship between Reaction and Learning**

This study hypothesised that reaction has an impact on learning. The hypothesis was supported and confirmed by the results ( $H5$ ,  $\beta = 0.145$ ,  $p = 0.033$ ,  $t = 2.243$ ). The results of this study support Kirkpatrick (1996) assumption that there is a positive relationship between reaction and learning. Furthermore, these results are consistent with the findings by Al-Mughairi (2018); Borate and Borate

(2014); Kirkpatrick and Kirkpatrick (2008); Aryadoust (2017) who found correlation or relationship between trainees' reaction to the training and learning. On the other hand, Alliger and Janak (1989) found only a weak linear relationship between reactions and learning, whereas much stronger relationships were evident among learning, behaviour, and results.

**Table 8. 5 Summaries of Studies on Relationship between Reaction and Learning**

<i>Researchers</i>	<i>Dependent Variables</i>	<i>Independent Variables</i>	<i>Major Findings</i>
Alliger and Janak (1989)	Training effectiveness	Reaction, learning, behaviour and results	The weak linear relationship was found between reaction and learning
Kirkpatrick & Kirkpatrick (2008)	Training effectiveness	Reaction, learning, behaviour and results	The positive reaction of trainees with the training program had a positive effect on learning.
Borate & Borate (2014)	Training effectiveness	Reaction, learning, behaviour and results	The reaction of students had a significant effect on learning.
Colquitt et al. (2000)	Learning, transfer, job performance	Reaction, Age, Valence	Trainees' reaction was weakly related to learning
Aryadoust (2017)	Improved Skills and Knowledge	Reaction	A positive reaction to the training highly correlated with improved knowledge and skills.
Noe & Schmitt (1986)	Training effectiveness	Trainees Attitudes	No relationship between trainee' attitudes and learning

### **8.5.6 Relationship between Learning and Behaviour**

In this study, behaviour means the transfer of learned skills and knowledge back on the job as well as the intention of trainees or desire to apply what they have learned from the training in their everyday work tasks. This study hypothesised that learning would have a significant effect on behaviour. The hypothesis was supported and confirmed by the results ( $\beta = 0.620$ ,  $t$ -value = 3.743,  $p = 0.001$ ), which were found to be statistically significant. The results support the findings by Cheng and Ho (1998), Lim and Johnson (2002), Holton and Baldwin (2003), Velada et al., (2007), Weiermann (2012) and Homklin et al. (2014), who found a relationship and impact of learning on behaviour. Furthermore, Lim and Johnson (2002) found a high perceived degree of learning to be associated with a high perceived degree of transfer and low perceived learning to be associated with low perceived of training transfer. Nelms and Dively (2007) also found an active learning approach in training by involving students in their learning than just listening to influence transferring the skills and knowledge that they have learned. Although the results of the survey questionnaire revealed a significant relationship between learning and behaviour, the results of the interviews revealed that no transfer of learning took place after the training.

Although the results of our study found a relationship between learning and behaviour, they are in contrast with findings by Colquitt et al. (2000), which showed learning to be not a predictor of behaviour. Machin and Fogarty (2003) as well argued that perceived success in learning does not guarantee the application of learned skills and knowledge back in the job; hence, they found an insignificant relationship between learning and intention to transfer learning back on the job. However, the findings from the interviews indicate that no transfer of skills and knowledge occurred back in the job. Several reasons were indicated by the study participants such as: not knowing what content to transfer as the training duration was very limited to grasp the content, lack of peer support in the workplace to transfer the learning. The results of our interviews are consistent with Machin and Fogarty (2003) as some trainees indicated that they did learn some new skills and acquired new knowledge; however, this does not translate to noticeable learning transfer.

**Table 8. 6 Summaries of Studies on Learning and Behaviour**

<i>Researchers</i>	<i>Dependent Variables</i>	<i>Independent Variables</i>	<i>Major Findings</i>
Cheng & Ho (1998)	Training Effectiveness	Training relevance and motivation, training content	The familiarity of training content and relevance of the training were found to predict motivation to learn and transferring learning.
Lim & Johnson (2002)	Learning Transfer	Learning	High perceived degree of learning was associated with a high perceived degree of transfer and low perceived learning was associated with low perceived transfer.
Machin & Fogarty (2004)	Learning transfer	Trainees self-efficacy, motivation to learn	Trainees that were motivated to learn before attending the training were able to transfer learning back on the job.
Weiermann (2012)	Learning, Knowledge Transfer	Implicit Task sequence learning	Trainers who matched their teaching methods to visual, auditory, and kinesthetic learners were found to enhance learning and knowledge transfer by students.
Nelms & Dively (2007)	Knowledge Transfer	Learning	Active learning through students involvement influenced their change in behaviour as compared to just listening to the trainer.

The results from the interviews also revealed that participants felt that the training they received did not meet their needs as they expected training content that relates to their everyday challenges when compiling annual reports to Department of Social Development, rather than just a presentation approach. According to Holton and Baldwin (2003), training should match the training needs of the

workplace. Therefore, learning by trainees will not always support their intention to transfer such skills and knowledge back in the job, as the results of the interviews revealed.

### **8.5.7 Relationship between Behaviour and Results**

As discussed in details in the earlier chapters, behaviour measures the capacity of the trainee to apply learned skills and knowledge back in the workplace, whereas results assess the impact by the training on the organisation (Kirkpatrick & Kirkpatrick, 2006). The results of this study support the hypothesis that behaviour has a significant influence on results (H7,  $\beta = 0.565$ ,  $p = 0.003$ ,  $t = 6.248$ ). The hypothesis was on the assumption by Kirkpatrick and Kirkpatrick (1996), that there is a positive relationship between behaviour and results. The results of our study are again consistent with the findings by Lin et al. (2011), who found a significant relationship between behaviour and results in their studies. Homklin et al., (2014) found higher levels of knowledge retained to have a positive effect on higher transfer and when the transfer is higher, then the job performance improved. Granado (2016) in his study to improve training effectiveness of the training provided to the public servants in the region of Andalusia (Spain), found transferability of training to be useful in detecting the weaknesses, strengths and improvements in training and proposals. If trainees apply their newly learned skills and knowledge in their workplace, organisations are likely to improve the results on non-compliance and governance. However, also keeping in mind that the learned skills and knowledge should be correct and relevant in addressing the problem. Thus, learning transfer will support positive training outcome. The earlier hypothesis was supported on training content to have a significant effect on both behaviour and results. As a result, a positive behavioural change will occur if the training content is relevant and familiar with the job tasks. This study supports that change in behaviour of trainees occurs when the training content is relevant to the trainee 's work task (Cheng & Ho, 1998). Alvarez et al. (2004) also found a significant positive effect of trainees' behaviour on the magnitude of the program's results (i.e. the degree of their job performance improvement). Similarly, Al-Mughairi (2018) found a significant positive relationship between trainee' behaviour and results.

In contrast to these findings, Hauser, Weisweiler and Frey (2018) found a significant relationship between the first three levels of Kirkpatrick (reaction, learning and behaviour); however, there was

no significant relationship between behaviour and increased employee's commitment to the organisation. This finding is inconsistent with our survey results. Similarly, the results from the interviews of this study show that no change in compliance or good governance practices has changed as a result of the training. Participants indicated that they are still operating the same way they were operating before the training.

#### **8.5.8 Training Content Moderation on Learning and Behaviour**

The results of our study did not find training content to significantly moderate the relationship between behaviour and results (training outcomes). Previous research has shown that training content has an impact on the level of skills and knowledge acquired from the training. Bates et al. (2007) found that perceived content validity was significantly related to transfer of training back on the job. Furthermore, Yamnill and McLean (2005), and Hutchins (2009) suggested that the relevance of training content to the day to day work tasks may improve the skills and knowledge of trainees, and the understanding of the training materials will, therefore, be more significant. Given that there is a causal relationship between learning and behavioural change, it would appear that training content has a moderating effect or influence on the relationship between learning and behaviour. The study by Al-Mughairi (2018) investigated moderating effects of training content and training objectives on the Kirkpatrick's four training outcomes (reaction, learning, behaviour and result). The results indicated that the usefulness of training content moderated the relationship between learning and behaviour. Our results are contrary to those of Al-Mughairi (2018) as training content had a significant effect on behaviour and results. However, our results did not find training content to have moderating effects on the relationship between learning and behaviour. Therefore, our results are inconsistent with the findings by Al-Mughairi (2018).

Similarly, Azmi (2011) found the familiarity of training content to be related to training motivation to learn and transfer. However, the training content did not moderate the relationship between learning and behaviour. Our results are, therefore, consistent with Azmi (2011).

**Table 8. 7 Summaries of Studies on Behaviour and Results**

<i>Researchers</i>	<i>Dependent Variables</i>	<i>Independent Variables</i>	<i>Major Findings</i>
Kirkpatrick & Kirkpatrick (1996)	Training Effectiveness	Reaction, learning, behaviour and results	Behaviour had a positive relationship with training results/outcome.
Lin et al. (2011)	Training Effectiveness	Reaction, learning, behaviour and results	Employees who applied their newly learned skills were found to have a positive influence on positive training results
Homklin et al. (2014)	Improved behaviour, Improved performance	Social, organisational support and transfer of learning	Higher learning transfer improved performance
Granado (2016)	Improved Organisational Performance	Training design factors and training transfer	Training design factors were found to be positively related to transferability of training, and transferability of training lead to improved performance
Hauser et al., (2018)	Employee's commitment to the organisation	Reaction, learning, behaviour and results	No significant relationship was found between behaviour and increased employee's commitment to the organisation (Results).

### 8.5.9 Training Content Moderation on Behaviour and Results

Grohmann, Beller and Kauffeld (2014) found training content to moderate the relationship between trainee's behaviour and results. These findings are consistent with our results where usefulness and relevance of training content were found to moderate the relationship between trainee's change in behaviour and results. On the other hand, Diamantidis and Chatzoglou (2012) did not find training

content to have a moderating influence on the change in behaviour and training outcomes. The insignificant moderating effect of training content on the relationship between behaviour and results could be as a results of the causal relationship between behaviour and results, which might be strengthened by other training design factors such as training methods, and training environment, but not by training content. Thus, the strength of the relationship between behaviour and results was not supported by training content as a moderating effect as revealed the study by Diamantidis and Chatzoglou (2012).

**Table 8. 8 Summaries of Studies on Moderating Effects (Training Content, Objectives) on training outcomes (learning, behaviour and Results)**

<i>Researchers</i>	<i>Dependent Variables</i>	<i>Independent Variables</i>	<i>Major Findings</i>
Al-Mughairi (2018)	Learning and Behaviour	Training Content  Training Objectives	The usefulness of training content moderated the relationship between learning and behaviour.  Training objectives did not moderate the relationship between behaviour and results.
Azmi (2011)	Learning and Transfer of learning	Training Content	The familiarity of training content did not moderate the relationship between learning and behaviour.
Grohmann et al. (2014)	Behaviour and Results	Training Content	Training content moderated the relationship between behaviour and results.
Granado (2016)	Improved Organisational Performance	Training design factors and training transfer	Training design factors were found to be positively related to transferability of training, and transferability of training leads to improved performance

Diamantidis & Chatzoglou (2012).	Training Transfer, Training Results	Training content, Training design, Environmental characteristics	Training content did not have moderating effects on the relationship between trainee's change in behaviour and training results.
Brown (2005)	Training Objectives	Training Transfer (maintenance and generalisation)	proximal plus distal goals and objectives moderated the increased transfer and maintenance of learning and improved performance.
Johnson et al. (2012)	Transfer of learning	Objectives and Goal Setting	There was a relationship between goals and behavioural change competencies (e.g. developing others and building and maintaining relationships)
Morin & Latham (2000)	Transfer of training, Supervisor's self-efficacy and communication skills	Goal Setting	Goal setting significantly moderated the self-efficacy of the participants who engaged in either mental practice alone or mental practice and improved communication skills.
Blume et al., (2010)	Learning, training transfer	Training objectives	Training objectives had significant moderating effects on the relationship between learning and transfer of learning

### 8.5.10 Training Objectives Moderation on Learning and Behaviour

This study hypothesised that training objectives would moderate the relationship between learning and behaviour; the results of the study rejected the hypothesis. Our results showed no significant moderating effects of training objectives on the relationship between learning and behaviour ( $\beta = 0.005$ ,  $t\text{-value} = 1.034$ ,  $p = 0.812$ ). Our findings are inconsistent with the study by Blume, Ford,

Baldwin and Huang (2010) who found training objectives to have a significant moderating effect on the relationship between learning and behaviour. Furthermore, Faerman and Ban (1993) found training objectives and content to moderate the relationship between training participant's initial satisfaction with the training, learning and changes in their work-related behaviour.

### **8.5.11 Training Objectives Moderation on Behaviour and Results**

This study hypothesised that training objectives would moderate the relationship between behaviour and results; the results of the study accepted the hypothesis. Our results showed a significant moderating effects between the interaction of training objectives with behaviour and results ( $\beta = 0.404$ ,  $t\text{-value} = -1.009$ ,  $p = 0.005$ ). This finding is consistent and supports the studies by Brown (2005), Johnson et al. (2012), Morin and Latham (2000), Richman-Hirsch (2001), who found goal setting to moderate the relationship between the transfer of learning and results.

On the other hand, our findings are inconsistent with the study by Al-Mughairi (2018) who found training objectives not to have any moderating effects on the relationship between behaviour and results. If trainees perceive the training objectives relevant to their everyday work tasks, they will apply the learned knowledge and skills gained from the training back in their workplace. As a result, there will be improved and efficient job tasks (Al-Mughairi, 2018); however, training objectives did not moderate the relationship between behaviour and results.

Overall, the results of this study reveal that the level of reaction was not directly affected by the training content. However, training objectives have shown to have a direct effect on trainee's reaction to the training. Likewise, there was a possibility that the level of trainee's learning was not directly affected by both training content and training objectives. On the other hand, our results show that training content had the most influential factors contributing to training transfer, followed by training results. On the other hand, training objectives did not have any direct effect on both behaviour and results.

Furthermore, the findings from this study indicated the possibility that the relationship between learning and behaviour were moderated by neither the training content nor training objectives. The study further showed that training content and objectives moderated the relationship between

behaviour and results. Finally, this study revealed that there is indeed a causal relationship between the four levels of Kirkpatrick's training outcomes (reaction, learning, behaviour and results).

## **8.6 Discussions on the Research Questions**

As discussed in the earlier chapters, four research questions were asked to address the research problem of this study. In this section, the results of three questions will be discussed, and the tested conceptual framework is depicted in Figure 8.1 later in this chapter.

- a) *What effects do training content and training objectives have on trainee's reaction, learning, behaviour and results?*
- b) *What are the moderating effects of training content and training objectives on the relationships between the training outcomes (learning, behaviour and results)?*
- c) *What are the relationships between the four levels of Kirkpatrick's model that influence NDA training effectiveness?*

A conceptual framework was developed to address the research questions which described the moderating effect of training characteristics (training content and training objectives) on the relationship between reaction, learning, behaviour, and results (Kirkpatrick's four training outcomes). Subsequently, the effects of these training characteristics on training effectiveness as well as a direct relationship between the training outcomes were examined. A mixed-method approach was used in the refinement of the model and to test the hypotheses of this research. The results of the different tests and approaches provided insights into the effectiveness of NDA's training on improving the non-compliance and governance practices of NPOs in Gauteng. These insights provided answers to the research questions as summarised below:

### **8.6.1 First Research Question**

*Q1: What effects do training content and training objectives have on trainee's reaction, learning, behaviour and results?*

To evaluate training effectiveness of the NDA, the first research question sought to understand the roles of training content and training objectives on the training outcome three years after attending the training offered by the NDA. The role of the training content and training objectives were emphasised through their direct impact on reaction, learning, behaviour and results.

As expected, this study found a significant and positive relationship between training content to behaviour and results. However, no relationship was found between training content and reaction and learning. In this study, the reaction of trainees was tested as a multidimensional construct that relies on trainees 'satisfaction, opinions on the relevance, difficulty and usefulness of training content and training objectives, and learning was tested on newly acquired skills and knowledge from the training. The reaction is a multidimensional measure that relies on trainee satisfaction, enjoyment, difficulties, quality of training, and the efficiency and usefulness of training (Kirkpatrick & Kirkpatrick, 1996; Giangreco, Carugati, Sebastiano & Bell, 2010). Therefore, to improve the effectiveness of NDA training, it is necessary to address the various dimensions of the trainee's reaction to the training since the study found that training objectives related to the reaction of trainees, this then demonstrated that the relevance of training objectives can make the trainees have positive attitude and enjoyment of the training as the objectives relate to their day to day the training and looking forward to applying or transferring the content back in their workplace, which will ultimately improve their understanding and practices on governance and NPO compliance requirements.

Two unanticipated findings emerged in this stage of the study. The first was the insignificant direct relationship between training content and trainees' reaction and learning. These results demonstrate that regardless of the relevance of the training content, the trainees can have adverse reactions or perceptions about the training, similarly, the relevance and usefulness of training content does not guarantee that learning will occur. On the other hand, the training objective had significant effects on trainee's reaction. This means that if trainees found the objectives of the training to be relevant to what they are doing back in their organisation and being targeted to improve or address the challenges they face, it is more likely that they will have positive perceptions and attitude of the training.

### **8.6.2 Second Research Question**

*Q2: What are the moderating effects of training characteristics (training content and training objectives) on the relationships between the training outcomes (learning, behaviour and results)?*

Through extensive literature review, the Kirkpatrick's model has been critiqued to have focused on the reaction, learning, behaviour and results without looking at other factors that might contribute towards the effectiveness of a training programme. Factors such as environmental characteristics and training characteristics. In this study, training characteristics such as the training objectives and the

training content were hypothesised to moderate the relationship between the three training outcomes of learning, change in behaviour and improved organisational or individual results. The strength of the relationship between learning and behaviour was detected by moderating the effects of training characteristics (training content). The impacts of moderation were analysed through a comparison of three conditions. First, the simple effects (independent and dependent, e.g., learning and behaviour). Second, the impact of the moderator variable (training content) on the dependent variable (behaviour). Third, the effects of the interaction (training content x Learning and behaviour). An unexpected finding suggests insignificant moderating effects of training content ( $\beta = -.099$ ) on the relationship between learning and change in behaviour/transfer of learning. Valuable insight can be drawn from this finding: training content did not support the strength of the relationship between learning and trainees' behaviour. The results of testing the moderating effect of training content on the relationships between learning and behaviour showed a very strong relationship between learning and behaviour ( $\beta = 0.075$ ;  $p > .05$ ) before inserting the training content as a moderating factor. However, after including training content as a moderating factor, the strength of the relationship between learning and behaviour reduced to ( $\beta = -.099$ ;  $p > .05$ ). Thus, training content has no moderating impact on the relationship between learning and behaviour of trainees.

Similarly, the strength of the relationship between learning and behaviour was again detected by moderating the effects of training objectives. The results indicate that training objectives had no moderating effects on the relationship between learning and behaviour. The results of testing the moderating effect of training objectives on the relationships between learning and behaviour showed a very strong relationship between learning and behaviour ( $\beta = 0.063$ ;  $p > .05$ ) before inserting training objectives as a moderating factor. However, after including the moderating variable, the strength of the relationship between learning and behaviour reduced to ( $\beta = .005$ ;  $p > .05$ ). Thus, training objectives have no moderating impact on the relationship between learning and behaviour of trainees. Since there were no moderating effects of training content and training objectives on the relationship between learning and behaviour, future research could be conducted to explore the moderating effects of other training characteristics on the relationships between learning and behaviour.

On the other hand, expected results were found on training content and training objectives moderating the relationship between trainee's change in behaviour and results. The strength of the relationship between behaviour and results were detected by moderating the effects of training content. The results indicate that training content had moderating effects on the relationship between behaviour and results. The results of testing the moderating effect of training content on the relationships between behaviour and results showed a strong relationship between behaviour and results ( $\beta=0.312$ ;  $p < .01$ ) before inserting training objectives as a moderating factor. However, after including the moderating variable, the strength of the relationship between behaviour and results increased to ( $\beta= 0.344$ ;  $p < .01$ ). Thus training content has a moderating effect on the relationship between trainee's change in behaviour and improved organisational results. These results could mean that the relevance and familiarity of training content to the everyday work activities can influence learning transfer back on the job. Thus, the transfer of training can lead to improved organisational performance.

Likewise, training objectives moderated the relationship between trainee's change in behaviour and organisational results. The results of testing the moderating effect of training objectives on the relationships between behaviour and results showed a significant relationship between behaviour and results ( $\beta=0.368$ ;  $p < .01$ ) before inserting a moderating factor. However, after including the moderating variable, the strength of the relationship between behaviour and results improved to ( $\beta= .404$ ;  $p < .01$ ). Thus, training objectives have a moderating effect on the relationship between trainee's behaviour and organisational results.

### **8.6.3 Third Research Question**

*Q3: What are the relationships between the four levels of Kirkpatrick's model that influence NDA training effectiveness?*

As expected, this study found a significant relationship between reaction and learning ( $t= 2.243$ ,  $p=.033 < .05$ ). In this study, the reaction of trainees was tested as a multidimensional construct that relies on trainees 'satisfaction, training enjoyment, perceptions on training relevance and usefulness. It shows that attitudes and perceptions of trainees about the training intervention are likely to influence their ability to learn new skills and knowledge from the training. Various aspects or

dimensions of trainee's reaction to the training must be addressed when measuring training effectiveness.

Another expected outcome was the significant relationship between learning and behaviour ( $t= 3.743$ ,  $p=.001 \leq .001$ ). In this study, the behaviour is the transfer of learning, whereby trainees can apply the behaviour, skills and knowledge that they have gained from the training back to the real-life tasks or work environments. This shows that trainees who have acquired new skills and knowledge from the training are most likely to transfer those relevant skills back on the job. Similarly, when trainees fail to adapt, then the cost of training is lost along with the cost-benefit of applying training back on the job. Another expected result was the significant direct relationship between Trainee's change in behaviour and organisational results ( $t= 6.248$ ,  $p=.003 < .01$ ). The results signify that improvement and change in behaviour of trainees occur when the training content is relevant to what is needed in the actual job. Furthermore, Non-profit organisations are likely to see better results from the training if trainees have transferred their newly acquired skills and knowledge to their workplaces. This was also determined through interviews whereby trainees who applied what they have learned back in their workplaces, indicated that they transferred learning because of the relevance and usefulness of the training content to their actual jobs.

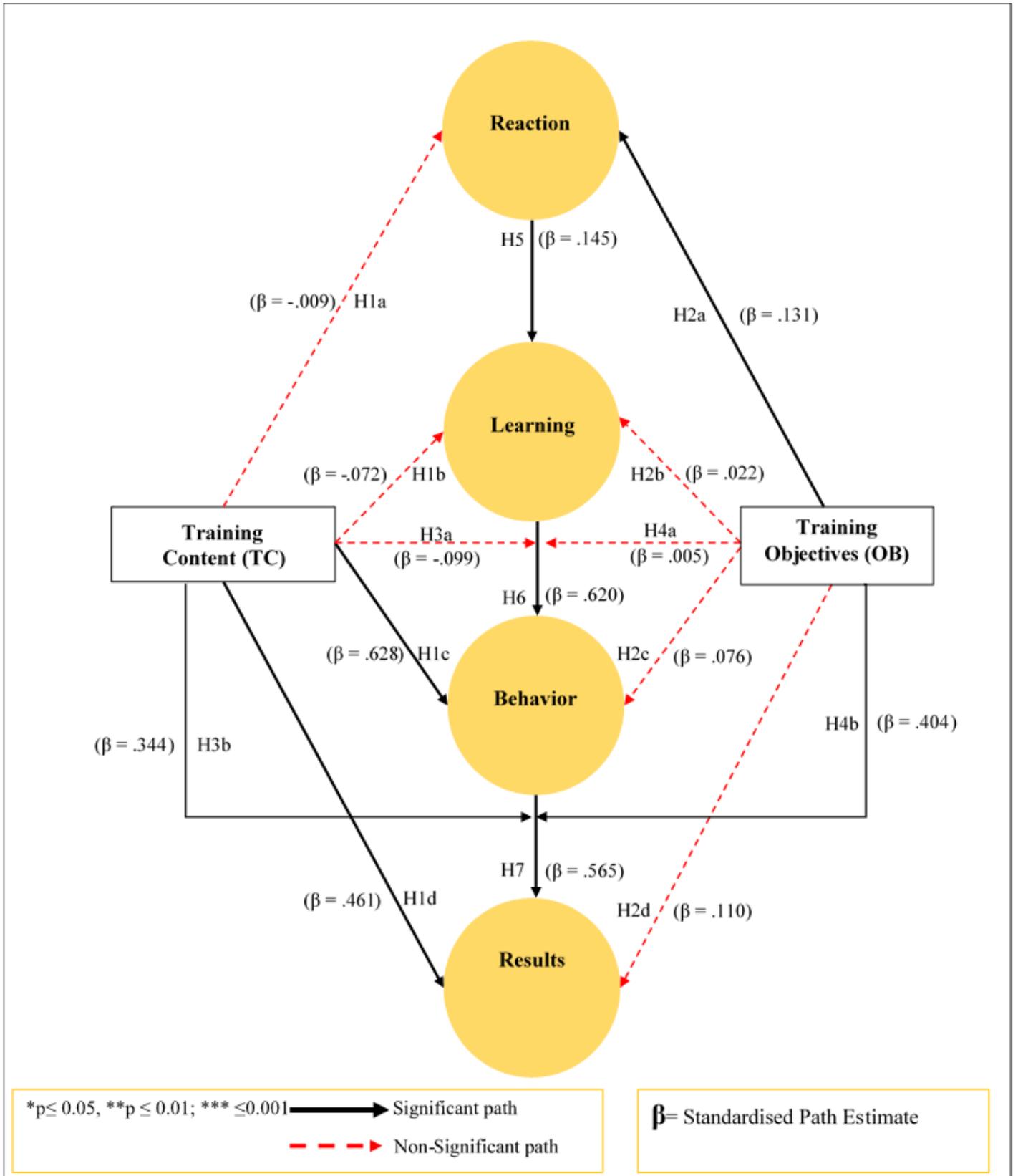


Figure 8.1 Final Tested Model of the Study

## **8.7 Chapter Conclusion**

This chapter discussed the findings of both qualitative and quantitative data, which were made up of questionnaires and the interviews. Expectedly, the findings of the study found a significant direct relationship between the reaction of trainees and learning. It became apparent from the interviews that most of the trainees were not satisfied with the design of the training, especially with regards to the time allocated to cover the vast information provided during the training. Although the trainees were not satisfied with the design of the training, this attitude did not show any correlation to learning. Another significant direct relationship was found between learning and behaviour, as well as behaviour and organisational results. This then means that if wrong skills or knowledge are learned during the training, these will be transferred on the job and as a result, this can negatively affect the organisation; hence it is crucial to ensure that the training content is relevant and useful to the actual work environment so that the right skills and knowledge are applied back on the job.

Surprisingly, there was no significant relationship or effects of training content on reaction and learning, and training objectives were also non-significant on learning, behaviour and results. The next chapter concludes the study by providing lessons learned and suggesting recommendations to the NDA and for future research.

## **CHAPTER 9: CONCLUSIONS AND RECOMMENDATIONS**

### **9.1 Introduction**

The objective of this study was to evaluate the effectiveness of NDA training in improving governance and non-compliance of NPOs. In other words, this study was a program evaluation to determine the change the training has made on the training recipients. In evaluating the program effectiveness, both qualitative and quantitative data were gathered. The qualitative data were generated from semi-structured interviews with individuals based in Gauteng province who had received training on NPO governance from the NDA in 2015. The common themes were extrapolated from the transcripts of the interviews and analysed. The quantitative data comprised of fifty closed-ended survey questionnaire. The need for the study stems from the problem facing the NPO sector where most of these organisations are de-registered due to non-compliance to the NPO Act, regardless of the NDA training in trying to improve or address this challenge. The research problem is that the NDA training has not been evaluated and as a result the effectiveness or relevance of the training is unknown, hence the need for this evaluation.

The chapter begins by discussing the achievement of the research objectives. The research gaps are discussed, followed by the theoretical and practical implications of the findings from this study. Furthermore, the methodological limitations of the study are deliberated on. Finally, the lessons learned and recommendations for future research are presented.

### **9.2 Research Objectives and Questions**

This study fulfilled the following five objectives to address the research problem presented in Table 9.1 below.

**Table 9. 1 Research Objectives**

<i>Objective No</i>	<i>Description of the Research Objective</i>
<b>1</b>	To examine the impact of training characteristics (training content and training objectives) on training outcomes, reaction, learning, behaviour and results.
<b>2</b>	To investigate the moderating effects of training content and training objectives on the relationship between learning and behaviour and behaviour and results (training outcomes).
<b>3</b>	To examine the relationship between the four levels of the Kirkpatrick’s training evaluation model
<b>4</b>	To develop a conceptual framework and related set of hypotheses that define the impact of training characteristics on training effectiveness of the NPO Governance and non-compliance training.
<b>5</b>	To provide recommendations and suggestions to maximise training effectiveness in practice.

**Research Objective 1**

*To examine the impact of training characteristics (training content and training objectives) on training outcomes, reaction, learning, behaviour and results.*

Chapter 2 of this study reviewed the literature and highlighted the importance of training and evaluating such training programs. Additionally, the chapter provided information on Kirkpatrick ‘s four levels training evaluation model, the criticism of the model as well as other training evaluation models. It highlighted the shortfall in the Kirkpatrick ‘s four levels (reaction, learning, behaviour and results) in failing to consider training characteristics that can influence the effectiveness of training. Level 1 (reactions) is concerned with the feelings and attitudes of trainees. Level 2 (learning) determine the degree at which trainees have acquired new knowledge and skills. Level 3 (behaviour) emphasise the extent to which training is transferred back on the job by the trainees. Level 4 (results) measures how the training has impacted the overall organisational performance. The literature further indicated the need to investigate the impact of training characteristics on training effectiveness before

and after training, how they moderate the relationship between the four levels of Kirkpatrick 's model. Accordingly, this study observed this need and proposed a conceptual framework that highlighted the indicators that influence expectations for training characteristics and training outcomes (reaction, learning, behaviour and results) post-training.

The findings of the qualitative data (interviews) confirmed the findings of the questionnaire. In evaluating hypotheses testing for the final model, it was found that training content was not positively and significantly influencing reaction and learning. However, it was found to have a positive and significant effect on trainee's behaviour and organisational results. On the other hand, training objectives were only found to have a positive influence only on the reaction of trainees amongst the other levels (learning, behaviour and results).

### **Research Objective 2**

*To investigate the moderating effects of training content and training objectives on the relationship between learning and behaviour and behaviour and results (training outcomes).*

Chapter 6 and 7 presented the results of the gathered qualitative and quantitative data that aimed to test the conceptual framework of the study. The two chapters provided the results of the interviews and questionnaire for descriptive analysis, reliability and validity tests. Furthermore, the results of confirmatory factor analysis (CFA) and structural equation modelling (SEM) were presented to validate the conceptual framework and to test the hypothesised statements of the study. The quantitative data demonstrated a good fit of the model by means confirmatory factor analysis, with the SEM results that met the required criteria. Chapter 8 discussed the findings that were presented in both chapter 6 and 7. The study found training content and training objectives not to moderate the relationship between other hypothesised constructs. Training content and training objectives were found only to have a moderating effect between trainee's behaviour and results.

### **Research Objective 3**

*To examine the relationship between the four levels of the Kirkpatrick's training evaluation model.* All the independent variables positively and significantly correlated to the dependent variables in examining the direct relationship between the four levels of Kirkpatrick's model. This means that the

study support that there is indeed a direct relationship between reaction and learning, learning and behaviour, behaviour and results.

#### **Research Objective 4**

*To develop a conceptual framework and related set of hypotheses that define the impact of training characteristics on training effectiveness of the NPO Governance and non-compliance training.*

Chapter 3 of this study presented a conceptual framework of the evaluation of the effects of training characteristics (training content, training objectives) on training outcomes (reaction, learning, behaviour and results). The study presented 15 hypotheses based on the extant reviewed literature. The Statistical Package for the Social Sciences (IBM SPSS) v.24 software was used for descriptive analysis, reliability and validity test and AMOS v.25 software was used to validate the conceptual framework of research and to test the hypothesised relationships.

#### **Research Objective 5**

*To provide recommendations and suggestions to maximise training effectiveness in practice.*

Chapter 9 concluded the research by revisiting the aim and objectives of the study and the research gaps. The theoretical and practical implications of the proposed conceptual model are set out. Limitations and recommendation for future research are proposed.

### **9.3 Research Gaps**

A gap was identified in the extant literature because past research that has used Kirkpatrick's model to evaluate the effectiveness of training focused mainly on either the first two levels of the model or all the four levels without considering other factors outside the four levels that can have an impact on the effectiveness of training. Limited empirical work has been carried out in measuring training outcomes pre and post-training (Tannenbaum & Yukl, 1992; Ford & Kraiger, 1995; Warr et al., 1999; Salas & Cannon-Bowers, 2001). This indicates a need for further empirical research with the focus on other factors contributing to training effectiveness. As a result, this research was conducted three years after the training intervention. The gap in this study is that the evaluation was not done pre-training and immediately after the training. Although the NDA conducts its pre-training assessments immediately after the training, the approach does not consider a particular training evaluation model

that has been previously tested. Hence the study used a tested model of Kirkpatrick to evaluate the effectiveness of the NDA training.

Furthermore, previous studies looked at Kirkpatrick 's four levels (reactions, learning, behaviour and results) either individually or in terms of the relationship between some two distinct levels. Limited empirical work has explored how the training characteristics factors have an impact on training effectiveness (Aluko & Shonubi, 2014; Al-Mughairi, 2018; Bates, 2004; Homklin et al., 2013). Therefore, further empirical research is needed to provide a better understanding of the impact of training characteristics on training outcomes. Henceforth, this research examined the moderating effects and subsequent impacts of training characteristics on training outcomes: reaction, learning, behaviour and results.

Moreover, there is a gap in the literature on the assumption that the four levels of Kirkpatrick 's model are somehow linked. The reviewed literature indicates that little research validates this assumption (Alliger & Janak, 1989; Kirkpatrick & Kirkpatrick, 2006). This is an indication that more empirical studies are needed to either affirm or disapprove this assumption (Bates, 2004). Thus, this study investigated the relationships/links between the four levels of Kirkpatrick's model.

#### **9.4 Lessons Learned**

The significant and positive relationship between trainee's reaction and learning revealed by the study. This finding means that how trainees perceived the training before they even attended such intervention had a positive influence on the acquired skills and knowledge. Another engaging lessons learned is that the relevance and familiarity of the training content to the actual job does not necessarily guarantee that learning will occur. However, if the objectives of the training are well-defined at the beginning, then trainees might have a positive response or perceptions of the training. The results of the study further showed that change in behaviour of trainees and improved organisational performance were influenced by the familiarity of training content to the job, its simplicity and relevance.

Furthermore, this study indicated a significant and positive relationship between behaviour and results, and training content had a significant and positive relationship with behaviour and results,

respectively. Unexpectedly, training objectives were not found to be significantly related or influencing behaviour and results. This means that for a training to be successful, training organisations should invest more efforts in ensuring that training content is relevant and easy to understand so that it is transferred back on the job and leading to improved organisational performance.

## **9.5 Theoretical Implications**

Theoretically, the study has contributed to the field of evaluating training effectiveness by developing a theoretical framework that examined the effects of NDA training in improving the governance of the Non-profit sector. Furthermore, it contributes to the literature on the behavioural aspect of training which shows how trainee's change in behaviour can be statistically significant to training outcomes.

The focus of many studies in evaluating the effectiveness of training programmes have looked at the four levels of Kirkpatrick's model (reactions, learning, behaviour and results) either individually or in terms of the relationship between two distinct levels. This study has contributed to the literature by evaluating the effects of training content and training objectives as training characteristics on reaction, learning, behaviour and results (training outcomes).

Although there are assumptions with regards to the linkages between the four levels of Kirkpatrick's model, few studies have confirmed this correlation (Alliger & Janak, 1989; Santos & Stuart, 2003). This study has contributed to the literature by confirming the causal relationship between reaction and learning, learning and behaviour, behaviour and results.

Previous studies found training content as the most influential factor affecting the transfer of knowledge to the workplace (Bates et al., 2007; Lim & Johnson, 2002). This study has contributed to the literature by confirming that training content was indeed the most substantial factor affecting the transfer of knowledge; however, training objectives were not found to have effects on the behaviour of trainees.

## **9.6 Practical Implications**

The findings of this research provide meaningful and practical implications for training organisations when creating training programs to produce desired outcomes. The results of this study suggest that the strongest significant relationships between training outcomes (learning and behaviour, behaviour and results) will not always support the idea that training characteristics (training content and training objectives) have a significant moderating effect on those relationships, especially the relationship between learning and behaviour.

Moreover, this study highlights that training content and training objectives have the potential to affect the effectiveness of training. Thus, understanding the effects of such training characteristics would better equip the NDA to create well designed and effective training programs.

The results, especially from the interviews, suggested that training evaluation should be an on-going process and not a once-off process that is carried out only immediately after the training. The NDA and other training organisations or individuals, therefore, should evaluate training before, during and after training to address any deficiencies in the training approach. This will lead to the desired training outcomes.

## **9.7 Recommendations**

The summary of recommendations based on the findings of this study is summarised in Table 9.2.

### **9.7.1 Recommendation 1**

Strengthening the institutional capacity (e.g. Governance Principles, Basic Bookkeeping and Financial Management, Report Writing) of organisations is essential in improving operational effectiveness and efficiency. While the registration of NPOs is voluntary, it is still expected to comply with the statutes underpinning good governance. Compliance with the prescripts of the King 4 Code of Good Practice is paramount as well as the NPO Act if the organisation is registered. In this regard, a critical governance tool that is missing in the document is the “Board Charter”. which prescribes the code of conduct for Board members to ensure good governance. The NDA should consider incorporating the Board Charter for NPOs Boards or Management Committees in the training manuals.

### **9.7.2 Recommendation 2**

Human resource is an essential aspect of any organisation, and this point was raised by some of the trainees who identified Human Resource Management training as a pressing need. Whilst the training addressed issues of Board and dealing with conflict management, all these involve people, so it will be beneficial to have a specific section that comprehensively addresses relevant human resources management policies including financial delegations, human resource procedures, volunteer policy, conditions of employment, leave policy, hiring and firing of staff, remuneration, performance management, and risk management amongst others.

### **9.7.3 Recommendation 3**

The analysis of international trends on CSO capacity development models and the changing global development agenda reveals that capacity building of local organisations should move beyond merely achieving programmatic results to a standalone goal for achieving sustainable development (Pathfinder International, 2015). To achieve this goal, there should be an approach that is tailor-made to a particular target audience and their needs by applying workshop methodology to enable practical learning and knowledge sharing. In line with the above approach, the NDA should consider implementing training initiatives that are targeting the individual in the organisation based on their levels of understanding of the sector and education, and the organisation itself.

### **9.7.4 Recommendation 4**

Since the registered NPOs are required to produce annual narrative reports with their financial statements. It was elevated as a need by the participants that the Governance training must look into issues of financial management and fundraising as part of the roles and responsibilities of the Board members of the NPO. The Governance training tool should include the fundraising aspect, mainly focusing on the involvement of the Board members in fundraising, the availability of the gift acceptance policy and the financial plan.

### **9.7.5 Recommendation 5**

There is a need to strengthen the capacities and capabilities of the NDA trainers in a manner that enhances contextual comprehension in addition to grasping the contents of the training materials.

Study respondents through interviews have expressed a need for the trainers to improve on their articulation and subject matter understanding, as well as the training styles. It is therefore recommended that trainers are also trained to be subject expertise and certified as trainers before they train any person outside the organisation.

#### **9.7.6 Recommendation 6**

There is a need to streamline the duration of the training to the content covered during the training. This study has identified weaknesses in this regard to the detriment of an efficient training program. The NDA should consider reviewing the design of its training by changing the duration from one day to a minimum of five days. This will enable the trainees to understand the content better and enhance their skills and knowledge.

#### **9.7.7 Recommendation 7**

It is recommended that the NDA assesses the needs of individuals and not using a blanket approach in training everyone. The training should be more inclined to the level of the individuals' needs and abilities. After assessing the needs of individuals, then the training plan that meets those needs must be developed, and the training program can then be developed based on the training plan. Lastly, on this particular recommendation, of importance is for the NDA to evaluate its training to understand if the needs of the learners have been met. For the NDA to have an effective training program, it is suggested that it follows an instructional training model such as ADDIE (Analyse, design, develop, implement and evaluate) in its training programs.

#### **9.7.8 Recommendation 8**

The results of the study showed us that the attitude and perceptions of trainees towards the training were mostly negative, and as a result, no learning occurred amongst those. This finding then raises a serious concern when the NDA is assessing the needs of the trainees, especially with the focus on learning styles of individuals. Assessment of learning styles is critical so that it enables the NDA to categorise the individuals according to their learning styles which are: Doers, Feelers, Thinkers and Observers. It is recommended that the NDA develops an individual personal learning styles inventory that needs to be completed by trainees before the training., with this approach then the training methods can be aligned to the individuals' learning styles. This section provided eight

recommendations that the NDA can use in improving its training interventions. The next section discusses the theoretical and methodological limitations of this study.

**Table 9. 2 Summary of Recommendations for Effective Training Program**

<i>No</i>	<i>Suggested Recommendations</i>
1	Trainees should be involved in training assessment and provided with the relevant information before the training.
2	The NDA should identify the training goals for trainees to achieve the training outcomes and overcome difficulties during training.
3	More effort should be committed to improving the skills and knowledge of trainers, the duration of the training and providing accredited training and certificates.
4.	NPOs should be segregated according to their level of knowledge and experience about the sector rather than using a one-size-fits-all approach to training.
5.	More efforts should be committed to preparing training content that supports applied learning and the transfer of knowledge to the workplace.
6.	A measurement of the effectiveness of a training program should be performed prior, during, immediately after, and a few months after training to respond to the trainee’s needs, identify the extent of their training experience, measure acquisition of knowledge and skills, and to enhance the transfer of learning.

## **9.8 Study Limitations**

In this section, the uncontrollable shortcomings that had consequently placed restrictions on the conclusions and the methodology applied in this study are mentioned.

### **9.8.1 Methodological Limitations**

The research design applied in this research is not without some methodological limitations that should be noted. First, the data were collected from individuals who attended the training in Gauteng province only due to the geographical disperse of all NDA trained NPOs and the resource constraints associated with coverage of such dispersed geographical cover. Whenever possible, data to measure the effectiveness of an intervention should be collected from a larger sample in different provinces,

multiple sources, including trainees, peers, other training institutions and the actual trainers who were involved in this particular training intervention. Also, it is reasonable to conduct evaluations that include a control or comparison group that has not received the intervention that is being evaluated (Ban & Faerman, 1990). Therefore, further studies could use multiple sources, expand the geographical focus to all the nine provinces and include control groups.

The second limitation is that the needs assessment forms were not used/available in this study so that the improvement on the skills and knowledge could be compared between the pre and post-training on what the trainees knew before they received the intervention and what they know now after participating in the training.

The third limitation is that the research analyses were based on the effects of training characteristics on training outcomes in NDA trained NPOs only, thus limiting the generalizability of the research findings (Cole et al., 2006). It is unclear whether the same pattern would occur in NPOs of other countries, and whether the results obtained from this survey would apply to other populations due to cultural differences. Future research could examine the cross-cultural aspects of this topic to determine the extent to which these results are specific to a country, sector or training area.

### **9.8.2 Theoretical Limitations**

The study has certain theoretical limitations that are worth noting and should be looked into future research plans. First, the study evaluated the effectiveness of NDA training towards improving the governance of NPOs in Gauteng province. This was only done by testing the training characteristics (training content and training objectives) on training outcomes in the Non-profit sector, and specifically, governance and non-compliance training, which may limit the generalizability of the results. There is a possibility that predictor variables will be different in organisations that are not in the Non-profit sector and governance training in specific. Therefore, the predictor variables in the conceptual framework of this study may be further examined in other forms of organisations with different training interventions. Thus, further research or tests should be considered necessary to strengthen the generalizability of the conceptual framework of this study. The other theoretical limitation is that the effects of other factors on training effectiveness were not considered in this study. Factors such as individual characteristics, training design characteristics and environmental

factors. Future research could examine the impact of these factors on training effectiveness of the NDA programme. The limitations indicated in this chapter do not make the findings of this research less critical but instead mentioned to direct future research initiatives that could support more significant improvement in this area. The following section discusses the delimitations of this study.

### **9.9 Delimitations of the Study**

As a result of the limitation in this study, the boundaries were set by the researcher to conduct this research. Within the scope of this research, it was not possible to include the trainers of the programme for interviews as they are based in different provinces across the country. As a result, training that occurred in other provinces was not explored. As appropriate, future studies by researchers or the NDA may seek to conduct further research in expanding the program or impact evaluations covering all the nine provinces and other training interventions. The next section presents possible opportunities for future research.

### **9.10 Future Research Opportunities**

There are many areas of possible future research opportunities that were identified throughout this study. The results of this study can be attributed to the effectiveness of the training as a whole, but the distinctions in the constructs of the conceptual framework of this study can be further researched, especially training design characteristics factors and environmental characteristics factors. The researcher is of the view that this would give a better indication of assessing the program effectiveness. Since the main aim was to evaluate program effectiveness by focusing mainly on learning of the trainees as the centre of our study, future research studies can evaluate if what is transferred back on the job is correct and if there has been any impact on the bottom line, further to this the research can work with the Department of Social Development to assess how many NPOs have improved in their compliance requirements as a result of the NDA training. These possible future researches may increase the validity and indicate more needs not found in this study for program improvement. In this research, the question remains whether what has been transferred back on the job by trainees is correct as the findings indicated that no learning occurred. It will be interesting to have a longitudinal study to measure the repeated observations of the same individuals/organisations over time with regards to the application and sustainability of the acquired skills and knowledge.

Another study variable that can be further explored is the motivation of trainees to learn and to transfer learning with a particular focus on how trainees' characteristics influence learning. Lastly, the respondents in this study were only exposed to one day of training, so further studies can be conducted to investigate the impact of training duration on training effectiveness.

Furthermore, the conceptual framework for this study should be tested in profit-making organisations within and outside South Africa to improve the generalizability of the results. There is a possibility that people who work in a different industry other than NPOs will react differently. Therefore, the predictor variables in this study should be further explored in other organisations in the same context of this study, which may return different results. This study further examined the transfer of knowledge to the workplace three years after the training was completed. Further research that examines the impact of the transfer of learning five years after the training is recommended to measure the sustainability of skills transfer. In-depth interviews with a bigger group, along with a questionnaire, are suggested to provide a better understanding of the antecedents of training characteristics and their effect on training effectiveness.

### **9.11 Study Conclusion**

The results of the study showed very little positive change in the acquisition of new skills and knowledge. This demonstrated that the program was not that effective in improving the skills and knowledge of the trainees, and this may be the course of non-transferability of training back on the job. According to Hua and Ahmad (2011), and other researchers, they assert that transferring what was learned from the training back on the work environment to be extremely important in improving performance and effectiveness of organisations, and as such training, effectiveness can be confirmed if learning was transferred back on the job. It can be concluded that:

- In assessing the reactions (attitudes and perceptions) of trainees to the overall design of the training, the reactions were adverse, meaning the majority of the respondents did not find the overall training satisfactory and this was due to several factors such as trainers' level of comfort level with the subject matter, the unpreparedness of trainers, language used during the training sessions (English), insufficient training duration and training methods. Furthermore, the training was not perceived to have been effective, and this could be as a

result of all these factors relating to the training design and trainers mentioned earlier in this paragraph. The adverse reaction of trainees to the NDA training did not provide new skills and knowledge. In other words, learning did not occur as a result of the training (see Appendix H)

- In assessing the impact of the NDA's training on individual learning (acquired skills and knowledge), the training improved the skills of few of the respondents as compared to the number of respondents that indicated no acquisition of new skills and knowledge from the training. This results then means that the training did not have the desired impact on the trainees considering the high percentages of dissatisfactions or disagreements to the statements on the acquisition of new skills and knowledge (see Appendix H).
- In assessing if the transfer of learning has occurred so that effectiveness can be realised with regards to improved poor governance and non-compliance as well as personal awareness of trainees on these issues. It is concluded that transfer of training has not happened in about 45% of the trainees.

Not all learning from the training programme can be expected to be transferred back on the jobs. This is especially true for the case of NPOs where training is more theoretical than practical. To assure the maximum transfer several considerations must be made before and during the training programme. First, to make a good training design that accommodates the different training needs at different levels, thorough training needs assessment at the individual participant level seems important to ensure the success of training transfer as well as the quality of training. The training needs of the participant's level may vary from individual to individual. So a one-size-fits-all approach will never produce the desired outcomes of the NDA training. The more a training satisfies the individual participant level training needs, the better the chances of the existence for training transfer. The use of diverse instructional methods is considered an important strategy for training design that leads to successful training transfer. By providing learning experiences in different ways, the trainees can master the training content conceptually and practically. Diverse learning stimuli also helps retention of the learning to a great degree. The training facilitator also plays a critical role in guiding the trainee's learning and application of the learning back to the jobs. Several research implications surface from

this study. First, it appeared that trainee personality variables influenced the learning and training transfer, but were not further explored in this study. Including the variables of trainee characteristics in future research, designs will enhance the breadth of future studies. Secondly, this study focused on the transfer of training in NPO setting within the South African context. Comparing the differences found in the transfer of training between NPOs in South Africa and international settings is an interesting topic in need of study by the NDA.

This closing chapter summarised the entire results of the study and suggested recommendations for the improvement of future NDA training. Furthermore, limitations, delimitations of this study were discussed followed by possible areas for future research. The training was not effective in improving the skills and knowledge of the trainees. As a result of the trainees, who are Board members of the NPOs, are still unable to identify or address any non-compliance and distinguish the governance role and responsibilities of the Board and the CEO of the NPOs.

## BIBLIOGRAPHY

- Abdulghani, H.M., Shaik, S.A., Khamis, N., Al-Drees, A.A., Irshad, M., Khalil, M.S., Alhaqwi, A.I. and Isnani, A. (2014) 'Research methodology workshops evaluation using the Kirkpatrick's model: Translating theory into practice', *Medical Teacher*, 36, pp. 24–29.
- Abrams, R.C., Nathanson, M., Silver, S., Ramirez, M., Toner, J.A. and Teresi, J.A. (2017) 'A training program to enhance recognition of depression in nursing homes, assisted living, and other long-term care settings: Description and evaluation', *Gerontology & Geriatrics Education*, 38(3), pp. 325–345.
- Acar, E.A. and Çetin, H. (2017) 'Improving Preschool Teachers Attitude towards the Persona Doll Approach and Determining the Effectiveness of Persona Doll Training Procedures', *International Journal of Progressive Education*, 13(1), pp. 96–118.
- Adalbert, E (2013) The concept of 'civil society': different understandings and their implications for third sector policies, *Voluntary Sector Review*, 4(2), pp. 149-164
- Alliger, G. M., & Janak, E. A. (1989). Kirkpatrick's levels of training criteria: Thirty years later. *Personnel Psychology*, 42(2), pp. 331-342.
- Aluko, F.R. and Shonubi, O.K. (2014) 'Going beyond Kirkpatrick's Training Evaluation Model: The role of workplace factors in distance learning transfer', *Africa Education Review*, 11(4), pp. 638–657.
- Aluko, F. R. (2014) 'From evaluation to reflection-on-action: Lessons learnt from the impact of a distance education programme', *South African Journal of Higher Education*, 28(5), pp. 1497–1512.
- Al-Mughairi, A.M. (2018) 'The evaluation of training and development of employees: the case of A national oil and gas industry', *Organisational Studies and Innovation Review*, 1(2), pp. 8-16.
- AlYahmady, H.H. and Alabri, S.S. (2013) 'Using Nvivo for Data Analysis in Qualitative Research' *International Interdisciplinary Journal of Education*, 2(2), pp.181-186.
- Al-Swidi, A. and Al Yahya, M.(2017) 'Training transfer intention and training effectiveness: Assessing the gender differences using multi-group structural equation modelling approach', *International Journal of Organisational Analysis*, 25(5), pp. 839-860.

- Anderson, E., Smith, R. and Hammick, M. (2016) 'Evaluating an interprofessional education curriculum: A theory-informed approach', *Medical Teacher*, 38(4), pp. 385–394.
- Antos, M. and Bruening, T.H. (2006) 'A Model Hypothesizing the Effect of Leadership Style on the Transfer of Training', *Journal of Leadership Education*, 5(3), pp. 31–52.
- Aryadoust, V. (2017) 'Adapting Levels 1 and 2 of Kirkpatrick's model of training evaluation to examine the effectiveness of a tertiary-level writing course', *Pedagogies: An International Journal*, 12(2), pp. 151–179. Available at: 10.1080/1554480X.2016.1242426 (Accessed: 24 October 2018).
- Attard Tonna, M. and Bugeja, G. (2018) 'Evaluating a Train the Trainer programme and the way this empowers educators to bring about systemic change', *European Journal of Teacher Education*, 41(4), pp. 496–516. Available at: 10.1080/02619768.2018.1462332 (Accessed: 24 October 2018).
- Awang, Z. (2012). *A Handbook on SEM: Structural Equation Modeling*. 5th ed. Kuala Lumpur, Malaysia: Centre of Graduate Studies.
- Aziz, S.F.A., Ahmad, S., Abiddin, N.Z., Noah, S.M. and Samah, B.A. (n.d.) 'Characteristics of a training programme that stimulate training motivation: An integrative literature', *Asian Journal of Business and Management Sciences*, 1(5), pp. 21-30
- Backer, T.E. (n.d.) 'Strengthening nonprofits: capacity building and philanthropy', pp. 54.
- Barnett, K. and Mattox, J.R. (2010) 'Measuring Success and ROI in Corporate Training', *Online Learning*, 14(2) Available at: 10.24059/olj.v14i2.157 (Accessed: 30 October 2018).
- Bartlett, M.S. (1950) "Tests of Significance in Factor Analysis," *British Journal of Statistical Psychology*, 3(2), pp. 77-85. Available at: <https://doi.org/10.1111/j.2044-8317.1950.tb00285.x> (Accessed: 27 March 2019)
- Banks, N and Hulme, D. (2012) 'The Role of NGOs and Civil Society in Development and Poverty Reduction'. Brooks World Poverty Institute Working Paper No. 171, Available at: <http://dx.doi.org/10.2139/ssrn.2072157>

- Bates, R. (2004) 'A critical analysis of evaluation practise: The Kirkpatrick model and the principle of beneficence', *Evaluation and Program Planning*, 27(3), pp. 341–347.
- Bates, R.A., Kauffeld, S. and Holton, III, E.F. (2007). Examining the Factor Structure and Predictive Ability of the German-Version of the Learning Transfer Systems Inventory. *Journal of European Industrial Training*, 31(3), pp.195-211.
- Bimpitsos, C. and Pteridou, E. (2012) 'A transdisciplinary approach to training: preliminary research findings based on a case analysis'. *European Journal of Training and Development*, 36 (9), pp. 911-929.
- Blair, B.J., Weiss, J.S. and Ahearn, W.H. (2018) 'A Comparison of Task Analysis Training Procedures', *Education & Treatment of Children*, 41(3), pp. 357–369.
- Blume, B.D., Ford, J.K., Baldwin, T.T. and Huang, J.L. (2010) 'Transfer of Training: A Meta-Analytic Review', *Journal of Management*, 36(4), pp. 1065–1105
- Borate, N.S. and Borate, S.L. (2014) 'A Case Study Approach for Evaluation of Employee Training Effectiveness and Development Program', *SSRN Electronic Journal* Available at: 10.2139/ssrn.2486212 (Accessed: 30 October 2018).
- Brown, T. C. (2005). Effectiveness of distal and proximal goals as transfer-of-training interventions: A field experiment. *Human Resource Development Quarterly*, 16(3), pp. 369-387.
- Byrne, B. M. (1989). *A Primer of LISREL: Basic Applications and Programming for Confirmatory Factor Analytic Models*. New York: Springer-Verlag. Available from: <http://dx.doi.org/10.1007/978-1-4613-8885-2> (Accessed: 13 January 2019)
- Calvo, S., Morales, A. and Wade, J. (2018) 'The use of MOOCs in social enterprise education: an evaluation of a North–South collaborative Future Learn program', *Journal of Small Business & Entrepreneurship*. 31(3), pp. 201-223.
- Carmines, E. G., & McIver, J. P. (1981). Analyzing models with unobserved variables. In G W. Bohrnstedt & E. F. Borgatta (Eds.), *Social measurement: Current issues* (pp. 65-115). Beverly Hills, CA: Sage

- Cattell, R.B. (1966) 'The Scree Test for The Number of Factors', *Multivariate Behavioural Research Journal*, 1(2), pp.245,
- Chen, C.Y., Chang, H., Hsu, W.C. and Sheen, G.J. (2017) 'Learning, behaviour and reaction framework: a model for training raters to improve assessment quality', *Assessment & Evaluation in Higher Education*, 42(5), pp. 705–723. Available at: 10.1080/02602938.2016.1180663 (Accessed: 24 October 2018).
- Cheng, E. W. L., and Ho, D. C. K. (1998). The effectiveness of some attitudinal and organisational factors on transfer outcome. *Journal of Managerial Psychology*, 13, pp. 309–317.
- Colquitt, J.A., LePine, J.A. and Noe, R.A. (2000) 'Toward an Integrative Theory of Training Motivation: A Meta-Analytic Path Analysis of 20 Years of Research', *Journal of Applied Psychology*, 85, pp. 679-707.
- Connolly, P. and York, P. (2002) 'Evaluating Capacity-Building Efforts for Nonprofit Organisations', 34(4), pp. 7.
- Cooley, S.J., Burns, V.E. and Cumming, J. (2016) 'Using Outdoor Adventure Education to Develop Students' Group Work Skills', *Journal of Experiential Education*, 39(4), pp. 329–354. Available at: 10.1177/1053825916668899 (Accessed: 25 October 2018).
- Costello, A.B., and Osborne, J.W. (2005) 'Best Practices in Exploratory Factor Analysis: Four Recommendations for Getting the Most from Your Analysis', *Practical Assessment, Research and Evaluation Journal*, 10(7), pp.1-9.
- Craig, P., Hall, S. and Phillips, C. (2016) 'Using the Freeth/Kirkpatrick model to evaluate interprofessional learning outcomes in a rural setting', *Focus on Health Professional Education* (2204-7662), 17(1), pp. 84–99.
- Cronbach, L. J. (1987). Statistical tests for moderator variables: Flaws in analyses recently proposed. *Psychological Bulletin*, 102(3), pp.414-417.
- Deros, B.M., Saibani, N., Yunos, B., Rahman, M.N.Ab. and Ghani, J.A. (2012) 'Evaluation of Training Effectiveness on Advanced Quality Management Practices', *Procedia - Social and Behavioural*

*Sciences*, 56, pp. 67–73.

Dewey, C.M., Ghulyan, M.V. and Swiggart, W.H. (2016) ‘Misprescribing controlled substances: An evaluation of a professional development program’, *Substance Abuse*, 37(3), pp. 412–418.

Elliott, A.C and Woodward, W.A. (2007) *Statistical analysis quick reference guidebook with SPSS examples*. 1st ed. London: Sage Publications

EL Hajjar, S.T. and Alkhanaizi, M.S. (2018) ‘Exploring the Factors That Affect Employee Training Effectiveness: A Case Study in Bahrain’, *SAGE*, 8(2), pp.1-12.

Faerman, S. R., & Ban C. (1993). Trainee Satisfaction and Training Impact: Issues in Training Evaluation. *Public Productivity & Management Review*, 16 (3), pp. 299 314.

Fayadh, A. (2017) ‘Effectiveness of the Proposed Training Formative Assessment Programme and its Impact on Teaching Style Improvements of Saudi Science Teachers in Saudi Arabia’, *Journal of Turkish Science Education*, 14(1), pp. 35–56.

Fischbach, S. (2015) ‘Ethical Efficacy as a Measure of Training Effectiveness: An Application of the Graphic Novel Case Method Versus Traditional Written Case Study’, *Journal of Business Ethics*, 128(3), pp. 603–615.

Fogle, C.D. (2015) ‘Quantitative and Qualitative Observations on the Effectiveness of Instructors at Management Training Sessions’, *Global Education Journal*, 2015(1), pp. 111–121.

Foxon, M. (1989). Evaluation of training and development programs: A review of the literature. *Australasian Journal of Educational Technology*, 5(2), pp. 89-104.

Gan, Z. (2018) ‘Success and failure in first-year teaching: Mainland Chinese ESL teachers in Hong Kong schools’, *Cogent Education*, 5(1) Available at: 10.1080/2331186X.2018.1455631 (Accessed: 11 November 2018).

Ghofranipour, F., Ghaffarifar, S., Ahmadi, F., Hosseinzadeh, H. and Akbarzadeh, A. (2018) ‘Improving interns’ patient–physician communication skills: Application of self-efficacy theory, a pilot study’, *Cogent Psychology*, 5(1), pp. 1–13.

- Giberson, T.R., Tracey, M.W. and Harris, M.T. (2008). Confirmative Evaluation of Training Outcomes. *Performance Improvement Quarterly*, 19 (4), pp. 43-61.
- Giangreco, A., Carugati, A., Sebastiano, A. and Bell, D. (2010). Trainees' reactions to training: shaping groups and courses for happier trainees. *The International Journal of Human Resource Management*, 21 (13), pp. 2468-2487.
- Granado, C. (2016). A study of the potential of training to be transferred to the workplace. *Journal of Educators, Teachers and Trainers*, 7(1), pp. 89-100
- Grohmann, A., Beller, J., & Kauffeld, S. (2014). Exploring the critical role of motivation to transfer in the training transfer process. *International Journal of Training and Development*, 18(2), pp. 84-103.
- Hair, J.F. Jr., Anderson, R.E., Tatham, R.L., and Black, W.C. (1998). *Multivariate Data Analysis*, 5th ed, Upper Saddle River, NJ: Prentice Hall.
- Hair, J.F., Black, W C., Babin, B. J. and Anderson, R.E. (2010). *Multivariate Data Analysis*, 7th ed., Harlow. England: Pearson Education.
- Hair, J.F., Black, W C., Babin, B. J. and Anderson, R.E. (2014). *Multivariate Data Analysis*, 7th ed., London: Pearson Education.
- Hauser, A., Weisweiler, S. and Frey, D. (2018) 'Because "happy sheets" are not enough – a meta-analytical evaluation of a personnel development program in academia', *Studies in Higher Education*, pp. 1–16. Available at: [10.1080/03075079.2018.1509306](https://doi.org/10.1080/03075079.2018.1509306) (Accessed: 24 October 2018).
- Henson, R.K. and Roberts, J.K. (2006) Use of Exploratory Factor Analysis in Published Research: Common Errors and Some Comment on Improved Practice. *Educational and Psychological Measurement*.66(3)
- Hinton, P.R, Brownlow, C., Mucmurray, I., and Cozens, B. (2012) SPSS explained, *Electronic Journal of Knowledge Management*, 10(1), pp. 32-45
- Ho, A.D.D., Arendt, S.W., Zheng, T. and Hanisch, K.A. (2016) 'Exploration of hotel managers' training

evaluation practices and perceptions utilizing Kirkpatrick's and Phillips's models', *Journal of Human Resources in Hospitality & Tourism*, 15(2), pp. 184–208.

Hodge, B., Wright, B. and Bennett, P. (2017) 'Does academic training change intentions? drawing upon the theory of planned behaviour to improve academic performance', *International Journal of Training Research*, 15(2), pp. 105–118.

Hogarty K, Hines C, Kromrey J, Ferron J, Mumford K. (2005) The Quality of Factor Solutions in Exploratory Factor Analysis: The Influence of Sample Size, Communalities, and Over determination. *Educational and Psychological Measurement*, 65(2), pp. 202-26.

Homklin., Yoshi Takahashi, Y. and Techakanont, K. (2014). The influence of social and organisational support on transfer of training: evidence from Thailand. *International Journal of Training and Development*, 18 (2), pp.116-131.

Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika*, 30, pp.179–185.

Hu, L., and Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, pp. 1-55.

Johnson, S.K., Garrison, L.L., Hernez-Broome, G., Fleenor, J.W. and Steed, J.L. (2012) 'Go for the Goal(s): Relationship Between Goal Setting and Transfer of Training Following Leadership Development', *Academy of Management Learning & Education*, 11(4), pp. 555–569.

Kaiser, H.F. and Rice, J. (1974) Little Jiffy, Mark Iv. *Educational and Psychological Measurement*, 34, pp. 111-117.

Kazu, H. and Demiralp, D. (2016) 'Faculty Members' Views on the Effectiveness of Teacher Training Programs to Upskill Life-Long Learning Competence', (63), pp. 205–224.

Kenny, D.A. (2018). Moderator Variables: Introduction. Available from:  
<http://davidakenny.net/cm/moderation.htm> (Accessed: 08 March 2019)

Kirkpatrick, D. (2018) 'Proscribing the past or de-proscribing the future: a genealogy and critical

discourse analysis of proscription in the North of Ireland, 1887–2017’, *Critical Studies on Terrorism*, pp. 1–22.

Kline, R.B. (1998) *Principles and practice of structural equation modeling*. 3rd ed. New York: Guilford Press, Methodology in the social sciences.

Kolomitro, K. and Anstey, L.M. (2017) ‘A survey on evaluation practices in teaching and learning centers’, *International Journal for Academic Development*, 22(3), pp. 186–198.

Kourkouli, K. (2015) ‘Investigating the effectiveness of the training procedures employed in Greek EFL state induction teacher education courses’, *Research Papers in Language Teaching & Learning*, 6(1), pp. 6–24.

Lee, S.Y., Bates, P.R., Murray, P.S. and Martin, W.L. (2017) ‘An exploratory study on the post-implementation of threat and error management training in Australian general aviation’, *International Journal of Training Research*, 15(2), pp. 136–147.

Lim, D. H. and Johnson, S. D. (2002). Trainee perceptions of factors that influence learning transfer. *International Journal of Training and Development*, 6 (1), pp.36-48.

Lin, Y.T., Chen, S.C., and Chuang, H.T. (2011). The effect of organisational commitment on employee reactions to educational training: An evaluation using the Kirkpatrick four level model. *International Journal of Management*, 28(3), pp. 926-931.

Lin, S., Hung, T.C. and Lee, C.T. (2015) ‘Revalidate Forms of Presence in Training Effectiveness’, *Journal of Educational Computing Research*, 53(1), pp. 32–54. MacCallum, R. C., Browne, M. W., and Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological methods*, 1(2), pp.130.

MacFarlane, K. (2016) ‘Transition through immersion in HE: An evaluation of how a transition and immersion programme for school pupils embeds a culture of the university experience for key stakeholders’, *Widening Participation & Lifelong Learning*, 18(3), pp. 63–73.

Machin, M.A. and Fogarty, G.J. (2004) ‘Assessing the antecedents of transfer intentions in a training context’, *International Journal of Training and Development*, 8(3), pp. 222–236.

- Mare, A. (2015) *'Motivators of learning and learning transfer in the workplace'*, MBA thesis, Gordon Institute of Business Science, University of Pretoria, South Africa.
- McChesney, K. and Aldridge, J.M. (2018) 'A new tool for practitioner-led evaluation of teacher professional development', *Teacher Development*, 22(3), pp. 314–338. Available at: 10.1080/13664530.2017.1418418 (Accessed: 24 October 2018).
- Mirza, M.S. and Ali, A. (2014) 'Effectiveness of Training Program in Changing Teachers' Attitude towards Students' Corporal Punishment', *Journal of Research & Reflections in Education*, 8(2), pp. 97–104.
- Mitchell, V.W. and Harvey, W.S. (2018) 'How preferable and possible is management research-led teaching impact?', *Management Learning*, 49(3), pp. 363–373. Available at: 10.1177/1350507618770755 (Accessed: 11 November 2018).
- Morin L., and Latham G. P. (2000). The effect of mental practice and goal setting as a transfer of training intervention on supervisor 's self-efficacy and communication skills: An exploratory study. *Applied Psychology: An International Review*, 49(3), pp. 566-578.
- Nelms, G. and Dively, R.L. (2007) *'Perceived Roadblocks to Transferring Knowledge from First-Year Composition to Writing- Intensive Major Courses: A Pilot Study'*, 31, pp. 27.
- Noe, R.A. and Schmitt, N. (1986) 'The influence of trainee attitudes on training effectiveness: Test of a model', *Personnel Psychology*, 39(3), pp. 497–523.
- O'Donovan, A., Clough, B., and Petch, J. (2017) 'Is Supervisor Training Effective? A Pilot Investigation of Clinical Supervisor Training Program', *Australian Psychologist*, 52(2), pp. 149–154. Available at: 10.1111/ap.12263 (Accessed: 25 October 2018).
- Paull, M., Whitsed, C. and Girardi, A. (2016) 'Applying the Kirkpatrick model: Evaluating an Interaction for Learning Framework curriculum intervention', *Issues in Educational Research*, 26(3), pp. 490–507.
- Pett, M.A., Lackey, N.R. and Sullivan, J.J. (2003) *Making Sense of Factor Analysis: The Use of Factor Analysis for Instrument Development in Health Care Research*. SAGE Publications, Thousand

Oaks.

- Pham, N. T. P., Segers, M. S. R., & Gijssels, W. H. (2013). Effects of work environment on transfer of training: Empirical evidence from Master of Business Administration programs in Vietnam. *International Journal of Training and Development*, 17(1), pp.1-19.
- Punia, B.K. and Saurabh, K. (2013) 'A review of factors affecting training effectiveness vis-à-vis managerial implications and future research directions', 2(1), pp. 14
- Rahyuda, A.G., Soltani, E. and Syed, J. (2018) 'Preventing a relapse or setting goals? Elucidating the impact of post-training transfer interventions on training transfer performance', *International Journal of Training Research*, 16(1), pp. 61–82. (Accessed: 24 October 2018).
- Rathbun, G.A., Leatherman, J. and Jensen, R. (2017) 'Evaluating the impact of an academic teacher development program: practical realities of an evidence-based study', *Assessment & Evaluation in Higher Education*, 42(4), pp. 548–563.
- Reio, T.G., Rocco, T.S., Smith, D.H. and Chang, E. (2017) 'A Critique of Kirkpatrick's Evaluation Model', *New Horizons in Adult Education & Human Resource Development*, 29(2), pp. 35–53. Available at: 10.1002/nha3.20178 (Accessed: 25 February 2018).
- Rohmann, A., Froncek, B., Mazziotta, A. and Piper, V. (2017) 'Current evaluation practices of diversity trainers in German-speaking countries', *International Journal of Training Research*, 15(2), pp. 148–159.
- Rosendale, J.A. (2014) 'Toward Worthy Performance: A Case Study on Western Union's Training Program', *Performance Improvement*, 53(8), pp. 39–44.
- Ryman, D.H. and Biersner, R.J. (1975) 'Attitude predictive of driving training success' *Personnel Psychology*, 28(2), pp. 181-188
- Saleem, A., Masrur, R. and Afzal, M.T. (2014) 'Effect of Professional Development on Enhancing the Knowledge Level of University Teachers in Pakistan', *Journal of Research & Reflections in Education (JRRE)*, 8(2), pp. 162–168.

- Schermelleh-Engel, K., Moosbrugger, H. and Müller, H. (2003) 'Evaluating the Fit of Structural Equation Models: Tests of Significance and Descriptive Goodness-of-Fit Measures', 8(2), pp. 53.
- Schumacker, R. E., & Lomax, R. G. (2004). A beginner's guide to structural equation modeling. 2nd Ed. New Jersey: London: Lawrence Erlbaum Associates
- Siengthai, S. (2015) 'A reflection on a leadership training programme of the Ministry of Interior, Thailand', *Human Resource Development International*, 18(3), pp. 317–324. Available at: 10.1080/13678868.2015.1071992 (Accessed: 25 October 2018).
- Silvestru, C.I., Lupescu, M.E., Silvestru, C., Ramona. Ion, V., and Icociu, V.C. (2018) 'EPALE for Online Adult Education in Romania', *eLearning & Software for Education*, 4, pp. 232–239. Available at: 10.12753/2066-026X-18-247 (Accessed: 25 July 2018).
- Steele, L.M., Mulhearn, T.J., Medeiros, K.E., Watts, L.L., Connelly, S. and Mumford, M.D. (2016) 'How Do We Know What Works? A Review and Critique of Current Practices in Ethics Training Evaluation', *Accountability in Research*, 23(6), pp. 319–350.
- Stiehl, S.K., Felfe, J., Elprana, G., and Gatzka, M.B. (2015) 'The role of motivation to lead for leadership training effectiveness', *International Journal of Training & Development*, 19(2), pp. 81–97.
- Sun, J. (2005) 'Assessing Goodness of Fit in Confirmatory Factor Analysis', *Measurement and Evaluation in Counseling and Development*, 37(4), pp. 240–256. Available at: 10.1080/07481756.2005.11909764 (Accessed: 13 July 2018).
- Tabachnick, B. G., and Fidell, L. S. (2007). Using multivariate statistics ,5th ed, Boston, MA, Allyn & Bacon/Pearson Education.
- Talvio, M., Lonka, K., Komulainen, E., Kuusela, M. and Lintunen, T. (2015) 'The development of teachers' responses to challenging situations during interaction training', *Teacher Development*, 19(1), pp. 97–115.
- Tanaka, J. (1987). How big is enough? Sample size and goodness-of-fit in structural equation models with latent variables. *Child Development Journal*, 58, pp. 134-146.

- Thompson, B. (2004) Exploratory and confirmatory factor analysis: Understanding concepts and applications. Washington, DC, US: American Psychological Association. Available from: <http://dx.doi.org/10.1037/10694-000> (Accessed: 23 March 2019)
- Topno, H. (2012) Evaluation of Training and Development: An Analysis of Various Models. *Journal of Business and Management*, 5(2), pp. 16-22.
- Tortop, H.S. (2014) 'Examining the Effectiveness of the In-service Training Program for the Education of the Academically Gifted students in Turkey: A Case Study', *Journal for the Education of the Young Scientist & Giftedness*, 2(2), pp. 67–86.
- Turner, M.R., Watts, L.L., Steele, L.M., Mulhearn, T.J., Torrence, B.S., Todd, E.M., Mumford, M.D. and Connelly, S. (2018) 'How Did You Like This Course? The Advantages and Limitations of Reaction Criteria in Ethics Education', *Ethics & Behaviour*, 28(6), pp. 483–496.
- Aryadoust, V. (2017) 'Adapting Levels 1 and 2 of Kirkpatrick's model of training evaluation to examine the effectiveness of a tertiary-level writing course, Pedagogies', *International Journal*, 12(2), pp. 151-179.
- Vandenberg, R. J. (2006) "Statistical and Methodological Myths and Urban Legends", *Organisational Research Methods*, 9(2), pp. 194-201.
- Velada, R., Caetano, A., Michel, J.W., Lyons, B.D. and Kavanagh, M.J. (2007) 'The effects of training design, individual characteristics and work environment on transfer of training', *International Journal of Training and Development*, 11(4), pp. 282–294
- Wartenweiler, T. (2018) 'Serious play in education for social justice - An exploratory study', *Journal of New Approaches in Educational Research*, 7(1), pp. 61–69. Available at: 10.7821/naer.2018.1.260 (Accessed: 25 October 2018).
- Weiermann, B., and Meier, B. (2012). Implicit task sequence learning with auditory stimuli. *Journal of Cognitive Psychology*, 24(4), pp. 468-475.
- Werner, J.M. and DeSimone, R.L. (2012) *Human resource development*. 6th ed. Mason, OH: Andover: South-Western; Cengage Learning.

- Wiger, N, Chapman, D., ed., Baxter, A. and DeJaeghere, J. (2015) 'Context matters: A model of the factors associated with the effectiveness of youth entrepreneurship training', *Prospects (00331538)*, 45(4), pp. 533–547. Available at: 10.1007/s11125-015-9366-x (Accessed: 25 October 2018).
- Williams, B., Onsmann, A. and Brown, T. (2010) 'Exploratory factor analysis: A five-step guide for novices', *Australasian Journal of Para medicine*, 8(3)
- Wright, S.L. (2015) 'Examining the Impact of Collaborative Technology Skills Training on Virtual Team Collaboration Effectiveness', *Journal of Applied Learning Technology*, 5(4), pp. 6–13.
- Yamnill, S., and McLean, G. N. (2005). Factors affecting transfer of training in Thailand. *Human Resource Development Quarterly*, 16(3), pp.323-344.
- Yilmaz, N. and Gökçek, T. (2016) 'The Effectiveness of In-Service Training for the Development of Reflective Thinking Skills Among Mathematics Teachers', *Journal of Theoretical Educational Science* 9(4), pp. 606–607. Available at: 10.5578/keg.14916 (Accessed: 25 October 2018).
- Yoon, D. (2018) 'The effectiveness analysis for the education and training of research equipment in South Korea', *Cogent Education*, 5(1), pp. 1–16.
- Zijlmans, L.J.M., Embregts, P.J.C.M., Gerits, L., Bosman, A.M.T, and Derksen, J.J.L. (2015) 'The effectiveness of staff training focused on increasing emotional intelligence and improving interaction between support staff and clients', *Journal of Intellectual Disability Research*, 59(7), pp. 599–612.

## APPENDICES

### APPENDIX A: PERMISSION LETTER FROM THE NDA

26 Wellington Road, Parktown, 2193, P O Box 31959, Braamfontein, 2017  
Tel: (011) 018 5500 Fax: (011) 018 5587 E-mail: info@nda.org.za Website: www.nda.org.za



**Mrs. Thamo Mzobe**  
**Chief Executive Officer**  
**National Development Agency**

20 March 2018

Dear CEO

Request for permission to conduct a research using NDA as a case in fulfillment of my studies

I am a registered with the University of Kwa-Zulu Natal (UKZN) for the fulfillment of Doctoral of Business Administration (DBA). The title of my research is '**Assessing the effectiveness of NDA's training of NPOs on the NPO Act Compliance**'. The reason for selecting this topic is to really see if there is any change or impact that our NPO Compliance training is making on the NPOs with regards to the de-registration by DSD due to the non-compliance to the requirements of section 17,18 and 19 of the NPO Act. The main research objectives of the study are:

**Objective 1:** To identify the constraints or challenges faced by NPOs in complying to the requirements of the NPO Act;

**Objective 2:** To explore and determine potential factors influencing the effectiveness and ineffectiveness of training.

**Objective 3:** To determine the outcome of NDA training of NPOs with specific focus on NPO Act compliance.

**Objective 4:** To re-conceptualise the NDA training model to inform training of non-profit organisations on NPO Act compliance.

The study will only focus on the individuals that were trained on NPO Act compliance. The population size for the study is 226 trained individuals in Gauteng province only. All the trained individuals in other provinces could potentially provide the information that the study is looking for, but due to the impracticality, financial and time constraints associated with collecting data, testing or assessing every element of the population, it is for this reason that I had resorted to sampling approach and selected



Gauteng province only. The findings of the study will also serve as a baseline for the NDA to conduct a thorough longitudinal study for measuring impact of the NPO Act compliance training in all the provinces.

I hereby seek your approval to conduct the study using NDA as the case. Participants will be randomly selected from the population and both questionnaire and interviews will be answered anonymously. Upon completion of the study, I undertake to provide the organization with a copy of the research report.

Kindly indicate with a cross (x) below. Your permission to conduct this study using the NDA will be greatly appreciated.



**Nthabiseng Kraai**

<b>Approved</b> X	<del>Not Approved</del>	Comments:
CEO Signature		

 **NATIONAL DEVELOPMENT AGENCY**  
**OFFICE OF THE CEO**  
26 Wellington Street | Parktown  
(011) 018 5500

## APPENDIX B: ETHICAL CLEARANCE LETTER



05 October 2018

**Ms Nthabiseng Innocentia Kraai (218050838)**  
Graduate School of Business & Leadership  
Westville Campus

Dear Ms Kraai,

**Protocol reference number: HSS/1600/018D**

**Project title:** Evaluation of National Development's Agency training on Improving Governance of Non-Profit Organisations

**Approval Notification – Expedited Application**  
In response to your application received 07 September 2018, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

**PLEASE NOTE:** Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully



Professor Sheruka Singh (Chair)

/ms

Cc Supervisor: Dr Pfano Mashau  
Cc Academic Leader Research: Professor Muhammad Hoque  
Cc School Administrator: Ms Zarina Bullyraj

Humanities & Social Sciences Research Ethics Committee  
Professor Sheruka Singh (Chair)

Westville Campus, Govan Mbeki Building

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Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)



Founding Campuses: Ergiveood Howard College Medical School Pietermaritzburg Westville

## **APPENDIX C: ONLINE QUESTIONNAIRE**

Dear respondent,

Through your voluntary participation, I hope to understand how the NDA training has imparted or improved your skills and knowledge on the governance of NPOs. The results of the study are intended to guide the researcher to develop a training framework that the NDA can use to train NPOs in South Africa on good governance.

Confidentiality and anonymity in identifying you as a participant will be maintained by both the researcher and the University (UKZN). Should there be any questions/ concerns or clarity about this study, please feel free to contact myself or my supervisor on the listed numbers below:

Researcher: Ms. Nthabiseng Kraai (011-018 5507)

Supervisor: Dr. Pfano Mashau (031-260 7021)

The survey should take about 20 minutes to complete. The questionnaire comprises of fifty questions, of which six of the questions are basic demographic information, and the remaining is focusing on answering the research questions of this study.

I thank you in advance.

Sincerely,

Ms Nthabiseng Kraai

## SECTION 1: Demographic Information

*Please tick/select only one response/box per question.*

### 1. Gender:

Male

Female

### 2. Age:

Below 20 yrs

20 -29 yrs

30-39 yrs

40-49 yrs

50-59 yrs

60 yrs and more

### 3. Highest Qualification

Below Grade 12

Grade 12

Diploma

Undergraduate Degree

Post Graduate degree

### 5. No of years in the NPO

1 year or less

2 to 5 years

6 to 9 years

10 years or more

### 4. Municipality

City of Johannesburg

City of Tshwane

Ekurhuleni

Sedibeng

### 6. Job Position in the NPO

CEO

Board Member

Other

**SECTION B:** *(This section is made up of 27 Statements. Please respond to all statements as the form will not be saved if any statement is unanswered)*

<b>1</b> Strongly Disagree	<b>2</b> Disagree	<b>3</b> Neutral	<b>4</b> Agree	<b>5</b> Strongly Agree
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**Please indicate the extent to which you agree or disagree with each of the following statements by checking the appropriate box according to the following scales from 1 to 5.**

	1	2	3	4	5
I was very satisfied with the training aids	<input type="checkbox"/>				
I was very satisfied with the trainer's comfort level with the subject matter	<input type="checkbox"/>				
The trainer was well organised and prepared for the course/training	<input type="checkbox"/>				
The training Classrooms were well equipped and conducive for learning (Training Environment)	<input type="checkbox"/>				
I was very satisfied with the language used during the training sessions	<input type="checkbox"/>				
The duration of the training was enough to enable me to understand	<input type="checkbox"/>				
The trainer's method/approach made encouraged me to gain new skills and knowledge	<input type="checkbox"/>				
I feel that the training was highly effective	<input type="checkbox"/>				
I found it difficult to follow the training/course	<input type="checkbox"/>				
The trainer showed sufficient knowledge of the NPO Act	<input type="checkbox"/>				
The trainer showed sufficient knowledge of Governance in the NPO sector	<input type="checkbox"/>				
I learned a lot from the NDA training on good governance and compliance	<input type="checkbox"/>				
I have forgotten most of what I have learned from the training	<input type="checkbox"/>				

I remember most of what I have learned from the training	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
I am now able to identify poor Governance and non-compliance in my organisation	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
The training content directly related to my everyday work	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
The training content was easy for me to understand	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Information/training content offered in this training improved my professional competencies.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Training objectives were expressed clearly by the trainer	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
The stated training objectives were relevant to my work	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
The training programme accomplished its stated objectives	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
The knowledge and skills offered in this training qualify me in dealing with non-compliance issues and improving poor governance practices	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
I have used the acquired skills and knowledge back on my job immediately after the training	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
I am still using the acquired skills and knowledge back on my job	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
After this training, I am better able to recognise non-compliance and poor governance-related activities.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
After this training, I have a more personal awareness of NPO governance and compliance issues	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
After this training, I know when myself or peers are doing something that will lead to poor governance or non-compliance of the organisation.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

**END OF QUESTIONNAIRE**  
**THANK YOU FOR YOUR TIME**

## **APPENDIX D: INTERVIEW SCHEDULE**

### **BEFORE THE INTERVIEW**

- Explain the purpose and the process of the interview
- Emphasise that the interview cannot continue if the participant has been forced or pressurized and that there is no form of incentive for participating in the study. Participation has to be entirely voluntary.
- After the participant expresses interest in participating in the study and understanding of the purpose of the interviews, then request the participant to sign the consent form, then give them the information sheet.
- Ask the participant if they are willing to be audio recorded and emphasise the anonymity of their identities.
- If the participant agrees to be recorded, give them the consent form to sign, then begin the interview.
- If the participants refuse to be recorded, take field notes.

### **INTERVIEW QUESTIONS**

#### **Q.1. PARTICIPANTS BACKGROUND (DEMOGRAPHIC) [3 Questions]**

- 1.1. What is your position/job title in the NPO?
- 1.2. How many years have you been with the NPO in your current role?
- 1.3. What is your highest formal qualification?

#### **Q2. REACTION (Perceptions and Attitude) [6 Questions]**

- 2.1. When you think about training you received from the NDA, what comes to your mind?  
(*perception*)
- 2.2. What do you think about the facilitator's level of knowledge about NPO governance issues?

2.3. What do you think about the training material that was used in training?

2.4. Do you think the time allocated for the training was sufficient or insufficient for you to learn anything? Please elaborate.

2.5. Think back to the training you received from the NDA, which you felt was particularly good or disappointing for you. What made it particularly good or disappointing? (favourable/unfavourable) *[attitude]*

2.6. What were your expectations from the training, and how did it meet them? *[attitude]*

### **Q3. LEARNING –SKILLS AND KNOWLEDGE [3 Questions]**

3.1. What new skills and knowledge did you gain from the training?

3.2. What training do you need to perform your job tasks better?

3.3. If you had to single out one topic from the training on NPO governance, what would be the most important to you?

### **Q4. BEHAVIOUR/TRANSFER OF TRAINING [3 Questions]**

4.1. What skills did you transfer back in the NPO with peers and colleagues?

4.2. What do you think helped you to apply this knowledge back at work? Tell me the story.

4.3. Did you find any challenge or obstacle in applying what you have learned from training back at work? Tell me the story.

### **Q5. RESULTS [1 Question]**

5.1. What has changed/improved in the NPO as a result of the NDA training?

### **Q6. MOTIVATION [2 Questions]**

6.1. What motivated you to attend the training?

6.2. What would motivate you to attend any future pieces of training?

### **Q7. RECOMMENDATIONS [1 Question]**

7.1. What would you suggest to the NDA to improve its future training?

**AFTER THE INTERVIEW**

- Afford the participants to ask any questions about the process
- Thank the participant and stop the recording
- Close the interview
- Note the non-verbal state of participant (calmness, nervousness, negativity) and any other general impressions.
- Note all these down during the interview.

## APPENDIX E: PARTICIPANT INFORMATION SHEET

Dear Research Participant

My name is Nthabiseng Innocentia Kraai, and I am a Doctoral of Business Administration (DBA) candidate studying at the University of KwaZulu-Natal, Westville Campus, South Africa. The purpose of this research is to understand the effectiveness of NDA training on improving governance practices of Non-Profit Organisations. The research is focusing on individuals who have received the NPO governance training in Gauteng province. You have been randomly selected as a participant to be interviewed for the study. With your permission, the interviews will be audio recorded to compare the recordings with the researcher's notes when transcribing the information. The interview will take approximately 1 hour.

Please consider the information below before deciding whether to participate in this research:

**Confidentiality:** Your responses to interview questions will be kept confidential. You will not be asked for your name during the interviews and at no time will your actual identity be revealed. You will be assigned a random numerical code which will help me to transcribe your responses. You will only be known by this code. The transcript, without your name, will be kept until the research is complete.

**Participation and withdrawal:** Your participation in this study is entirely voluntary, and you may refuse to participate or withdraw from the study at any time without any penalty. You can also ask for a break at any time during the interviews. Your involvement is purely for academic purposes only, and there are no financial benefits involved.

Should you have any questions or concerns about this research, please feel free to contact the researcher or the supervisor of this research on the contact details below. If you would like to participate in this research study, please sign the participant interview consent form attached to this sheet.

Sincerely,

---

**Researcher**

Nthabiseng Kraai

060 854 1318

[Innokraai@yahoo.com](mailto:Innokraai@yahoo.com)

---

**Supervisor**

Dr Pfano Mashau

031 260 7021

[mashaup@ukzn.ac](mailto:mashaup@ukzn.ac)

## APPENDIX F: PARTICIPANT INTERVIEW CONSENT FORM

### Research Topic: Evaluating the Effectiveness of NDA training on NPO Governance

Researcher : Nthabiseng Kraai  
Researcher's contact Details : 060 854 1318  
[innokraai@yahoo.com](mailto:innokraai@yahoo.com)  
Student No : 208050838

Dear Research Participant

#### Consent:

I agree to participate in the above-mentioned research. I have read and understood the participant information sheet, and I also understand my role in this research project. I understand that I am free to withdraw from the interviews at any given time without prejudice. I understand that I have the right not to be audio recorded if I wish so. I understand that my participation is voluntary, and no form of incentive shall be given to me as a result of my participation. I have been informed that anonymity will be used in this research project and that at no point will my identification be revealed. I have been provided with a copy of this form and the participant information sheet. I have not been coerced to participate in this study.

I agree to participate in this research study.

---

**Name of Participant (Print)**

---

**Signed**

---

**Date**

**APPENDIX G: INFORMED CONSENT FOR AUDIO RECORDING**

**Consent:**

I..... *(full names of participant)*  
hereby confirm that I have read the participant information sheet and have signed the participant consent form, which is attached herewith this form. I understand the contents of this document and the nature of the research project, and I have been informed that anonymity will be used in this research. I consent to participate in the research project.

Please indicate (by ticking where applicable) whether you are Agree or Do Not Agree for the interview to be audiotaped.

Type of Recording	Agree	Not Agree
Audio		

I have not been coerced nor induced in any way to be audio-recorded. I understand that I am at liberty to withdraw from the interviews at any time. Furthermore, I can ask the researcher to stop the recording at any time without any prejudice.

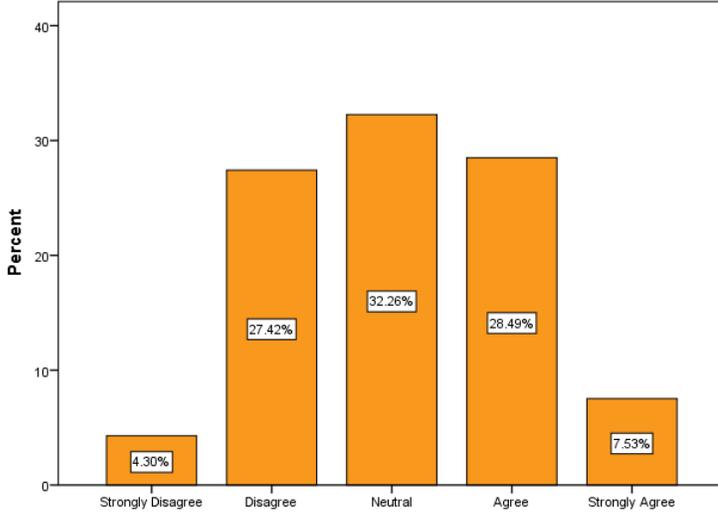
\_\_\_\_\_  
**Name of Participant (Print)**

\_\_\_\_\_  
**Signed**

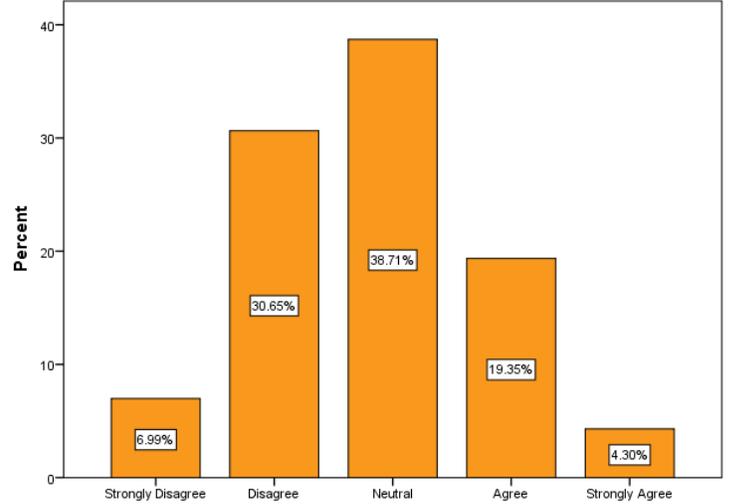
\_\_\_\_\_  
**Date**

## APPENDIX H: FREQUENCY RESULTS – BAR CHARTS

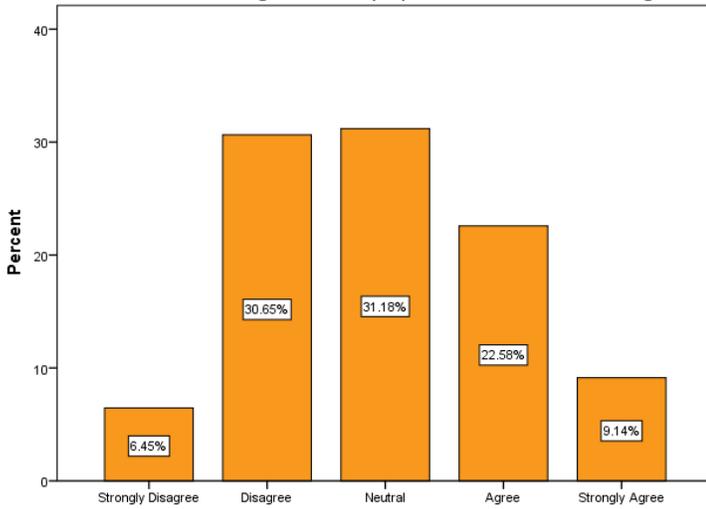
**I was very satisfied with the training aids (Flip charts, powerpoint slides, etc.)**



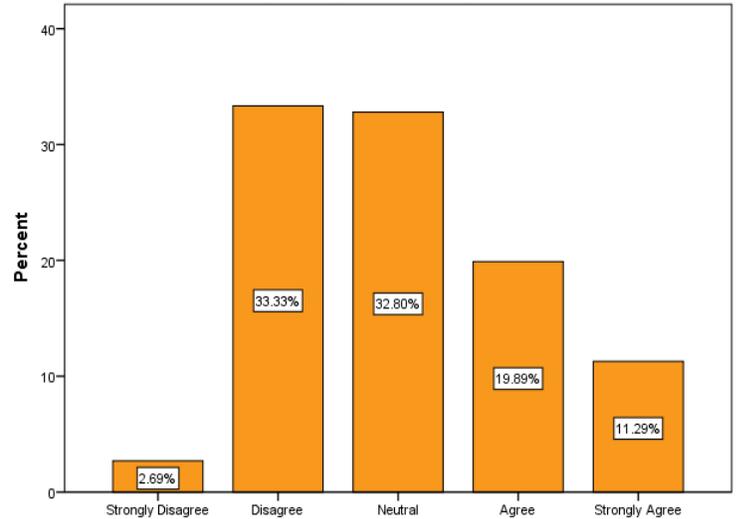
**I was very satisfied with the trainer's comfort level with the subject matter**



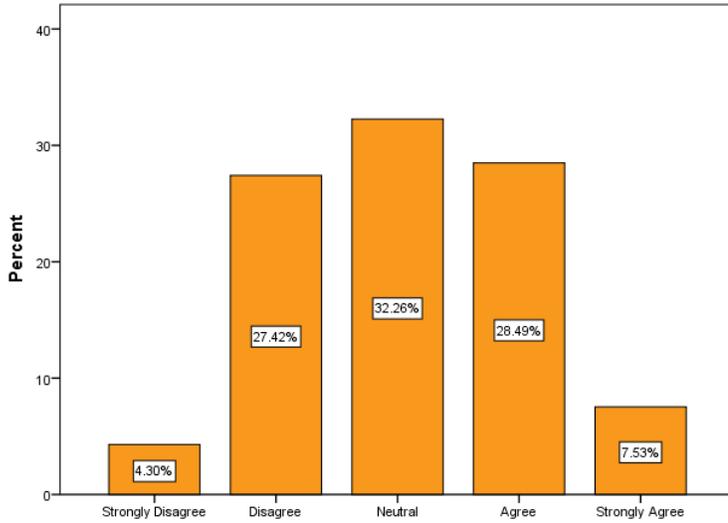
**The trainer was well organised and prepared for the course/training**



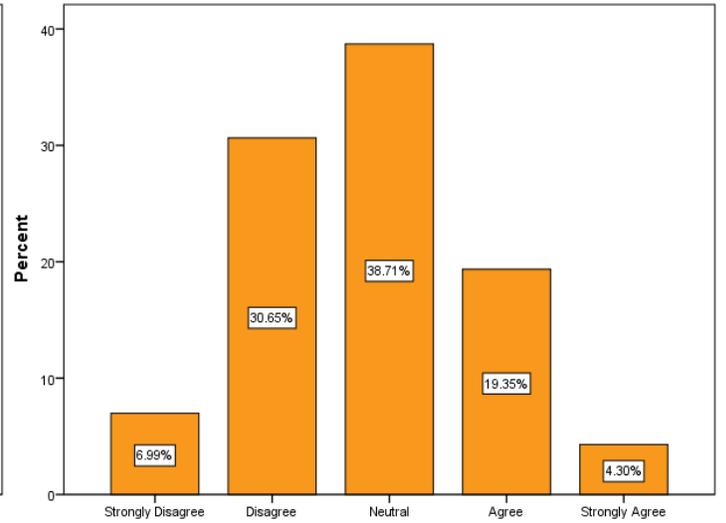
**The training Classrooms were well equipped and conducive for learning (Training Environment)**



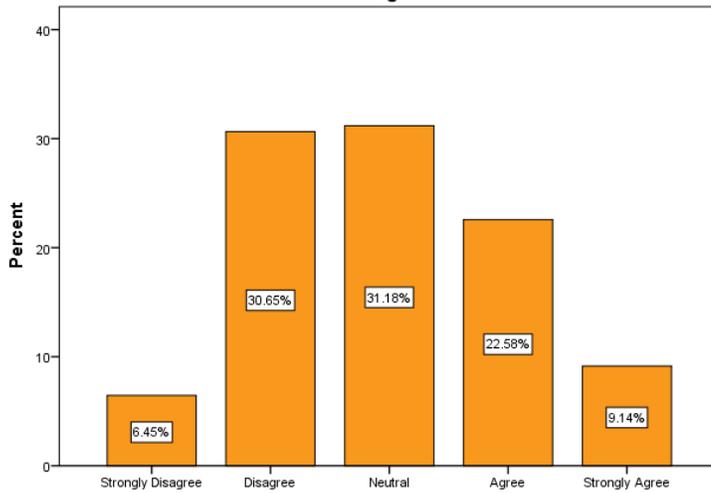
I was very satisfied with the language used during the training sessions



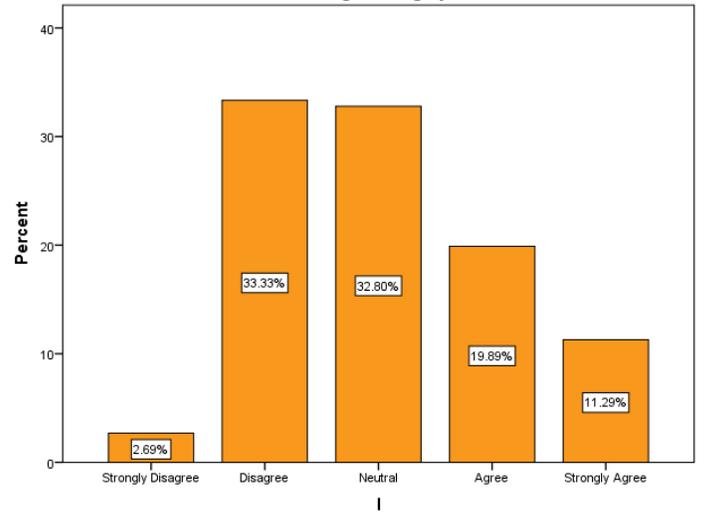
The duration of the training was enough to enable me to understand



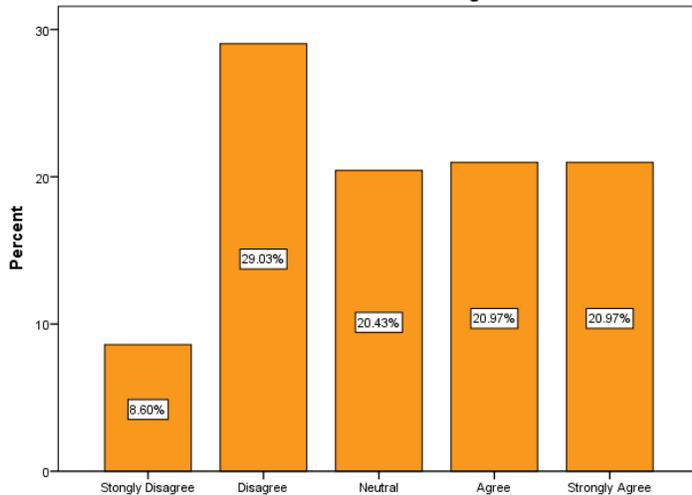
The trainer's method/approach made encouraged me to gain new skills and knowledge



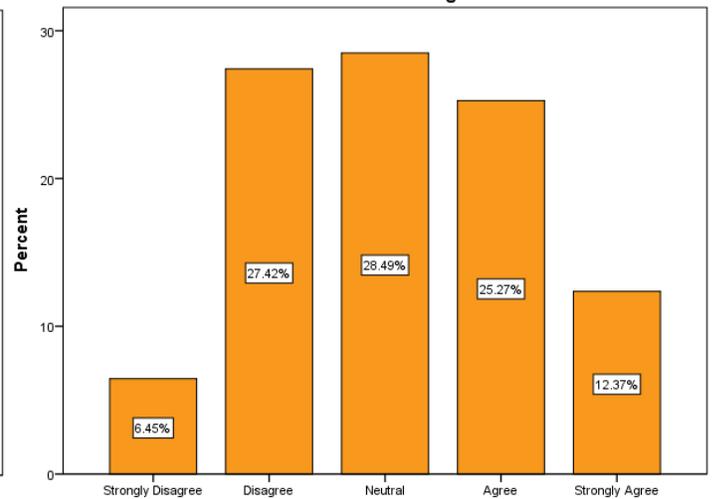
I feel that the training was highly effective



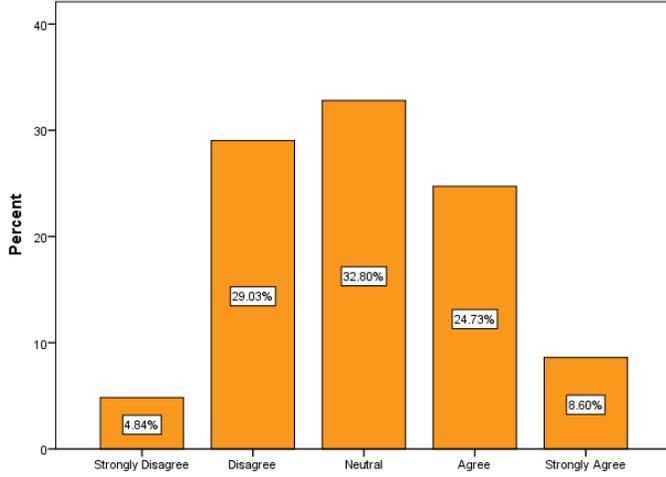
I found it difficult to follow the training/course



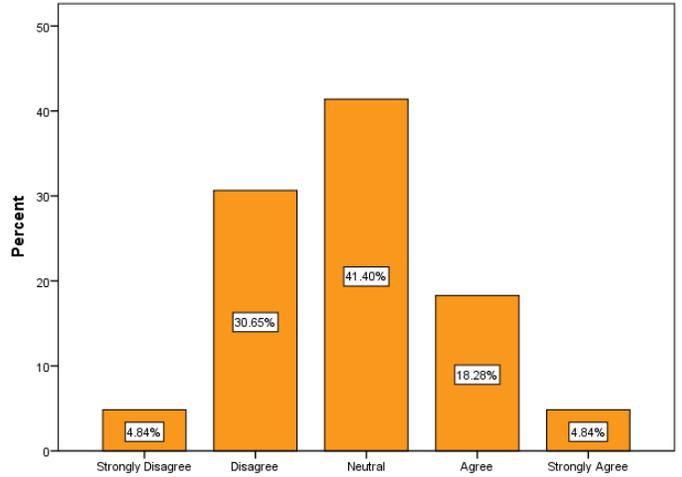
The trainer showed sufficient knowledge of the NPO Act



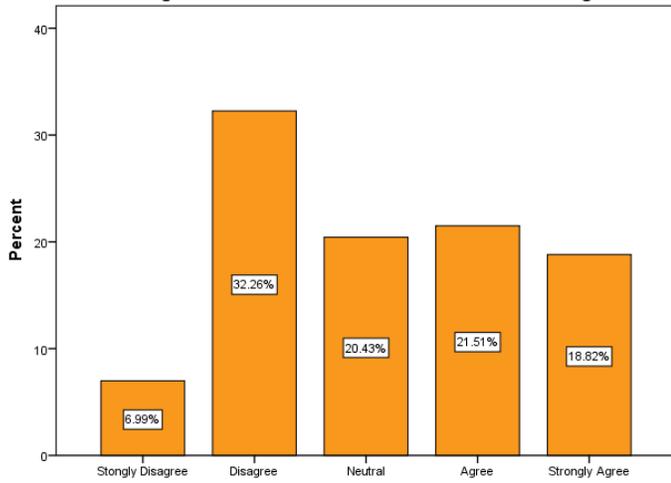
The trainer showed sufficient knowledge of Governance in the NPO sector



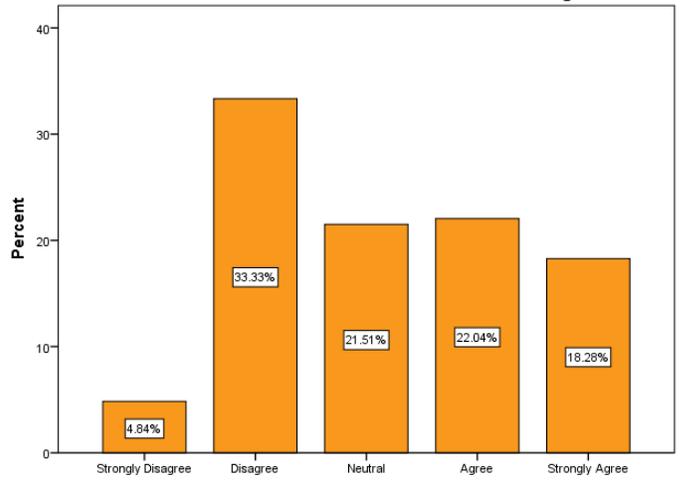
I learned a lot from the NDA training on good governance and compliance



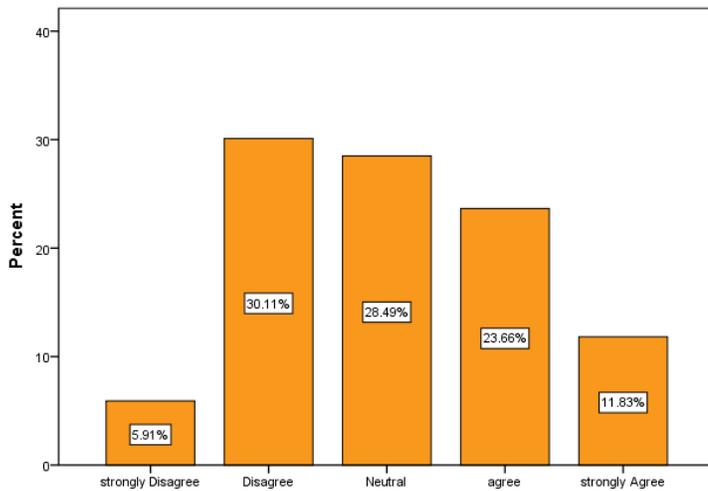
I have forgotten most of what I have learned from the training



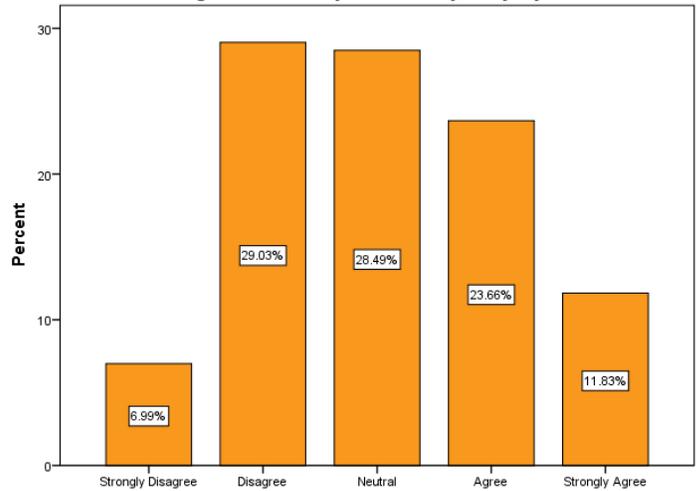
I remember most of what I have learned from the training



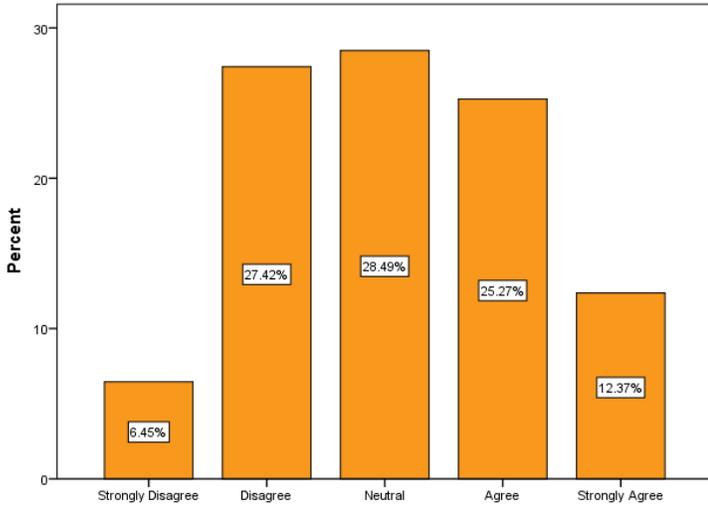
I am now able to identify poor Governance and non-compliance in my organisation



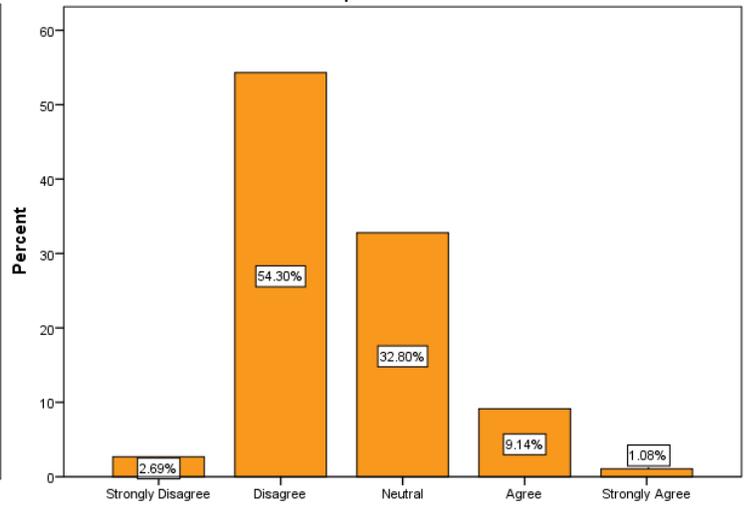
The training content directly related to my everyday work



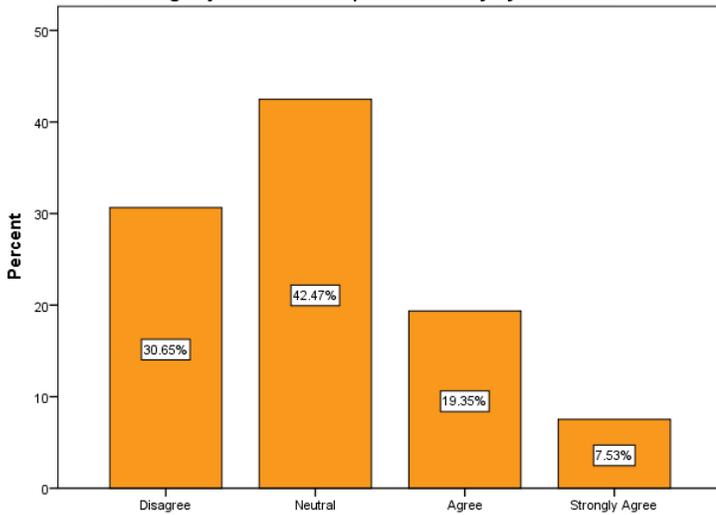
The training content was easy for me to understand



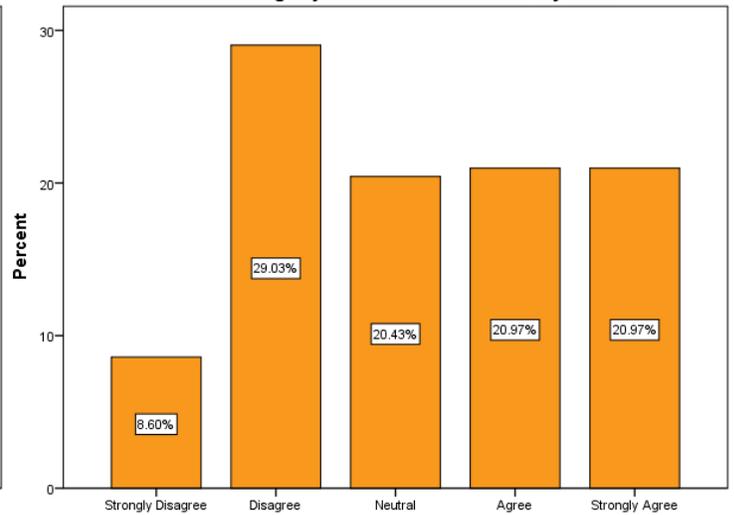
Information/training content offered in this training improved my professional competencies.



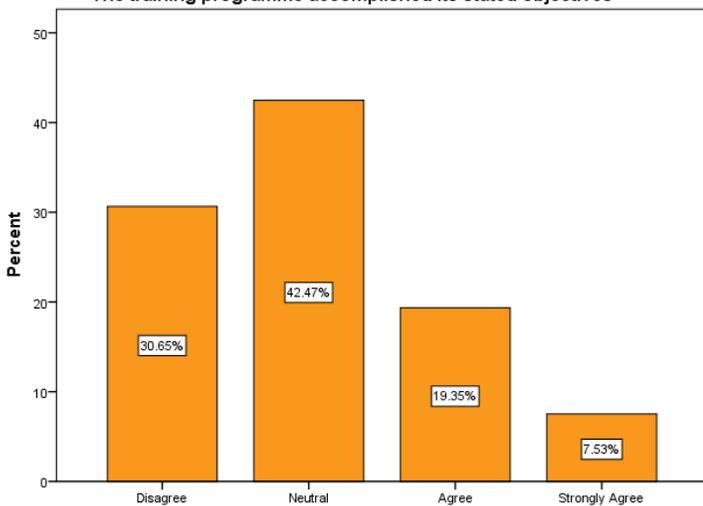
Training objectives were expressed clearly by the trainer



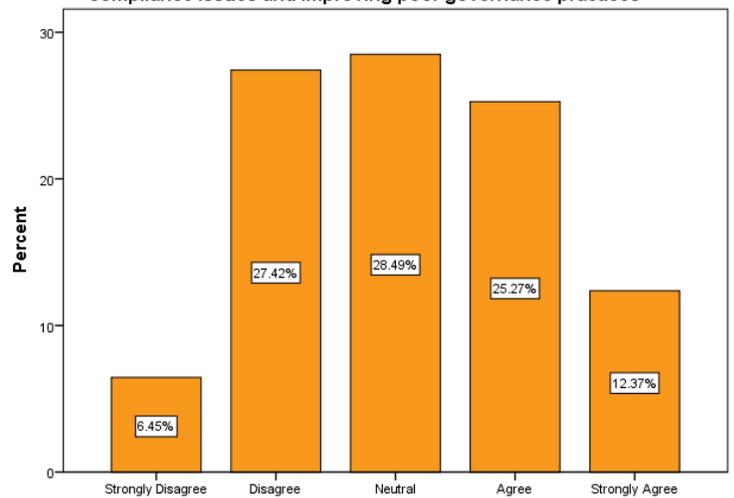
The stated training objectives were relevant to my work



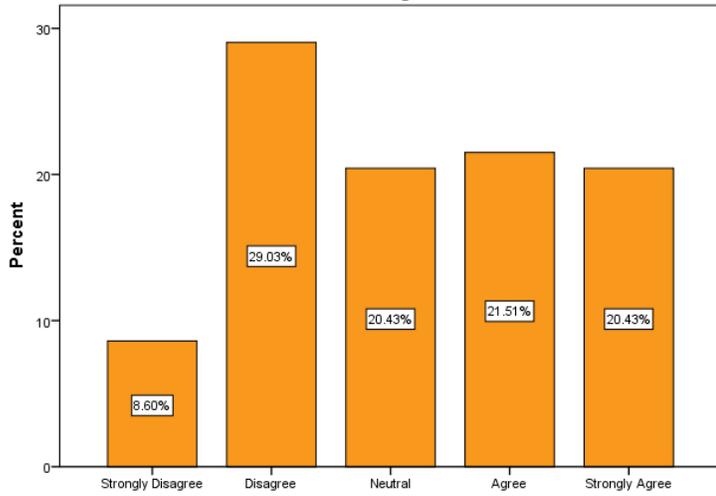
The training programme accomplished its stated objectives



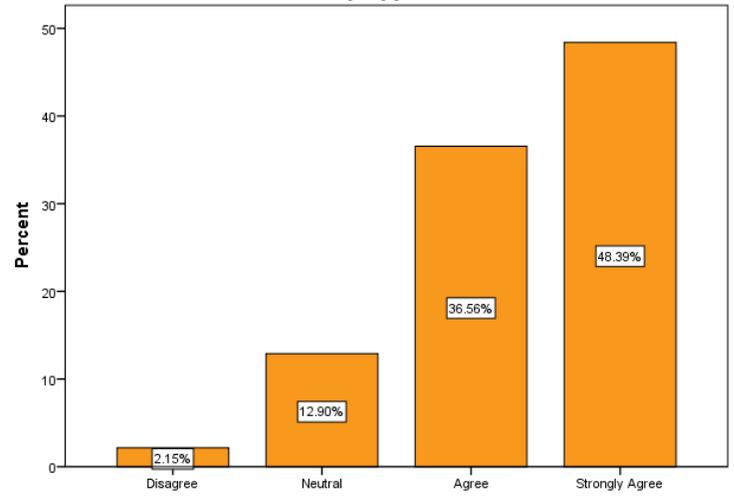
The knowledge and skills offered in this training qualify me in dealing with non-compliance issues and improving poor governance practices



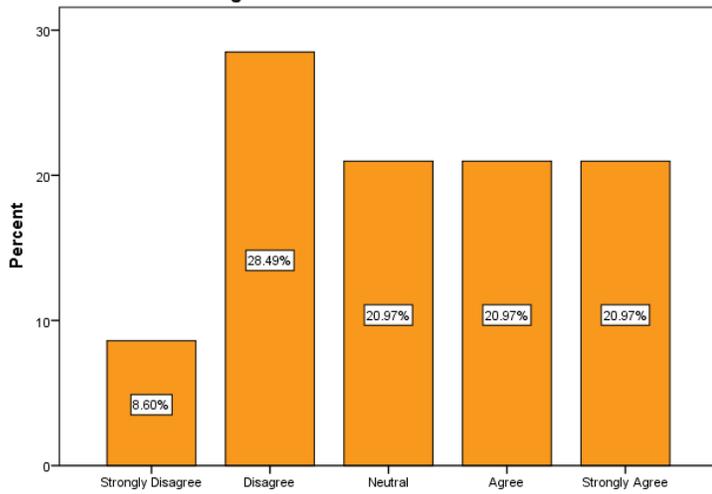
**I have used the acquired skills and knowledge back on my job immediately after the training**



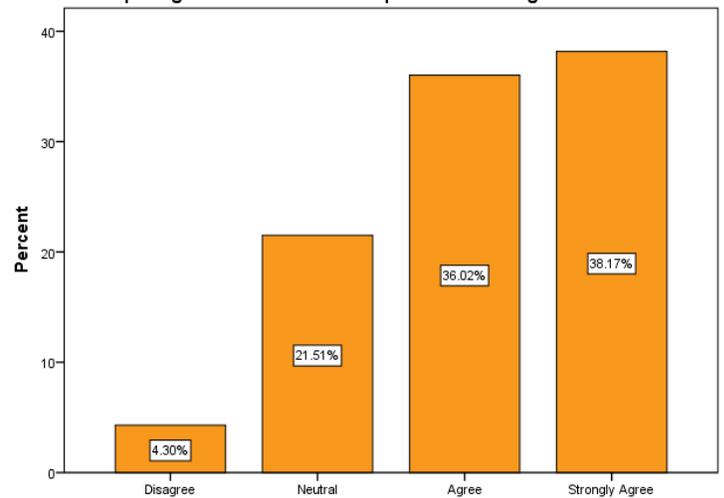
**I am still using the skills and knowledge I acquired from the training in my everyday job**



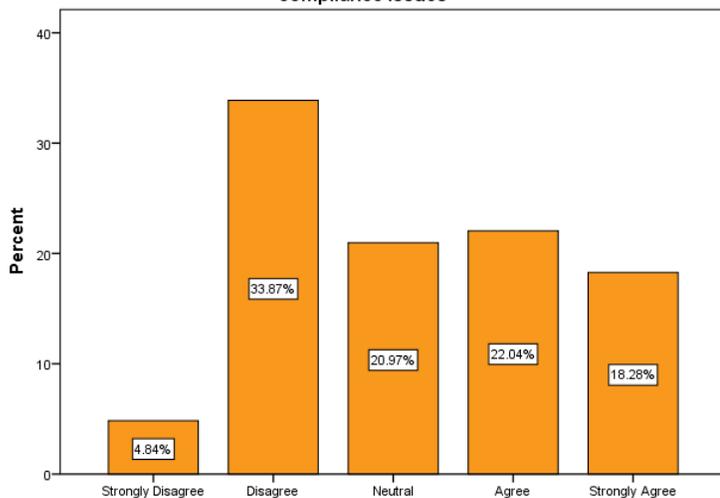
**After this training I am better able to recognise non-compliance and poor governance related activities**



**After this training I know when myself or peers are doing something that will lead to poor governance or non-compliance of the organisation**



**After this training I have more personal awareness of NPO governance and compliance issues**



07 December 2020

**Ms Nthabiseng Innocentia Kraai (218050838)**  
**Graduate School of Business & Leadership**  
**Westville Campus**

Dear Ms Kraai,

**Protocol reference number:** HSS/1600/018D

**New Project title:** Evaluation of the National Development Agency's training on improving governance of Non-Profit Organisations

### **Approval Notification – Amendment Application**

This letter serves to notify you that your application and request for an amendment received on 30 November 2020 has now been approved as follows:

- Change in title

**Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form; Title of the Project, Location of the Study must be reviewed and approved through an amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.**

**PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.**

**All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.**

Best wishes for the successful completion of your research protocol.

Yours faithfully



.....  
**Professor Dipane Hlalele (Chair)**

/dd

Cc Supervisor: Dr Pfano Mashau  
Cc Academic Leader Research: Professor Muhammad Hoque  
Cc School Administrator: Ms Zarina Bullyraj

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Humanities & Social Sciences Research Ethics Committee  
UKZN Research Ethics Office Westville Campus, Govan Mbeki Building  
Postal Address: Private Bag X54001, Durban 4000  
Tel: +27 31 260 8350 / 4557 / 3587  
Website: <http://research.ukzn.ac.za/Research-Ethics/>

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

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