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Mahlalela, Mduduzi Simanga

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Factors affecting the implementation of the South African Police Service directive on accessibility infrastructure

Mduduzi Simanga Mahlalela
WITS Graduate School of Governance

Thesis presented in partial fulfilment for the degree of Master of Management (in the field of Public Sector Monitoring and Evaluation) to the Faculty of Commerce, Law, and Management, University of the Witwatersrand

July 2023

DECLARATION

I Mduduzi Simanga Mahlalela declare that this research report entitled 'Factors affecting the implementation of the South African Police Service directive on accessibility infrastructure' is my own unaided work. I have acknowledged, attributed, and referenced all ideas sourced elsewhere. I am hereby submitting it in partial fulfilment of the requirements of the degree of Master of Management (Public sector monitoring and evaluation) in the University of the Witwatersrand, Johannesburg. I have not submitted this report before for any other degree or examination to any other institution.

Name of candidate	**Mduduzi Simanga Mahlalela**
Student number	**1108473**
Signature	
	Signed at Johannesburg on 31st July 2023
Telephone numbers	**0723746877**
Email address	**1108473@students.wits.ac.za**
First year of registration	**2020**
Date of proposal submission	**01 December 2022**
Date of report submission	**31 July 2023**
Name of supervisor	Kambidima Wotela

ABSTRACT

Author: Mduduzi Simanga Mahlalela **Supervisor** Kambidima Wotela

Thesis title: Factors affecting the implementation of the South African Police Service directive on accessibility infrastructure.

The United Nations Convention on the Rights of Persons with Disabilities (2006) Article 9 guides the implementation of universal access, as the accessibility of facilities and physical environment requires usable designs (Sholanke et al, 2019). In South Africa, the policy is implemented through the White Paper on the Rights of Persons with Disabilities (2016) and the National Strategic Framework on Universal Design and Access (2021) to promote fairness, eradicate discrimination, and advocate for reasonable accommodation. Hence, the policy addresses the importance of user-friendly infrastructures and the implementation of universal access in all departments.

However, Maart et al (2007) point out that policies on infrastructure access, experience implementation challenges. The South African Police Service Strategic Plan (2020-2024) and the SDIP (2022-2023) highlight the importance of infrastructure plans and police accessibility in police stations. While the Annual Report of 2020-2021 narrates the challenges experienced in completing accessibility projects and new police stations because of delayed suppliers. Mthethwa (2012) identifies that, assessing policy improves accountability and service delivery for policymakers and implementers. These aspects frame the research problem.

Therefore, the research assesses the factors affecting the implementation of the South African Police Service directive on accessibility infrastructure, focusing on the process, attitudes, progress, and challenges as main questions. The research details the problem, identifies the knowledge gap, and further establishes a framework to understand the research findings. A qualitative research strategy is proposed for the study, employing a case study design administered with an interview schedule to gather data from participants within the Facility Management in the South African Police Service.

Keywords: Accessibility, built-environment, implementation, policy, management, universal access, monitoring, challenges, assess.

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1 INTRODUCTION TO THE RESEARCH

1.1 Background

Generally, before we embark on the research problem statement in Section 1.2.1, the purpose of this research in Section 1.2.2, and the research questions in Section 1.2.3, this chapter concisely presents the terms and concepts that conceptualise this research. Furthermore, the research context is largely presented in Sections 1.1.1 and 1.1.2. Whilst, a detailed discussion of the research setting is presented in Section 2.1. The study programme is introduced in Section 1.1.3. Equally, the discussion of the intervention is delivered in 2.2. The delimitations are discussed in 1.3 with the justifications of the study in 1.4. Then, the preface to the research report is in 1.5.

1.1.1 The South African Police Service in brief.

The South African Police Service (SAPS) is a National branch of the department operating nationally. The national role is to carry out the constitutional mandate of the department. According to William and Pruitt (2010) and Faull (2011) the department's past dates in the pre-apartheid era of the South African Police Force (SAP) which was established to maintain public order, exclusively in black communities. The strategic stability in the SAP was intended at winning citizens towards communal crime control (Civilian Secretariat for Police, 2016).

In Post-apartheid, the SAPS is governed by the Constitution of the Republic of South Africa, 1996 (Civilian Secretariat for Police, 2016). This has resulted in the changes and minimal use of force (William & Pruitt, 2010), the distribution of equitable policing to rural and urban areas as well as the introduction of community policing forums (Minaar & Ngoveni, 2004).

These changes came about through the shift to democracy and the passing of reformed laws such as the SAPS Act 68, 1995. Thus, the SAPS derived its directives from Section 205 of the Constitution of the Republic of South Africa, 1996 (SAPS Strategic Plan 2020-2024, 2020).

At the national level, the SAPS deals with policy development, implementation, and maintenance of professional ethics (Civilian Secretariat for Police, 2016). Faull (2011); Minaar and Ngoveni (2004) identify the level with the appointment and deployment of

National Commissioners and the protection and safety of government dignitaries and the responsibility to form a partnership for fighting against crime.

At the divisional level complaints, allocation of resources and evaluations of service provision are maintained (Faull, 2011; Civilian Secretariat for Police, 2016). This also includes the issues of facility management as the proposed research focus of the current study. Lastly, the provincial level serves as a platform for civil society to access services (Faull, 2011).

1.1.2 State of the South African Police Service infrastructure

The SAPS requires proper management, performance and monitoring, and evaluation of infrastructure. The Ministry of Police uses its budget to address issues of assets and infrastructure through its division of Supply Chain Management. The Civilian Secretariat for Police (2016) discusses that SAPS takes responsibility for infrastructures to monitor the allocation and expenditure of the budget in support of the Minister of Police and the policy priorities. Additionally, Supply Chain Management takes the responsibility of extending infrastructural geographical footprints within SAPS (SAPS Annual Report, 2020-2021).

Consequently, the services are led through, infrastructure strategy, service points strategy and capital asset to ensure that existing infrastructure assets are well maintained. William and Pruitt (2010) infer that SAPS has to account for infrastructure, to ensure adaptation. Some of the outsourcing policies that Minaar and Ngoveni (2010) suggest include the maintenance of buildings. This is part of the implementation of the infrastructure directive to ensure that there is compliance and monitoring.

Service sites should be monitored to ensure accessibility, as it is the geographic placement for quality services and community participation. This means that the use of outsourced services for service delivery should be monitored and evaluated. Van Wyk (2014) purports that supervising stations requires the monitoring of accessibility of physical conditions.

The SAPS Strategic Plan 2020-2024 elaborates that the geographical placement of stations and other service points should consider accessibility to increase quality service to citizens. The progress noted includes the creation of an environment that embraces sustainable community support and participation (Civilian Secretariat for Police, 2016).

As a result, assessing the conduct of a policy or programme, to promote accountability of policymakers and implementers to improve service delivery and to foster quality and equity of the policy (Mthethwa, 2012), remains important.

Therefore, the state of the SAPS depicts a need to understanding of the national execution of accessibility directive, to conclude on the progress and challenges in the success of the accessibility directive.

1.1.3 An introduction of the infrastructure directives

The Department of Public Works and Infrastructure serves as an overseer of state properties; however, every government department is responsible for the management of its property, including infrastructure. The Department of Women, Youth, and Persons govern issues of disabilities inclusive of accessibility. An overall policy that provides for infrastructure directives in the management of accessibility is the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD (2006). South African implements the policy through the White Paper on Rights of Persons with Disabilities (2016) and the National Strategic Framework on Universal Design and Access (2021), which is aimed at promoting equality, elimination of discrimination and ensuring reasonable accommodation. These policies are important in the implementation of infrastructure accessibility that are user-friendly.

According to Finch and Zhang (2013), in reality, infrastructure or facilities management does not only concern issues on construction, real estate, and building maintenance; it also includes planning to ensure that building designs align with business objectives and mandates. This research submits that the infrastructure directives also govern the SAPS, within the facility management. Thus, the SAPS has a target minimum of 300 buildings per annum that are to be assessed to ensure accessibility and reasonable accommodation (Department of Labour, 2022).

This also includes the need to expand the infrastructural geographical impression made to community services through consistent resourcing and maintenance of existing infrastructure assets such as police stations (SAPS Strategic Plan, 2020-24). The submission is that there is a commitment to ensure infrastructure access to police service through ramps, rails, and parking (SAPS Service Delivery Improvement Plan (SDIP), 2022/23). However, in terms of the infrastructure development programme,

challenge in the development of new stations, as SAPS have not completed scheduled projects as a result of delayed service providers (SAPS Annual Report, 2020/21:27).

Therefore, infrastructure directives are vital as inclusion developments are reliant on the availability of infrastructure directives.

1.2 Research conceptualisation: Towards factors affecting the implementation of the South African Police Service directive on accessibility infrastructure

1.2.1 The research problem statement

The SAPS Strategic Plan 2020-2024, commits to advancing internal environment and operational capabilities by implementing an Integrated Resource Strategy. In its resource strategy, the target is to ensure that there is access to capital assets and infrastructure like police stations, technological equipment's and aircraft. Among others the development of stations through the Infrastructure Development Programme, encountered challenges to complete planned projects because of delayed service providers and interruption by construction groups and business forums (SAPS Annual Report, 2020-21:27). As part of SAPS Service Delivery Improvement Plan (SDIP) (2022-23) identifies police accessibility, and infrastructure access as a priority to implement easy access to police service through ramps, rails, parking and ablution facilities for disabled persons.

While there is a commitment to infrastructure, delays and challenges to accessing public built environment remain a challenge in the disability and architectural field (Kadir & Jamaludin, 2012). This Human Rights commitment is crucial as enshrined in the UNCRPD (2006), as public facilities should be adequate and user-friend by removing obstacles and discrimination (Pillay & Gumbo, 2019). This means that there is a need for departments to comply with all set standards to address accessibility and to maximise public participation.

Although regulatory frameworks are important, access to services cannot be guaranteed by these instruments; thus, SAPS is required to be accessible as ascertained by the law (SDIP, 2022-2023, September 2022).

As an implementer of the UNCRPD (2006), the South African Constitution in its Chapter 02, section 9 is also concerned with issues of human rights, and these are

important constitutional obligations. Furthermore, universal access is also important as it affords strategies in designs that are usable and adaptable to everyone (Sholanke et al, 2019).

It is submitted that further challenges exist because of physical barriers (Naami, 2019, Angeloni, 2013), inaccessible buildings are because of physical designs that exclude disabled persons to participate in economic life (Pillay & Gumbo, 2019; Maja et al, 2011). In cases where physical barriers exist, they affect the individual's functioning. Recommendation by Govender (2019) highlights that future research should explore arrangements and methods for the implementation of inclusive policy and practices, development and reasonable accommodation.

Outstandingly, old-built infrastructures are a result of spatial injustices of the past, as most buildings used by public departments are not accessible. As a result, this study will assess the implementation of the directive on accessibility infrastructure of the SAPS for the physically disabled, as the SAPS Strategic Plan 2020-2024 is in its implementation. It will utilise the implementation theory to interpret the research results converting them to research findings as suggested in the established conceptual framework.

1.2.2 The research purpose (aim and objectives) statement

The purpose of this research is to assess factors affecting the implementation of the SAPS directive on infrastructure accessibility. The research will be framed from implementation studies and will apply the implementation theory to infer the empirical results. The employed theory emanates from the perspective of the implementation field of study with its accompanying key component processes. This research aims at exploring the implementation of the SAPS infrastructure accessibility directive and addresses the objectives by looking into the literature and knowledge gap.

Firstly, the literature is reviewed on the implementation of accessibility infrastructure directives to understand fully the subject nationally and internationally. Secondly, the research seeks to examine the processes followed during the implementation of accessibility infrastructure directives within SAPS.

Thirdly, the research explores the attitudes toward the implementation of the accessibility infrastructure directive. Fourth, it realises the progress made as well as the challenges in implementing the directive on accessibility infrastructure. The research

proposes to collect data through a qualitative research strategy applied with a case study research design. A purposive sampling procedure will be employed through semi-structured interviews to reach participants that are implementers of the directive accessibility infrastructure.

A thematic analysis will be utilised for analysing the collected data. Thereafter, the implementation theory and other related theories will discuss the implementation outcomes. In conclusion, the research will contribute to concluding the outcomes created by the themes and analysis of the study concerning the implementation of the subject within the SAPS.

1.2.3 The research questions

In view of the research background, there remains a need to understand the impact of implementing the directive. Further down are research questions used as attempt to address the main research problem on the factors affecting the implementation of accessibility infrastructure directives of the SAPS.

1.2.3.1 What are the processes in place in the SAPS to ensure the effective implementation of accessibility infrastructure directives?

1.2.3.2 What is the attitude of facility management towards accessibility infrastructure directives within SAPS?

1.2.3.3 What is the implementation progress on the accessibility infrastructure directive in SAPS?

1.2.3.4 What are the challenges faced in the implementation of the SAPS accessibility infrastructure directive?

1.3 Delimitations of the research

The research delimitations mean the scope of the study, where limitations are recognized to prevent the generalisation of findings from the research population (Miles & Scott, 2017). During the literature review based on the implementation of accessibility to infrastructure, most studies uncovered that this research should make use of the implementation frameworks to explore the research.

The implementation framework has two components: management and monitoring. Whereby, management involves policy initiation, examination, design, implementation,

monitoring, and evaluation (Mentzel & Fick, 1996). This also includes change and performance management (Mentzel & Fick, 1996). The literature points out that implementation should take the form of the management of public intervention to ensure proper monitoring (O'Toole, 2000).

On the other hand, monitoring offers a response to the implementation by determining proper implementation and the evaluation of results (Chenwi, 2009). This includes the monitoring of indicators, benchmarking of targets, measuring outputs, intended results, outcomes, and impact (Chenwi, 2009; Cloete, 2009). In addition to this, operational compliance should be through the monitoring of resource availability and the progress of the implementation (Mazmanian & Sabatier, 1989). The challenges experienced in the policy implementation regarding infrastructure effects inaccessibility (Maart et al, 2007). Moreover, for this study, the research questions will evaluate these components to conclude on unnoticed management and monitoring in the implementation of policies.

Ethics consideration is employed through obtaining ethical clearance certificates and application of validity and reliability test concerning the data collection instruments. The study carries the assumption that there might be dependency from the National Department of Public Works and Infrastructure, however, this is not the main focus, instead the processes followed, progress made, attitudes and challenges by the SAPS in implementing the directive will be determined.

1.4 Justification of the research

The study uncovers in detail, the underlying factors affecting the implementation of the directive on infrastructure accessibility for physically disabled people in their access to the built environments of the SAPS. This adds to the existing knowledge on the subject, especially as a case study.

This study seeks to assist the department to generate quality information in the adaptation of built environments that are inclusive and to determine the challenges thereafter. This includes the focus on the UNCRPD (2006) and South African requirements concerning access to facilities.

Past studies on accessibility pointed out that it is inclusive of universal access (Pillay & Gumbo, 2019). The importance of accessibility to buildings is important as individuals

function optimally in an enabling-environment (Chiwandire & Vincent, 2017). The environmental factors where an individual operates or lives, hamper or enable the individual from performing daily tasks and participating fully in society (Angeloni, 2013). Therefore, in cases where physical barriers exist, they affect the individual's functioning.

Naami (2019) argues that physical barriers such as inaccessible ramps, storey buildings without elevators, and staircases are a hindrance to access to the physical environment for disabled persons. Thus, restrictions and barriers in accessing buildings due to physical designs result in the exclusion to participate fully and adds to the state economy (Pillay & Gumbo, 2019). This infrastructure inaccessibility continues to affect disabled persons negatively in South African workplaces (Maja et al, 2011). The studies highlight issues in the accessibility of universities, universal design in the field of architecture, and accessibility to public spaces (Pillay & Gumbo, 2019; Naami, 2009; Maja et al, 2011).

Tudzi et al (2017) assessed the accessibility of facilities for disabled people and stressed the importance of inclusive infrastructure. Baris and Ulsu (2009) investigated the accessibility of disabled to the environment, their problems, and their participation in life. Van Der Waldt (2014) assessed infrastructure project challenges for a municipality. Given the factors above, studies exposed that policies are complied with; however, there is a need for assessing implementation to determine the progress, attitudes, process and challenges. The research understudy suggests a knowledge gap and intends to reveal the factors that affects the implementation of the accessibility infrastructure directive.

1.5 Preface to the research report

The report has six chapters. After this chapter on the introduction, the literature review describing the problem, the past studies, the explanatory framework, and the conceptual framework is presented in Chapter two. The research strategy, design, procedures, reliability and validity measures and limitations are discussed in Chapter three. Chapter four and Chapter five present and deliberates the findings, to interrogate the research questions. The last Chapter six summarises and concludes the research.

2 REVIEWING LITERATURE TO DERIVE THE CONCEPTUAL FRAMEWORK

Chapter two has general goals; namely Sections 2.1 and 2.2, where we recognise the research problem. Section 2.3 we recognise the knowledge gap and Sections 2.4, 2.5, and 2.6 we craft a theoretical framework for interpreting the findings. Thereafter, the research approach is conceptualised in Section 2.7. Particularly, the study defines the research context in Section 2.1, as groundwork for Section 2.2 in which the research problem is detailed. The literature review on studies that have tried to assess the implementation of the directive on accessibility infrastructure is detailed in Section 2.3. Through the reviewed information, in Sections 2.4 and 2.5, we position the research within implementation studies and its main component and attributes. Devising from the identified implementation theory, Section 2.6 also discusses the institutional theory, COM-B theory, and RE-AIM theory as relevant explanatory frameworks for this research. Section 2.7 details a plan of how this research proposes to assess the factors affecting the implementation of the South African Police Service directive on accessibility infrastructure.

2.1 The history and description of the South African Police Service

The succeeding Section 2.1.1, concisely deliberates the South African Police Service (SAPS) in context with our emphasis on its history (Pre- and post-apartheid), the structure of SAPS at the national, divisional and provincial level, and the aspects of infrastructure and accessibility directives in SAPS.

2.1.1 The South African Police Service in context

The South African Police Force (SAP) was established during the pre-apartheid, to maintain public order, especially in predominantly black communities. William and Pruitt (2010) noted the history of the SAP as a source of maintaining order in black societies, during the apartheid government. The main idea was to enforce violence and laws that were discriminatory (Faull, 2011). The SAP was composed of "Kikstakonstabels" also referred to as "Instant Constables" (William & Pruitt, 2010:118). These laws did not reduce and control crime but contributed to racial crimes because of inequality (Minnar & Ngoveni, 2004).

In Post-apartheid, the Constitution of the Republic of South Africa (1996), introduced the SAPS, which was developed to engage citizens in collective crime control (Civilian Secretariat for Police, 2016). This transformation resulted in the distribution of police services to rural communities as opposed to the centralised urban areas. Faull (2011) argues that the SAPS failed to adopt professional police, because of the experienced corruption and use of force, which still represents the SAP.

The SAPS is divided into national, divisional (component), and provincial (district and police station) levels. At the national level, the attention is on policy development, application, and maintaining professionalism. The implementation, development of operating standards, training, and professional conduct are maintained across the country (Civilian Secretariat for Police, 2016). The SAPS Strategic Plan 2020-2024 suggests that the protection and security of government dignitaries are at the national level. Minaar and Ngoveni (2004) argued that a partnership with the SAPS at the national level is required to coordinate visible policing. Van Wyk (2014) also identifies some of the notable works coordinated which includes parliamentary oversight mandated to the Department of Civilian Secretariat for Police, for the monitoring and evaluation.

At the divisional level, SAPS manages complaints, resource allocation and service provision, and evaluations for effective and efficient service delivery. Faull (2011) points out that the handling of complaints is the obligation of the local police station with the development of a platform for civil society to access services, at the provincial level. The national and divisional services implementation primarily occurs at the local level.

The Ministry of Police allocates a budget to address assets and infrastructure through Supply Chain Management. The Civilian Secretariat for Police (2016) discusses that SAPS oversees infrastructures to monitor budget allocation and policy priorities for police Ministers. The Division of Supply Chain Management is responsible for infrastructure within SAPS (SAPS Annual Report, 2020-2021). This includes the reference made and commitment by the SAPS Strategic Plan 2020-2024, to ensure advance resources including infrastructure access through Integrated Resource Strategy.

Given the above, this is where the implementation of the infrastructure accessibility directive takes place. Below is an illustration of the SAPS organisational structure, from the national, provincial, and divisional levels.

Level	Province/Division
National Commissioner	National Commissioner
National Head	Directorate for Priority Crime Investigation
Deputy National Head	Directorate for Priority Crime Investigation
Deputy National Commissioners	Policing
	Crime Detection
	Support Services
Provincial Commissioner	Eastern Cape
	Free State
	Gauteng
	Kwa-Zulu Natal
	Limpopo
	Mpumalanga
	North West
	Northern Cape
	Western Cape
Divisional Commissioner	Crime Intelligence
	Detective and Forensic Services
	Financial Management Services
	Human Resource Management
	Human Resource Development
	Inspectorate
	Legal and Policy Services
	Protection and Security Services
	Technology Management Services
	Visible Policing and Operations

Table 1: Structure of SAPS (by author)

In summary, this this section reflected on the brief history of the SAPS. All the levels of SAPS department were viewed as important towards the implementation of directives and policies, including the national level.

2.2 The challenges of accessing built environment: symptoms, root causes, consequences and the interventions

Infrastructure accessibility challenges emanates from building designs and urbanisation issues, such as accessibility constrained by the age of the building. Inaccessible buildings may create access barriers, potentially causing discrimination (Salha et al, 2020). The poor infrastructure progress also results in delays in accessibility (Murwira & Bakker, 2017). Thus, inaccessibility remains experienced by the end-user.

This section analyses the problem based on the challenges in accessing the built environment. We discuss the research with a detailed explanation of Section 2.2.1 that is, the symptoms of the challenges of accessing the built environment. Section, 2.2.2 deliberates on the root causes and 2.2.3 discusses the consequences. The connection of these factors is exemplified in a problem tree analysis in Figure 1. Lastly, Section 2.2.4 presents the results framework as an intervention to the challenges of accessing the built environment.

2.2.1 The symptoms of the challenges of accessing built-environment

Inaccessible infrastructures and built-environment have led to discrimination and barriers for decades. The problems hinted on the problem tree suggest that challenges remain. This section presents indicators identified as warning signs in the challenges of accessing the built-environment like the lack of recognition of disabled persons, inconsistent policy implementation, and universal access cost as validating for exclusion.

Firstly, the lack of recognition of disabled persons is critical. The lack of end-user input on designs leads to poor infrastructure management (Salha et al, 2020). While end-user participation promotes political participation in the development of accessible public places (Chiwandire & Vincent (2017). This also assists with the implementation plans, as obstacles and barriers are easily eliminated during the planning phase. Conversely, poor recognition and removal of accessibility challenges at the planning stage lead to inaccessible buildings. Consequently, the World Health Organisation (2011) suggested that it results in the exclusion of disabled persons' participation.

Secondly, inconsistent policy implementation is a consequence of the incorrect development of public spaces. This is because of the acknowledgement of scarce resources during the development of universal designs (Chiwandire & Vincent, 2017).

As a result, the building project gets placed on one project manager, which may result in undesirable outcomes. Inconsistent policy implementation results in incorrect implementation of policies, such as in the development of outdoor environments (World Health Organisation, 2011). Acknowledging resource scarcity before engaging in the activities, occurs from poor implementation of universal designs, leading to the failed implementation of policies that enhances accessibility (Chiwandire & Vincent, 2017; Salha et al, 2020).

Arguably, undesirable outcomes are likely to be present on projects that are managed single-sided. This results in incorrect implementation of policies and administration of accessibility (Murwira & Bekker (2017).

Thirdly, universal access cost is used as justification for exclusion including project managers' assumption of adaptation cost. Such results in slow progress in adaptation and universal design because of the affordability as compared to sustainable development and public good (Salha et al, 2020). This means that, resources are likely to be misallocated.

Infrastructure costs are reasons to justify reluctance to make the built environment accessible (Chiwandire & Vincent, 2017). Therefore, infrastructures continuously get old, and poorly maintained because of incomplete adaptations (Wang et al, 2019). Salha et al (2020) contend that accessibility is an investment and a public good. However, the World Health Organisation (2011) suggests that priorities with accessibility are sometimes not allocated to ensure universal design. Given that, the costs and financial functions get assigned to different responsibilities.

Generally, the symptoms of the challenges of accessibility directives point to the allocation of resources to adapt to universal access, poorly maintained buildings, the costs of revamping all buildings, resource scarcity, and lack of understanding of the end-users responsibilities. These symptoms contribute to inaccessibility and in turn, result in similar challenges as that of this study.

2.2.2 The root causes of the challenges of accessing built-environment

This section presents the indicators identified as root causes of the challenges of accessing the built environment. These are the old built environment; budgetary

constraints; non-compliance to legislative instruments, building codes, and accessibility standards; lack of awareness of disability and challenges in universally accessible designs.

Firstly, the old-built environments are likely to render ineffective adaptation and accessibility, leading to resource and universal design management in unindustrialised areas (Wang et al, 2019). Based on that, compliance is crucial to enable the adaptation of older buildings while preserving their appearance.

Opinions by Murwira and Bekker (2017) suggest that South African old-built environments are a result of delayed infrastructure investment, leading to inadequate planning, allocation of resources, and slow infrastructure delivery backlogs. According to Wang et al (2019) in developing countries, this result in infrastructure aging as meeting the basic needs of infrastructure continues to be a problem. The building of new infrastructure and rehabilitation of old buildings considers universal functionality (Chiwandire & Vincent, 2017). Arguably, barrier-free environments are not maintained and are essential for equality and participation (Salha et al, 2020). Compliance should ensure the removal of technical constraints on historically preserved buildings (World Health Organisation, 2011).

Secondly, budgetary constraints impede the implementation of compliance with set standards of the National Building Regulations and Building Standards Act (No. 103 of 1977). Misaligned finance allocation and preservation of old looks are a result of financial constraints (Murwira & Bekker, 2017; Salha et al, 2020). Wang et al (2019) discusses that finances for refurbishing existing infrastructures are usually insufficient with many infrastructures deteriorating. Cost consequences for emerging amenities for universal access is also a challenge (Chiwandire & Vincent (2017). Thus, the implementation of accessibility requires a sufficient budget as compliance may be enforced (World Health Organisation, 2011).

Conversely, although time and budgetary constraints are a major challenge, the shortfall in the delivery of infrastructure can result in ineffective systematic delivery and a shortage of skills to deliver infrastructure (Murwira & Bekker, 2017). Therefore, built environment preservation should be universal.

Thirdly, non-compliance to legislative instruments, building codes, and accessibility standards results in poor adaptation and slow universal access. Non-compliance with

National Building Regulations and Building Standards Act (No. 103 of 1977) and the UNCRPD (2006) as legislations, leads to poor planning, lack of financial resources, lack of disability awareness and prevents the reduction of disaster and management plans (World Health Organisation, 2011).

Non-compliance with legal obligations indicates poor adherence to universal access and inclusion (Chiwandire & Vincent, 2017). This leads to slow adaptation for universal access. The lack of an enforced policy framework occurs from inadequate financial resources allocation, planning and design capacity; enforcement mechanisms; user participation; and disability awareness (World Health Organisation, 2011). Hence, underdeveloped measures to address standards and guidelines for legislation lead to inaccessibility (Salha et al, 2020). Furthermore, early resilience in the built environment to comply with legislation could prevent disasters and address management plans, and responses to emergencies (Wang et al, 2019). Therefore, when legislation is neglected, society's infrastructure is impacted negatively.

Misconceptions about universal access hinder disability awareness (World Health Organisation, 2011). Training responsible players for adaptation and access is necessary, as it helps with the recognition of diversity. Salha et al (2020) note that the lack of awareness of disability leads to inaccessible infrastructures, including Information Technology. Given the above, the lack of removal of these physical barriers leads to negative attitudes in all domains. Arguably, the World Health Organisation (2011) suggests that awareness-raising should overcome prejudice in architecture, construction, design and policy-making.

Chiwandire and Vincent (2017) argues that the lack of disability awareness results in poor diversity recognition. Thus, the need to ensure universal access becomes impaired. Universal designs face challenges in ensuring fully accessible public infrastructure due to public knowledge (Chiwandire & Vincent, 2017). Therefore, poor compliance with universal designs as per the set standards, may result.

Many public units lack access and do not promote the rights of disabled persons (Chiwandire & Vincent, 2017). The World Health Organisation (2011) identifies accessibility as essential to maintain the culture of removing barriers, through raising standards and attaining delayed universal design. Wang et al (2019) argue that poorly maintained public infrastructure leads to inaccessible spaces for elderly and disabled

individuals, including transportation and building. Architects, construction engineers, and implementers seem to lack understanding on disability policies for successful accessibility (Salha et al, 2020). Hence, they continue constructing inaccessible infrastructures.

In summary, inaccessibility arises from inadequate planning, slow delivery, backlogs, poor resource allocation and lack of information alignment to policy measures, poor compliance and lack of awareness. These in turn have the potential of contributing to challenges in accessing the built environment which is linked to the current research.

2.2.3 The consequences of the challenges of accessing built-environment

Challenges in accessing the built-environment results in poor recognition of disabled persons' right, exclusion from participation, increased non-compliance and the lack of progress in accessibility, government perceived as failing disabled persons, and poor monitoring and evaluation for accessibility progress.

Firstly, the rights of disabled persons are poorly recognised because of inaccessible infrastructure. Such inaccessible infrastructure results in discrimination and prejudice, and does not facilitate the importance of human rights (Chiwandire & Vincent, 2017). This leads to the poor manifestation of the fundamental rights of disabled people. Inclusive access to infrastructure also equates to enjoying human rights (Chiwandire & Vincent, 2017; Wang et al, 2019).

Secondly, the exclusion of disabled persons results from inaccessibility, leading to isolation and discrimination because of inadequate accommodation. Inaccessibility maintains the marginalisation and seclusion of disabled people (Salha et al, 2020). This includes the exclusion from the daily use of technology. Inadequate facilities further cause inconvenience and limited mobility to move freely (Chiwandire & Vincent, 2017). World Health Organisation (2011) argues that accessibility efforts should allow the design and development of policies in monitoring progress and responsiveness.

Thirdly, the increased non-compliance to track progress on infrastructure accessibility requires the principles of universal designs and developments managed by architects as set by the UNCRPD (2006). Tracking infrastructure accessibility progress is mostly not followed under universal design principles highlighting the role player's responsibility to ensure accessibility and reasonable accommodation (Chiwandire & Vincent, 2017). In

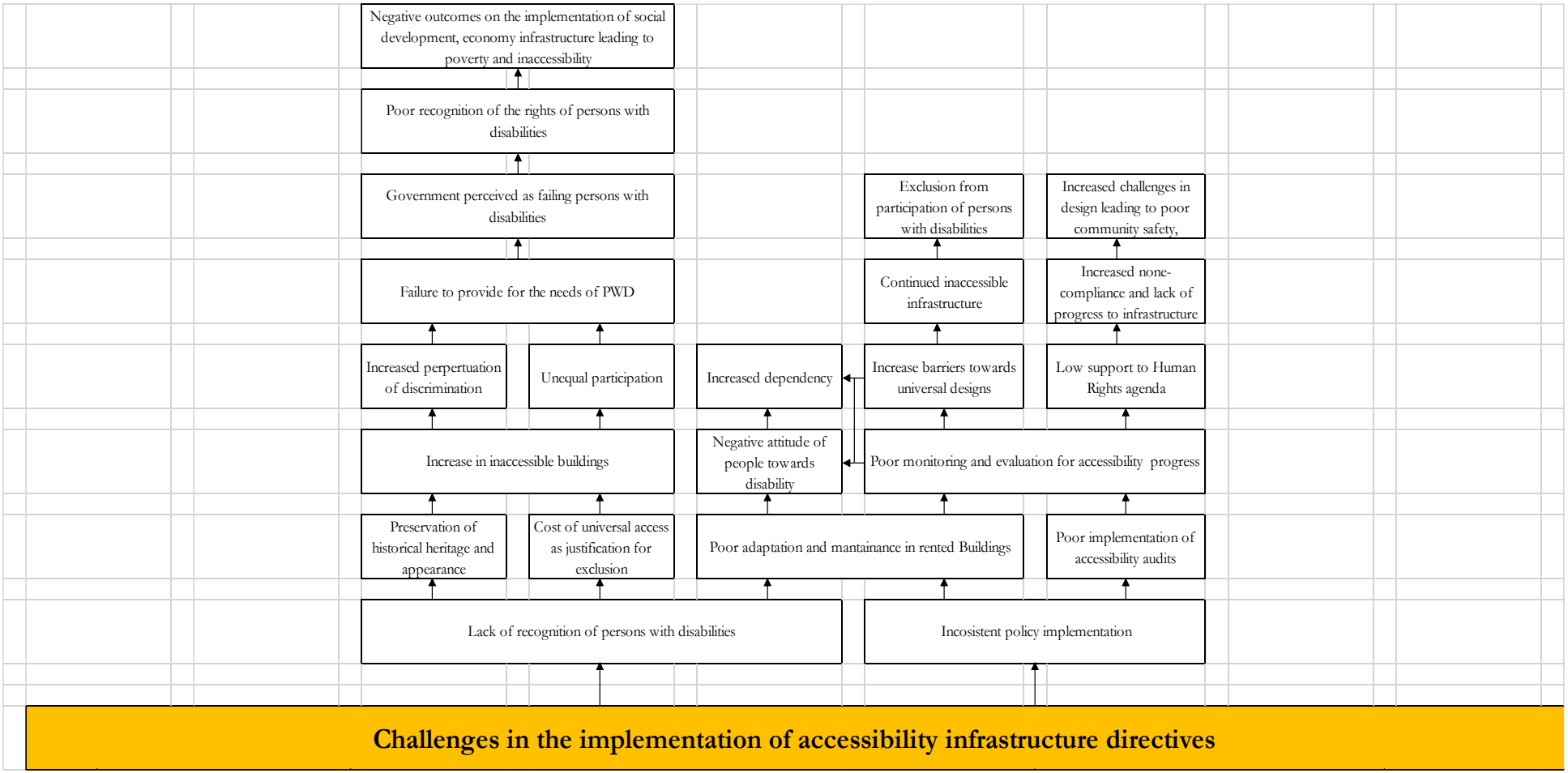
addition, physical environments should be accessible on design standards (World Health Organisation, 2011). This further leads to the need for tracking and developing architectural designs on buildings and plans for access (Salha et al, 2020).

As a result, the maintenance of new and traditional infrastructures is mostly prevalent (Wang et al, 2019). Time and schedule then overruns result in poor quality management for construction projects, leading to poor performance (Murwira & Bekker, 2017). This is likely to lead to non-compliance and poor progress tracking, as monitoring and evaluation remain a challenge and is not undertaken to ensure proper management of infrastructure. As a result, the relationship between the government, the developers, and end-users is affected.

Chiwandire and Vincent (2017) purport that reformed statutes has had insignificant influence on refining accessibility as many buildings are inaccessible. Murwira and Bekker (2017) infer that engaging in preliminary evaluations before beginning a project, addresses accessibility. Monitoring and evaluating accessibility laws and standards is also crucial for ensuring compliance (World Health Organisation, 2011). Arguably, end-users and developers' relationship is not strengthened to ensure that all invention processes and evaluations are carried out correctly (Salha et al, 2020). This includes those legislations such as the UNCRPD (2006).

The government may also be viewed as failing disabled persons because of poor universal design, as old designs are inaccessible and exclude disabled persons from participating in society's economic growth and development (Murwira & Bekker, 2017). Standards and norms for accessibility and end-users require consultation during the development and initial planning stage of designing projects, to maximize accessibility (Salha et al, 2020; Chiwandire & Vincent, 2017). The World Health Organisation (2011) notes that the government should ensure that policies and standards are inclusive. Murwira and Bekker (2017) suggest that the government is responsible for public infrastructure development. Given that, investing in public buildings addresses infrastructure backlogs, promoting economic growth accessibility.

In summary, this section focused on the problem review by looking at the symptoms, root causes, consequences and draws conclusion by reflecting on the results framework relating to the challenges of accessing infrastructure. The problem tree below illustrates the assessed challenges in accessibility infrastructure directives.


Negative outcomes on the implementation of social development, economy infrastructure leading to poverty and inaccessibility
Poor recognition of the rights of persons with disabilities
Government perceived as failing persons with disabilities
Exclusion from participation of persons with disabilities
Increased challenges in design leading to poor community safety,
Failure to provide for the needs of PWD
Continued inaccessible infrastructure
Increased none-compliance and lack of progress to infrastructure
Increased perpertuation of discrimination
Unequal participation
Increased dependency
Increase barriers towards universal designs
Low support to Human Rights agenda
Increase in inaccessible buildings
Negative attitude of people towards disability
Poor monitoring and evaluation for accessibility progress
Preservation of historical heritage and appearance
Cost of universal access as justification for exclusion
Poor adaptation and mantainance in rented Buildings
Poor implementation of accessibility audits
Lack of recognition of persons with disabilities
Incosistent policy implementation
Challenges in the implementation of accessibility infrastructure directives

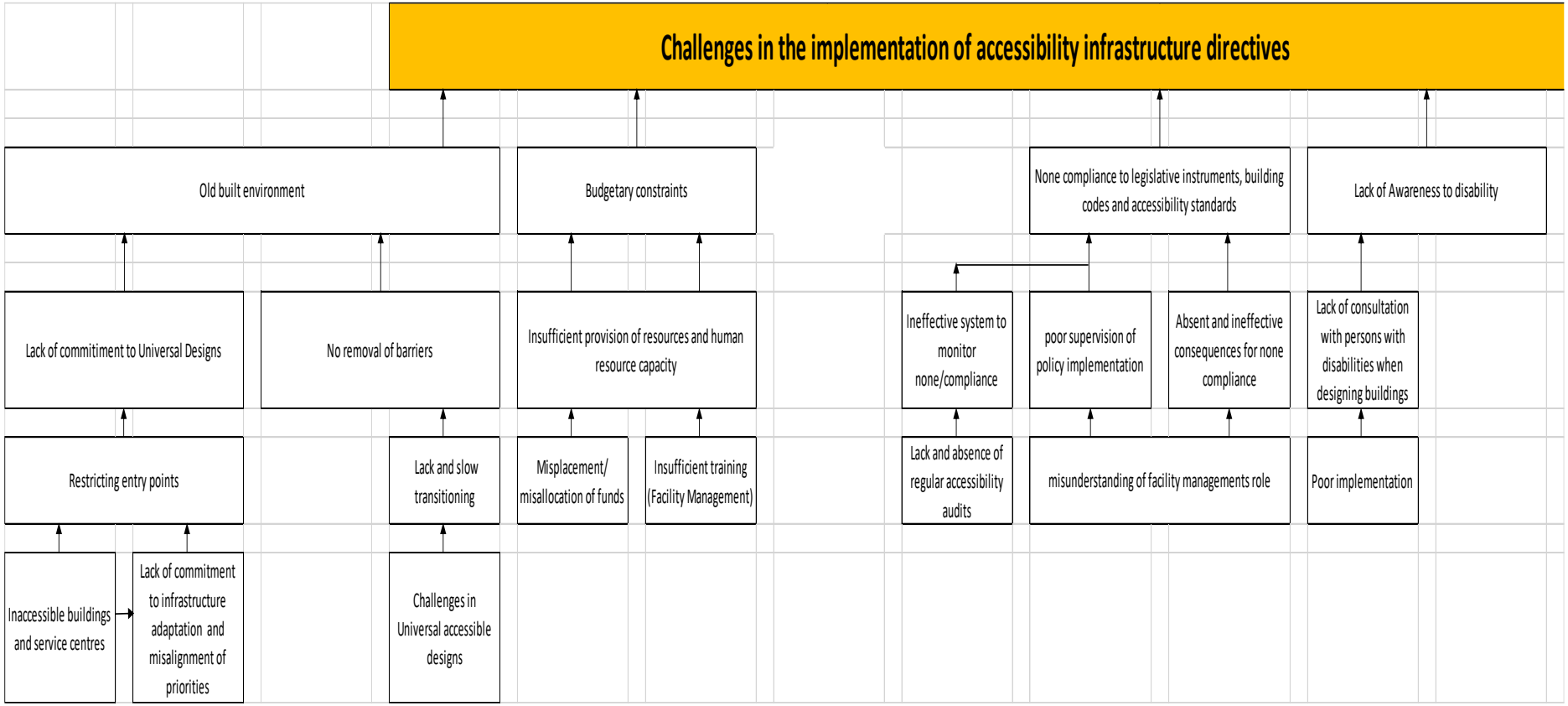


Figure 1: Challenges in the implementation of accessibility infrastructure directives: Problem Tree (Sources: Author)

2.2.4 The results-framework relating to the challenges of accessing infrastructure

The results framework outlines intervention management components, including impact, outcome, output, activities and inputs. Firstly, the discussion begins with defining the components and lastly provides the narrative linked to the challenges of accessing infrastructure.

The impact refers to the long-term, cumulative effects at higher level goal to be achieved by a project, policy, or intervention over time towards what is aimed to be changed (Parsons et al, 2013; Peersman & Rugg, 2010). Outcomes are the intermediate effects of an intervention's outputs, inclusive of knowledge, attitudes, beliefs, behaviours, and the impact of the project or intervention (Peersman & Rugg, 2010; Parsons et al, 2013).

Outputs focus on the immediate effects of program, policy, or intervention activities (Peersman & Rugg, 2010). Direct deliverables and products include infrastructure directive implementation, with input ranging from tangible to intangible. Inputs can be tangible and intangible outcomes of the programme activities (Parsons et al, 2013).

Activities involve organising actions, such as funding, technical assistance, and resources, to achieve project interventions and policy objectives (Peersman & Rugg, 2010; Parsons et al, 2013). Lastly, the inputs transform into capital, human, technical expertise and material resources used in a program, policy or intervention (Peersman & Rugg, 2010; Parsons et al, 2013). Thus, the impact aligns with the outcomes, outputs, activities, inputs, indicators, targets and baselines.

Implementing accessibility infrastructure in SAPS maximises accountability for infrastructure directives. Chapter six of the National Strategic Framework on Universal Design and Access (2021), identifies the management cycle or phases of universal design and access as inclusive of: policy and direction setting, planning and design, implementation and performance management, review and evaluation and feedback mechanisms and monitoring and evaluation. These are important as part of the management framework on infrastructure accessibility.

In the Census report (2011), Lehohla (2014) suggests that planners and decision-makers should develop accessibility guidelines, identify obstacles, and promote services by

providing appropriate infrastructure, inclusive of housing, medical facilities, workplaces, and monitoring implementation, and ensuring accessible facilities and services. In achieving this goal, the implementation of accessibility infrastructure will measure four outcomes as illustrated in Figure 2 with their outputs and linkages to their outcomes, activities, targets, baseline, assumptions and risks.

The outcomes are namely: Outcome 1: increased positive attitude towards the availability of accessibility audits; Outcome 2: improve understanding of the process of facility management in the implementation of the accessibility infrastructure directive; Outcome 3: improve implementation progress on the accessibility infrastructure directive and Outcome 4: decrease challenges in implementing the accessibility infrastructure directive.

The White Paper on the Rights of Persons with Disabilities Implementation Matrix (2015) identifies strategic reports and annual performance as important in gathering information that responds to the problem. Hence, annual reports, Supply Chain Management reports and strategic planning reports are important as proof to adapting 100% target of implementation compliance, for the SAPS. The SAPS has a target minimum of 300 buildings per annum that are to be assessed to ensure that are accessible and accommodating of people with disabilities (Department of Labour, 2022).

Hence, expanding infrastructural markings to service the communities, remains important. Thus, Figure 2 provides a possible breakdown of the potential results framework for the implementation of the infrastructure accessibility directive for the SAPS.

Results chain level	Description	Indicator(s)	Data/information source	Baseline values	Targets	Assumptions	Risks
Impact	Maximise accountability in the implementation of accessibility to infrastructure directive	Number of accessible buildings	Annual Reports, Infrastructure plans	Database	All	Compliance of the Public Finance Management Act.	Blame shift in inte-governmental responsibilities
Outcome 1	Increased positive attitude towards the availability of accessibility audits	Number of meetings held on facility management	Supply Chain Management Reports	Database	All	Influence of positive attitudes on reasonable accommodation and universal designs	Challenges on shared responsibilities
Output 1.1	Enhanced attitude towards infrastructure accessibility directives Trainings and awareness campaigns to reach professionals	Number of facility management officials	Supply Chain Management Reports Annual Reports		All	Provision of information based on perceived daily information and encounters	Societal ideas could attitude
Outcome 2	Improved understanding of the process of facility management in the implementation of the directive	Number of facility management personnel with trade expertise	Supply Chain Management Reports Infrastructure Development Plan		All	Public sector owned and leased buildings are properly audited with quantified and costed implementation plans for retrofitting	-Facility management conducted by qualified personnel -Poor training
Output 2.1	Role of facility management to determine compliance	Percentage of trained of facility management officials	Supply Chain Management Reports Human Resource Development data	Available data	All	-Sufficient allocation of human and capital resources. -Understanding and compliance of legislative instruments	-Adamant acceptance of responsibilities -Disregard of costs associated with universal access
Outcome 3	Improved implementation progress on the accessibility infrastructure directive	Number of experienced officials	Supply Chain Management Reports		All	-Positive results and ultimately lead to the goal. -Inclusive infrastructure	-Biased measured results -Proper documentation and reports provided for an easy process.

Results chain level	Description	Indicator(s)	Data/information source	Baseline values	Targets	Assumptions	Risks
Output 3.1	Policy performance and implementation of accessibility policies	Number of officials understanding policy	Supply Chain Management Report Interviews with professionals	Available National Instruction	All officials conversant with policy	-Monitoring and evaluation of accessibility progress -Decreased non-compliance and lack of progress -Increase inclusion	-Forged compliance -Misunderstanding of the policy
Outcome 4	Decreased challenges in implementing the accessibility infrastructure directive	Number of completed buildings	Supply Chain Management Reports Infrastructure Development Plan Annual Reports	Available Reports	All completed buildings	-Exposure of facility management to audit frameworks for compliance within the directive. -A fully functioning quality assurance systems that enhances compliance. -Improved performance.	-Poor reception and participation. -Exaggerated challenges based on budgetary constraints.
Output 4.1.1	Knowledge and insight about accessibility audit frameworks.	Number of Officials trained	Supply Chain Management Personnel EHW and Human Resource Development reports	Trained officials	All	-Recognition of the rights of persons with disabilities -Decrease challenges on design leading in accessibility and social inclusion	Challenges with financial constraints lack of supervision of policy implementation

Figure 2: Results-framework on the challenges in the implementation of accessibility infrastructure directives
Sources: Author

2.3 Methods, data, findings, and conclusions of studies on the implementation of accessibility directive

In this section, we pursue to review and conclude on the different methods, findings and conclusions of qualitative and quantitative studies conducted in South Africa and other countries. The review is based on previous studies concerning assessing the challenges faced in the implementation of built environment accessibility directives in the public sector, to evaluate this research.

The section also deliberates the limitations of the studies to identify the knowledge gap in the current research. Factors of implementation research can be assessed through different methods (Goggin, 1986). Hence, this research concludes the use of qualitative and quantitative research.

The study begins by sourcing data that interrogates 2.3.1 qualitative and quantitative research studies on the implementation of accessibility built environment directives, conducted in South Africa and other countries. It looks at the aim or objectives of the study, research strategy, interpretive or theoretical frameworks considered, research design, data or information collection instrument used, target population and sampling technique applied, data or information collection process, data or information processing, data or information analysis, key empirical results presented, key research findings, limitations the study documented, and own assessed limitations of the study.

2.3.1 Qualitative research and quantitative research studies on the implementation of accessibility-built environment directives, conducted in South Africa and other countries.

The aims and objectives of the research study differed in all these studies. The studies made reference to qualitative, quantitative and mixed methods to understand the outcomes made concerning the problem. Research studies primarily examined persons with disabilities, focused on built environments, examining impacts, participation, and obstacles encountered. While other studies looked at addressing human rights issues and the realisation of the importance of accessible design to the built environment. Studies identified challenges in implementing accessible built environments in various contexts.

Banda-Chalwe et al (2013) studied the experiences of participation for persons with mobility limitations in Zambia. Baris and Ulsu (2009) studied the problems and

priorities of disabled persons' participation in the built environment and their experiences. McKinney and Amuson (2020) explored the experiences of people with disabilities in the built environment. Lastly, Maart et al (2007) investigated the experiences of people with disabilities in environmental barriers in urban than rural settings. Shumba and Moodley (2018) assessed the implementation of the disability policy framework in Namibia, using a qualitative study. Chiwandire and Vincent (2017) assessed wheelchair users, access, and exclusion in South African higher education and used a qualitative strategy. Van Der Waldt (2014) assessed infrastructure project challenges for the Dr. Kenneth Kaunda District Municipality and employed a qualitative, case study to obtain data. Danso et al (2017) assessed the accessibility of built infrastructure facilities for disabled persons for the Sofoline Interchange and used qualitative research.

Contradictory studies by Tudzi et al (2017) aimed at addressing human rights and the right to education. Hayati and Faqih (2013) investigated the realisation of accessible designs for public places in Surabaya. From the reviewed articles written about the research problem, it was noted that the challenges in the implementation of accessibility directives in the built environment were not explored.

2.3.1.1 Interpretive/theoretical frameworks considered

Most studies used conceptual frameworks under the legislation, including domestic and international protocols on disability-related matters and implementation studies. Other studies used frameworks related to medical and welfare to conclude on accessibility.

Banda-Chalwe et al (2013) used a framework inclusive of facilitating and mainstreaming societies by addressing fundamental aspects of integration, inclusiveness, and equality in the built environment. McKinney and Amuson (2020) were guided by both local and inland policies on disability, Article 9 of the UNCRPD. Hayati and Faqih (2013) also suggested the policy as a signatory agenda to their study. The international protocols were also used as a signatory to the studies in Ghana (Tudziet al, 2017). Maart et al (2007) used of medical and welfare frameworks for their study. Studies utilised different frameworks, including human rights protocols, as evidence.

On the other hand, Shumba and Moodley (2018), Chiwandire and Vincent (2017) and Van Der Waldt (2014) employed implementation studies. Studies applied different frameworks to analyse the results, which can be useful in any other study.

2.3.1.2 Research strategy (qualitative or quantitative)

The studies employed different strategies; however, qualitative studies were prevalently used as they gathered enough knowledge through surveys, exploratory, and focus groups. A qualitative strategy was used as a research strategy and observational studies were employed (Banda-Chalwe et al, 2013; McKinney & Amuson, 2020; Hayati & Faqih, 2013; Shumba & Moodley, 2018; Chiwandire & Vincent, 2017; Van Der Waldt, 2014; Danso et al, 2017). The above, assisted the researchers to obtain rich data regarding the studies on the built environment.

Although the discussed studies used a qualitative strategy; Maart et al (2007); Tudzi et al (2017); Baris, and Ulsu (2009) used quantitative studies to gather data. A combined study or mixed method was used by Baris and Ulsu, (2009). While this is, the studies explored the subject using different methods, which produced sufficient data to answer the enquiry understudy.

2.3.1.3 Research design

Reviewed studies focused on case studies addressing accessibility challenges in built environments for disabled persons. Banda-Chalwe et al (2013); McKinney and Amuson (2020); Baris and Ulsu (2009); Shumba and Moodley, 2018; Chiwandire and Vincent, (2017); Van Der Waldt (2014); Danso et al, (2017) used case studies to obtain information on disabled individuals' experiences with built environment accessibility.

Notably, quantitative studies were also used with cross-sectional and empirical designs. Maart et al (2007) used a descriptive, cross-sectional approach. Observational (experimental) and empirical designs were also used by Hayati and Faqih (2013) and Tudzi et al (2017). Although case study was mostly used here, studies can take form of different designs.

2.3.1.4 Data/information collection instrument used

The studies used interviews as collection instruments. Although these interviews were used in focus groups, face-to-face, in-depth, and semi-structured as well as through

questionnaires all were to gather information. Checklists and observations that included the taking of notes and pictures also formed part of the data instruments to gather information.

Past studies by Banda-Chalwe et al (2013) and Tudzi et al (2017) used focus groups and face-to-face interviews. This also included in-depth and semi-structured one-on-one interviews used by McKinney and Amuson (2020); Shumba and Moodley, 2018; Chiwandire and Vincent, (2017); Van Der Waldt (2014); Danso et al (2017). Written documents and interviews were also used by Baris and Ulsu (2009) and Van Der Waldt (2014).

On the contrary, Maart et al (2007) used group discussions and implemented checklists to gather information. Hayati and Faqih (2013) also used observations, notes and photography for gathering evidence and data sources in the field. The current research can also use any form of collection.

2.3.1.5 Target population and sampling technique applied

Factors to consider for obtaining information on the experience and built environments include ethnic group, age, sex and community type. The type of sampling is also important. Studies showed the use of sampling such as stratified purposive sampling as important. Participants were also selected based on their knowledge.

A stratified sampling selected five provinces based on the statistics of disabled people while considering the location, age such as youth or old which applied a purposive sampling method in Banda-Chalwe et al (2013). In McKinney and Amuson (2020); Chiwandire and Vincent (2017); a purposive sampling selected disabled participants knowledgeable about subjects considering age, ethnicity and subject knowledge. Expert and knowledgeable participants were used in Shumba and Moodley (2018); Van Der Waldt (2014).

Arguably, Baris and Ulsu (2009) used a random sampling technique for visually impaired people. This included their gender, and a mix of females and males provided information on the subject. In Tudzi et al (2017) snowball and convenience sampling in a quantitative study was used by selecting willingly and readily available participants. Notably, Maart et al (2007) also used available participants through convenient sampling.

2.3.1.6 Data/information collection process

The data collection process takes account of factors such as the setting, the questions, the study frequency, the administration, the general information and the study determination. In Banda-Chalwe et al (2013) data was collected by the researcher and an assistant, where codes were allocated to the participants. During the in-depth interviews, entry was obtained and the authors interrogated participants and engaged in probing to gather all the answers (McKinney & Amuson, 2020; Shumba & Moodley, 2018; Chiwandire & Vincent, 2017; Danso et al, 2017). Van Der Waldt, (2014), also consulted interviews and documents to gather information.

Arguably, Baris and Ulsu (2009) used questionnaires to obtain answers to forty questions. Eight disabled participants participated in the in-depth interviews for data collection through questionnaire administration (Tudzi et al, 2017).

2.3.1.7 Data/information processing

Data processing involves analysing data through various methods to improve its quality. This includes listening to audio recordings, reading notes, photographs, and questionnaires. The checklists are also important in dispensation; however, the language used should be universal such as English translation, and be stored safely.

Banda-Chalwe et al (2013) and McKinney and Amuson (2020); Van Der Waldt (2014); Shumba and Moodley (2018); Chiwandire and Vincent (2017) used interviews and followed-up on the questions, which provided rich information with the use of audio-recordings and identifying of participants with numbers.

As part of data processing; notes and photographs were used in the studies by Baris and Ulsu (2009). Maart et al (2007) translated the checklist into English and stored it safely. Therefore, information processing in the research on built environment interaction involves various methods.

2.3.1.8 Data/information analysis

Data analysis relies on the collected data and the used strategy. This further informs the use of the analysis methods such as software's. An SPSS software package was used for data analysis in Ankara (Baris & Ulsu, 2009). Tudzi et al (2017) analysed the research using Statistical Analysis System Software (SAS 9.1) because of the non-parametric

quantitative data, and the Kolmogorov-Smirnov One-Sample Test was utilised to test the differences.

In qualitative research by Banda-Chalwe et al (2013), the data obtained from the recordings were transcribed by the author and checked by the assistants before being loaded in the NVivo 10.0 data management. In McKinney and Amuson (2020) the interviews were audio-recorded, transcribed and analysed with a phenomenological hermeneutic method. The use of the computer software programme (Statistica) for data analysis also becomes important in analysing data (Maart et al, 2007). Themes and coding resulted in the thematic analysis used by Van Der Waldt (2014); Shumba and Moodley (2018); Chiwandire and Vincent (2017).

Therefore, data analysis in qualitative and quantitative studies addresses challenges in the built environment through various forms.

2.3.1.9 Key empirical results presented

The empirical results of studies on individual experiences for people with disabilities and their contact with the building totally different. Studies found the presence of barriers, and poor universal designs as depriving the full exercise of disabled person rights, opportunities, and education and resulting in inaccessible public facilities.

Banda-Chalwe et al (2013) and Hayati and Faqih (2013) suggest that disabled persons experience problems accessing the built-environment, inaccessible designs of public facilities, and the implementation of universal designs as contributing to implications in their lives. Poor access leads to a loss of independence and control (McKinney & Amuson, 2020). This also included the physical barriers that made the environment inaccessible (Baris & Ulsu, 2009).

Studies highlighted restrictions and deprivations caused by an accessible built environment, violating rights (Tudzi et al, 2017). Challenges experienced in the implementation of policies further resulted in inaccessible infrastructure (Maart et al, 2007). Thus, an inaccessible built environment challenges slow implementation, resulting in poor recognition of disabled rights and policy implementation.

2.3.1.10 Key research findings

The findings of the studies suggest that there is an implementation of the policy; however, the needs of disabled persons are not met. This means that disabled people face exclusion from society because of policy challenges in public building implementation.

Banda-Chalwe et al (2013) noted a setback for the economic freedom of disabled persons, where the study found that assessing public buildings in rural and urban areas could strengthen the evidence that there are inaccessible buildings in Zambia. McKinney and Amuson (2020) revealed negative emotions in understanding disabled people and their participation in the built environment in South Africa. This impacted their quality of life and well-being, and it was suggested that future research should study the experience of disabled people within the broader South African built environment.

Van Der Waldt (2014) articulated challenges experienced in implementation such as technical or administrative, financial, and governance obstacles and innovative best practises for tracking progress. Chiwandire and Vincent (2017) concluded on the conservation of heritage as validation for modifying old buildings, failure to address inaccessibility and the approaches used to implement the programme. Sensitisation and awareness were identified as important to address inclusion. Shumba and Moodley (2018) concluded the need to review inclusive policies and conduct an evaluation as well as tools to check efficiency and effectiveness. Further achievements were identified to be through awareness, capacity building, improving supply chain management, monitoring and evaluation of programmes. Danso et al (2017) pointed out the need for audio communications, markings and handrails, on designs for the visually impaired.

Arguably, Baris and Ulsu (2009) highlight that inaccessibility to the built environment hides many difficulties for disabled people which lead to exclusion from participating in social life except for bare necessities and to live as a community separated from the society. In Tudzi et al (2017) inaccessible universities made students feel left out and policy implementation strengthening was required. The lack of disability legislative implementation and proper policy implementation were highlighted as important for public inclusion (Maart et al, 2007). Hayati and Faqih, (2013) also note the implementation of the policy, without accessibility evidence.

The findings presented an acknowledgement of policy implementation; however, studies note a gap in the implementation as there still exist challenges that hamper the involvement of disabled persons within society. With the information presented, it is evident that knowledge gaps exist in assessing the implementation of the built-environment accessibility directive through their challenges.

2.3.1.11 Limitations the study has documented

The study limitations present the restrictions encountered. These are the different circumstances that resulted in a limited scope and biased information such as the sample size of the study. This is agreed by Banda-Chalwe et al (2013) that the experiences of disabled persons were not fully obtained because of the sample size of the study. This can also be a result of the diversity of the participants (McKinney & Amuson, 2020). The study by Tudzi et al (2017) and Danso et al (2017) identify a non-probabilistic sampling which resulted in limiting the scope. Chiwandire and Vincent (2017) focused on disabled persons only. While Van Der Waldt (2014) looked at project implementers.

The study focused on disabled persons only. In Maart et al (2007) the checklists did not cover all impairments. This means that information biases may result, as information may only be obtained from a group of people with knowledge on the subject.

2.3.1.12 Own assessed limitations of the study

Limitations assessed by the author were noted on the data collection instruments as important to ensure that all the important data is obtained. McKinney and Amuson (2020) identified that limitations on instruments could render information biased as problems were identified from only four participants believed to have enough knowledge. Hayati and Faqih (2013) observation-based information acquisition can result in limitations. Banda-Chalwe et al (2013) noted that focus groups might have been replaced with completely individual interviews to obtain in-depth and allow follow-ups.

Limitations are usually linked to the scope of the study, participants, the knowledge to be obtained as well as the strategy. Studies did not address the assessment of an implementation programme during its process. Past studies reveal a knowledge gap in public systems for inclusive society policies, reasonable accommodation and infrastructure accessibility (Govender, 2019).

Studies show limited information on infrastructure accessibility assessment implementation. The studies assessed a part of policy implementation (Maart et al, 2007; Hayati & Faqih, 2013; Shumba & Moodley, 2018; Chiwandire & Vincent, 2017; Van Der Waldt, 2014).

Danso et al (2017), however, studies did not assess this subject within frontline departments. Studies lack evidence on facility management challenges. Although, studies assessed employers and disabled persons as research participants (McKinney & Amuson, 2020), there was a lack of studies that assessed implementers and facility management as participants in the studies.

Given the information above, this section reflected on the qualitative and quantitative studies conducted in South Africa and other countries to conclude on the research problem. The literature review pointed out the lack of evidence on studies determining progress and compliance to legislation implementation; public infrastructure accessibility as well as facility management challenges. However, the studies did presented research validity, truthfulness and replicability in other settings. This knowledge gap requires research, and to assess the implementation of the SAPS infrastructure accessibility directive progress and challenges to determine the level of success and compliance with statutes addressing issues of disability. As a result, the study addresses challenges, attitudes, progress and process through the research questions.

2.4 An introduction to implementation studies and its components and processes

The research assesses factors affecting the implementation of accessibility infrastructure directive, through a literature review, where implementation studies have been identified as a field of study. The description of implementation is detailed in Section 2.4.1, and its purpose is in Section 2.4.2, the established facts are discussed in Section 2.4.3. In Section 2.4.4, the key issues and debates are deliberated, whilst Section 2.4.5 looks at the major components. Section 2.4.6 discusses the major processes of implementation, broadly.

2.4.1 Describing implementation

Implementation focuses on the setting of attainable results to achieve, conduct and execute and fulfil a policy mandate. Therefore, implementation reflects the expected

policy outcomes. Hill and Hupe (2002) infer that the focus is on the expectations and the identified anticipated results in a policy. Mazmanian and Sabatier (1989) indicate that the carrying out of policy decisions is directed by statutes. Such decisions identify problems that should be resolved through implementation. Implementation forms the development of deliverables to be conducted by the government (O'Toole, 2000). A divergence by Mthethwa (2012) is that it focuses on the processes, resources, and relationships that connect policies to the actions of a programme. Therefore, to be able to conduct or execute, achieve or complete a task requires implementation. The theory highlighted in this section will further be elaborated in section 2.6.

2.4.2 The purpose of implementation

The purpose of implementation is to evaluate the program performance for accountability for delivering services effectively with equitable and quality policy. This requires multi-actors as role players towards successful policy implementation. Hence, policy implementation reasons guide the whole process. Implementation assesses the extent of policy goal attainment and analyses any available reasons for the inability of policy initiatives to achieve planned objectives (Mazmaian & Sabatier, 1989). Such is through assessing or evaluating the policy conduct, promote accountability of policymakers and implementers (Mthethwa, 2012). Based on the above, the effectiveness of that policy to increase service delivery and raise equity and quality, can be enhanced.

On the contrary, identifying implementation reasons is crucial for effectiveness in achieving and completing the tasks of a policy (Hill & Hupe, 2002). In addition, multi-actors should be involved in implementation (O'Toole, 2000). Therefore, multi-actors serve as oversight by fulfilling the functions of role players and stakeholders.

2.4.3 Established facts in implementation

Implementation successes consider policy evolution, requiring policy alteration with positive and negative resource allocation effects. Therefore, understanding policy is important to achieve goals, the identification of reasons for implementation, and the multi-actors that influence the progress of implementation through coordination.

The policy implementation is constantly changing requiring resource allocations and policy objectives to adapt (Mazmanian & Sabatier, 1989). Hill and Hupe (2002) also

highlight a need to act on assumptions before implementation. This should guide clear roles and activities to be completed during the implementation. Therefore, understanding implementation is crucial as after the adoption of a policy, the policy may not be implemented and intended results may not be fully achieved (Mthethwa, 2012). A divergence in O'Toole (2000) highlights the importance of multi-actors to take account of the clients, political support, and external influences. This ensures the fulfilment of cooperation and coordination required from all the role players.

2.4.4 Key issues and debates in the study of implementation

The debates around implementation include that judgements of what works should be made on issues of outputs and outcomes. This becomes the ability to check, analyse and scrutinise previously engaged sets of objectives to influence achievement. In addition to this, considering the set objectives by the president and state, assist in implementation compliance and cooperation.

Hill and Hupe (2002) note that outputs and outcomes covertly guide decision-making. This includes linking set goals and expectations to conclude on previous achievements. Problems in implementing policy take into account the process, the challenges experienced and the content of influence, setting, process, and the actors involved (Mthethwa, 2012). Arguably, Mazmanian and Sabatier (1989) note that the awareness of the objectives set by the Supreme Court, or the president; encourages involvement, envisions success, and influences cooperation and compliance. Therefore, the principles presented by the authors, implies that the involvement of all parties results in successful implementation.

2.4.5 Major components of implementation

This section debates the major components of implementation. The components of implementation are management and monitoring by providing feedback on the implementation. Management includes implementation of decision-making, problem-solving, resource mobilisation, and allocation as well as monitoring of the activities.

The Webster's dictionary defines components as a part or element of a larger whole; this includes the collection of results to a complete project. Implementation takes the form of two components, management and evaluation; whereby management involves the system, process, and development factors and monitoring of compliance to ensure

innovation, collaboration, and creativity through problem-solving of the setting and content of implementation (Hill & Hupe, 2002). The development of a working state is guided by monitored and managed public projects (O'Toole, 2000).

On the contrary, management focuses on operational compliance while monitoring looks at resource availability and the progress of the implementation (Mazmanian & Sabatier, 1989). Hence, policy formulation, dissemination; economic, and public settings; management; stakeholder participation; design and resource mobilisation; and results on progress, are crucial (Mthethwa, 2012).

2.4.5.1 Management

Management emphases the different processes of policy such as its formulation, implementation, design, stakeholders, and monitoring and evaluation. It further makes distinctions between the New Public Management resources such as performance. Mentzel and Fick (1996) define management as a cross-cutting process of policy initiation, formulation, analysis, decision-making, implementation, monitoring and evaluation and the setting where it happens. Management represents the important sources of information and actions or cross-cutting processes (De Coning & Fick (1995). On the contrary, Asmah-andoh (2009) highlights that it includes instrumental tools required to administer the New Public Management system such as performance.

Management ensures the adoption of policy facilitation and stakeholder interaction processes for implementation. This also includes the New Public Management of accountability and responsiveness to performance. Such is through embracing the implementation of different policy dimensions processes and assisting in the facilitation of stakeholder interaction, and the creation of a good governance system (De Coning & Fick, 1995; Mentzel & Fick, 1996). Asmah-andoh (2009) argues that the adoption of the New Public Management contributes to performance measurements and governance.

The fact about management is that it determines implementation through performance on how well processes are administered and the importance of good productivity and capacity. Mentzel and Fick (1996) note that management should determine performance on how well the processes and functions of policy management are at the national, provincial and local levels. Productivity and capability through the results, output, and

outcomes are also important (Asmah-andoh, 2009). Arguably, De Coning and Fick (1995) highlight that in implementation, policy analysis has a limited scope.

Debates point to the clear structure of management through strategic and policy management, evaluation of capacities, and linking of services with the impact. In management, the structure should deal with change management, strategic planning and policy management (Mentzel & Fick, 1996). Macro-institutional change, restructuring policy, information, and evaluating capacities should also be included (De Coning & Fick, 1995; Asmah-andoh, 2009). For successful monitoring and evaluation, linking of service delivery, impact, and the management of performance leads to proper implementation.

The components concerned with management are change management and performance management, such as reporting of information and its management. As management is guided by change management to ensure that it is implemented properly (Mentzel & Fick, 1996). Performance management also plays a major role, in reporting on performance information (Asmah-andoh, 2009). The constitutional process identifies the interests of the policy, as a crucial part of implementation (Mentzel & Fick, 1996).

The processes of management include identified formation, initiation, research, analysis, implementation, monitoring, and advocacy; with measuring performance as important in ensuring proper management. The process of management comprises the nature, research, analysis, strategy formulation, implementation and monitoring, facilitation, and workshop (Mentzel & Fick, 1996). Asmah-andoh (2009) argues that the process should include indicators and measures of performance, and output to ensure the effectiveness and responsiveness of policies. Hence, the above will further contribute to the implementation and the subcomponents of management discussed below:

2.4.5.1.1 Change Management

Change Management looks at the process of directing the organisation's structure and capabilities, by identifying implementation needs for a planned future. As a process, it reintroduces the organisational path, structure, and capabilities to ensure proper implementation, change assurance, and readiness to implement change (By, 2005; Weiner, 2009). Nograšek (2011) argues that change management focuses on structured individual and organisational transitioning to attain outcomes. The process requires

change management to ensure the use of capital, human and physical resources. Change management specifications, emphasising the organisation's finances, human, and informational resources should be made Weiner (2009). These will further ensure that results in the success of policy implementation are continuous (By, 2005). A diversion in Nograšek (2011) notes that change management is aimed at ensuring that employees accept and embraces the change within the implementation.

Implementation changes should be initiated at the upper level to contribute to the desired outcomes and communicate progress and achievements. Change management may also result in poor performance. Nograšek (2011) suggests that change management can reactively respond to modifications at the macro level and proactively lead to achieving set goals. At the leadership level, communicating positive messages also assists in realising change (Weiner, 2009). This can be through sharing information, social interaction, and shared experience to assess the level of implementation. On the contrary, analysing change management may assist in the identification of challenges such as poor achievements (By, 2005).

Implementation of change management assists in realising the potential risks by dealing with any negative assumptions. By addressing the hard and soft sides of the implementation, it is probable to achieve the desired goal. Change expert believes that organisations readiness to change have the potential of leading to more successful implementation (Weiner, 2009). This is through addressing setbacks and the importance of the implementation. The context of the organisational change can also address the processing system which addresses the management of the implementation outcomes (Nograšek, 2011).

The important components of change management include the contextual factors, the content where change takes place, the change powers, resources, and effectiveness as well as factors that lead to resistance to change. By (2005) identifies the rate of occurrence of change management in terms of its management, reengineering, resources, and other initiatives as components of change management. Weiner (2009) notes that understanding change from its change valence, efficacy, and contextual factors are important as components. However, the content of change through its change management method and management of the opposition to transform remains important (Nograšek (2011).

The implementation process should ensure that change occurs holistically from redesigning, staffing, and communication to the development of change. Weiner (2009) identified the process of change management to include collective behaviour change in the systems redesign, staffing, workflow, decision-making, communication, and reward systems. This is to ensure that the values, strategy, structure, system, staff, style, and skills are aligned with the implementation (Nograšek, 2011). Given that, the development of change should follow the stages of pre-contemplation, contemplation, preparation, willpower, and monitoring.

2.4.5.1.2 Performance Management

Performance Management is concerned with the progress made in achieving goals, outcomes, and results. It involves strategic ways of ensuring that deliverables are improved. Performance Management looks at the progress made toward achieving goals and the ways through which such is achieved as part of the New Public Management (Asmah-andoh, 2009). It comprises the product and outcomes of the implementation process (Carr Copeland & Waxler, 1995). It also deals with strategic and integrated deliverables by ensuring that there is an improvement in service delivery (Dzimbiri, 2008).

The purpose of performance management is to define the implementation context and targets. This involves ensuring that business units where the implementation takes place are understandable. In addition, resources should also be allocated to allow service delivery. Performance management is concerned with ensuring that organisations and individuals are well managed through performance improvements, development, stakeholder satisfaction, involvement, targets, resources, and proper communication (Dzirimbi, 2008; Carr Copeland & Waxler, 1995). Asmah-andoh (2009) argues that management should clarify the context and conditions of delivery.

Performance management focuses on the purpose of the implementation to ensure that resources are properly allocated through human, capital, and physical resources. This also includes the management of skills to ensure competence. Asmah-andoh (2009) notes that performance management stems from the nature and the goal of the implementation by focusing on the human, community, and the functions of services the intervention aims to achieve. Dzirimbi (2008) suggests that the best management principles allow contract management to initiate self-management to integrate with the

organisational outcomes. Conversely, Carr Copeland and Waxler (1995) note that focusing on professional competence such as skills, training, and coaching encourages officials to take the mandate of their performance and thus, contribute to proper implementation.

Debates concern the organisation and communicating results during the implementation process. This comprises clear engagement and understanding of the vision and goals of the organisation where the implementation takes place. Performance information assists as a strategic tool in managing and communicating inputs to improve service delivery (Asmah-andoh, 2009). Furthermore, examining the implementation process and its policy results sets clear functions for performance and expected deliverables (Carr Copeland and Waxler, 1995). However, Dzirimbi (2008) suggests that performance decisions and reviews play an important role in measuring outputs and delivering performance. Therefore, comparing expected results with objectives, targets, standards, and indicators. Understanding performance management through the organisations vision, missions, values, and strategic goals also leads to proper implementation.

The components identify content and setting of the performance as crucial to managing implementation. This further involves the commitments made by the stakeholders, clients and resources. The focus is on developing indicators and tracking progress and identifying the outcomes of the implementation content (Asmah-andoh, 2009). These include the content and capacity that the implementation intends to achieve. Arguably, commitments on the top level and the location of the power center are important (Dzirimbi, 2008). Given the above, strategic plans, guidelines, training, effective communication, rewards, and funding are important in performance management.

The process involves aligning the resources, and capacity, and understanding the need for the policy or intervention. This also means that proper service delivery guidelines should be followed. Such is inclusive of aligning resources and capacity with the implementation, understanding the policy framework with the annual budgets, and compliance with legislative frameworks (Asmah-andoh, 2009). Carr Copeland and Waxler (1995) suggest understanding questions on governance, the resource used and the beneficiaries, the achievement of goals and objectives, and the activities that contribute to success, failures, and mitigation, should be responded to. Hence, the

importance of following a manual that guides the steps of performance management and service delivery (Dzirimbi, 2008).

2.4.5.2 Monitoring

Monitoring is the collection of information to check against the alignment of set targets and indicators to ensure that there is compliance and targets are being met to achieve the ultimate goal. Chenwi (2009) defines monitoring as a systematic process of gathering information to evaluate compliance. It is a regular systematic collection of information for specific indicators to determine progress and goal achievement (Cloete, 2009). Such is seen as important in the implementation and management of policy. Kaplan (2006) argues that it is episodic to the performance of programmes and policies. Thus, monitoring requires management of implementation.

The purpose ensures that there is feedback on issues of implementation to assess change and compliance and use standardised prescripts of reporting. This includes the appointment of external stakeholders to take over the activity. Monitoring provides feedback for implementation by assessing the extent to which appropriate measures were adopted and applied and the evaluation of results as well as regular use of standardised guidelines and formats for reporting (Chenwi, 2009). Kaplan (2006) argues that monitoring ensures capacity by utilising external service providers for compliance. Therefore, for the effectiveness of monitoring, evaluation should serve the purpose of tracking progress and compliance.

The noted key is the dependency on evidence to ensure progress, which requires evaluation to administer mitigation measures, gaps and failures and adjust measurements. Such is dependent on evidence of stored and processed information that assists in the reporting process (Cloete, 2009). Thus, the process of monitoring does not work in isolation, instead, progressive monitoring, should be evaluated. Monitoring achievements; detects failures, acknowledges gaps and declines in progress to readjusting actions to realise progression (Chenwi, 2009). However, Kaplan (2006) argues that all programmes and actions require regular monitoring and evaluation for proper implementation.

The debates consist of the process of collecting and analysing data, little evidence towards achieving results, and benchmarking targets on policy implementation. As a systematic process; there is little reliability in positive results as there is absent evidence that it has consequences to the impact (Kaplan, 2006). Therefore, to realise monitoring, progress is important to identify indicators and engage in benchmarking targets. Arguably, Cloete (2009) mentions that for management processes, monitoring and evaluations should be undertaken to measure policy achievements.

There are several components in monitoring such as indicators, benchmarking of targets, measuring outputs, intended results, outcomes, and impact. Chenwi (2009) identified the components of monitoring as indicators and benchmarking targets. These are important to facilitate progress and to measure and commit to the goals planned for achievement. Cloete (2009) notes that the components assess policy resources such as outputs or products, intended results, outcomes, and the impacts of the policy. The processes should be direct, objective, practical, and adequate, and take the form of project management. Monitoring should be direct through measuring changes, have well-defined objectives, be practically and regularly collected, and be adequate (Kaplan, 2006). Additionally, preliminary assessment, planning, collecting and analysing information, and reporting back are positive steps to monitoring programme or policy implementation and project management techniques (Chenwi, 2009; Cloete, 2009)

The components of implementation discussed in this section suggest that assessing implementation through management should have a focus on change management and performance management. This is because this research should be able to locate the level of change that has been influenced by the factors above and determine the change that has been brought by performance. In addition to this, monitoring of progress should be determined by the implementation and evaluation of a programme.

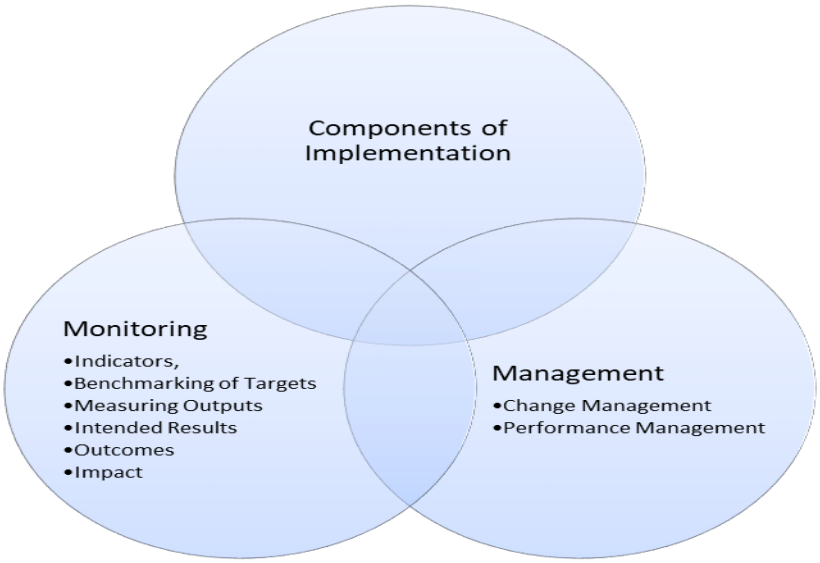


Figure 3: Major components of Implementation (By Author)

2.4.6 Major processes of implementation

The process of implementation is guided by the methods that result in the attainment of outcomes. The approaches that form the process include the 1) rational approach, 2) institutional theory, 3) bottom-up, 4) top-down approach, 5) street bureaucrats through the center; the periphery, and the target group.

The processes of implementation begin with the instrument theory of the top-down/ bottom-up combination and the collaborations among policy actors such as the multi-actor and network settings with target groups (O'Toole, 2000). Hill and Hupe (2002) point out that it is an initial policy decision, where activities by individuals and groups are set to achieve the objectives of the policy decision. The rational theory as guiding the process through the bottom-up approach which focuses on the why, what circumstances, and with what assumptions are different actions used in this process (Hill & Hupe, 2002).

This also includes the link between using different methods and power relations. Mthethwa (2012) identifies that the top-down approach is also known as the rational or system model, which emphasises the faithfulness of policymakers to adhere to implementation and improve performance. This infers that, the bottom-up approach, looks at the local implementers to adapt or learn policy approaches that attain local needs and concerns. Thus, street-level styles are adopted between policy-making and

delivery. Policy becomes dependent on the interaction of actors in the local sphere and aims at explaining the things that happen during the implementation of policies.

Mazmanian and Sabatier (1989) argue that the street-level bureaucrats regulate services and identified the center; the periphery, and the target group. At the center, implementation comprises the determinations of higher-level officials and institutions for compliance. At the peripheral stage, the implementation looks at ways through which locally, implementing officials and institutions respond to challenges as a result of outsiders. The target groups are the sole beneficiaries of a program, and their ideas and plans complement that of the central authorities. Thus, the intended deliverables are authority-driven.

The section assessed the introduction to implementation studies and its components as the study is located in. This serves to identify all the aspects of the study as well as to introduce the key attributes to the study in 2.5.

2.5 Key attributes in implementation that are key to accessibility infrastructure directives.

In this section, the contextualised implementation (Section 2.4) and subsequent on the discussion on components of implementation are discussed. This section breaks the component(s) into subcomponents which this research on accessibility infrastructure directive is sitting on to ultimately get to the attributes that are key to this research. Proceeding, these attributes are discussed with attention to their information needs, sources, and linkages with each other. These attributes illustrate what exactly an implementation plan entails based on Section 2.4. An illustration of the attributes is made to give a clear view of what to expect. Section 2.5.1 of the attributes discusses the setting. Section 2.5.2 discusses the content, whilst Section 2.5.3 discusses the commitment. Lastly, Section 2.5.4 looks at the feedback on results.

2.5.1 The setting

The setting means the context where interventions take place, the actors as stakeholders and influencers involved in the implementation. Hawe et al (2004) infer that refers to the state where intervention is implemented such as the social, political, and organisational levels. Agyepong and Adjei (2008) add that it includes the understanding of the cultural, historical, economic, social, political, and institutional context to ensure

change. These further take account of the process and actors that influence interests, through their experiences, positions, agendas, development, and influence on policy implementation. However, Hanberger (2001) argues that setting concerns the what, when, and how to implement the policy. Given that, involving multi-actors influences decision-making and direction.

The setting links to implementation studies as it looks at the aspects of the implementation of intervention through its process, competence, resourcefulness, and actions for decision-making. The implementation of any programme and intervention is dependent on contextual factors, which include staff morale and competence, availability of resources, and the settings (Hawe et al, 2004). It also results in examining how a policy, line of action, or inaction is implemented to influence the change (Hanberger, 2001). However, Agyepong and Adjei (2008) argue that proper context may influence decision-making and determine the degree of success or failure.

The setting also links to the results and feedback on implementation and content attributes, to ensure implementation. Context evaluation focuses on the process, impact, and outcome of the implementation (Hawe et al, 2004). Accordingly, Agyepong and Adjei (2008) add that to understand and address the setting, the content should be clear as it provides for decision-making among the actors. Given that, the involvement of stakeholders is crucial.

The setting or context connects to the question of the research understudy on 1.2.3.1 and 1.2.3.3. Agyepong and Adjei (2008) note buy-ins as influenced by environmental characteristics. Change is also accumulated over time through achievements (Hawe et al, 2004). Hawe et al (2004) and Hanberger (2001) maintain that the context where the policy operates focuses on the location of the problem, the situation, and the socio-historical and political context and stakeholders involved. Hence, understanding the environmental characteristics and problem setting guides the strategies to resolve the problem.

The setting can be studied qualitatively and quantitatively. Hawe et al (2004) and Agyepong and Adjei (2008) point out that qualitative and quantitative methods can be employed through notes, records, documents, oral narratives, and interviews, to conclude the efficiency of an intervention. The combined methods can also use questionnaires, interviews, observations, text, and discourse analysis (Hanberger, 2001).

Based on the above, the setting can be achieved by understanding the context and actors in implementation.

2.5.2 The content

The content focuses on the origin, intentions, and plans, and judges the setting where the implementation takes place and its capabilities to reach set outcomes. De Coning and Fick (1995) highlight that content looks at policy, its origin, intentions, and implementation through the outputs and indicators for proper implementation. Agyepong and Adjei (2008) point out the context, actors, decision making and processes of agenda-setting for the implementation of a programme. Weiner (2009) argues that it focuses on the implementation capabilities through its resources, mobilising, and performance.

Content relates to the field of study as it deals with the process, implying that change should be observed, using monitoring and evaluation. De Coning and Fick (1995) note that content links to the processes and actors of the context in implementation. Such includes monitoring and evaluating active leadership and a continuous review of the implementation of a policy (Agyepong & Adjei, 2008). The content, change, and design should be observed in the implementation (Weiner, 2009).

Content also links to the attributes of the setting by ensuring that processes lead to implementation. Similarly, the processes of contingent change and implementation of change link to the context where the policy takes place (De Coning & Fick, 1995). This also relates to the change that leads to implementation. The attributes of content relate to the question in 1.2.3.2 and 1.2.3.3. By ensuring that the agenda and settings are clear and the identification of successes and failures in the implementation (Agyepong & Adjei, 2008). The resources and structure of implementation also guide the effectiveness to change (Weiner, 2009). Arguably, content also connects to the coordination of facilitating the implementation agenda and its players (De Coning & Fick, 1995).

Qualitative and quantitative studies can be used to gather data as De Coning and Fick (1995) used qualitative case studies of a policy process through participant observation, reviewing of public sector documents, media, and historical records. Agyepong and Adjei (2008) used quantitative data in policy decisions.

2.5.3 The commitment

Commitment necessitates an understanding of policy implementation, inclusive of the practices, capacity required, compliance, and partnerships to bring change. Rooney et al (2005) point out that commitment focuses on the practice that produces better outcomes and enhances efficiency. Such is through achieving implementation from partial to absolute commitment, avoidance, and proper compliance and consistent use (Malhotra & Galletta (2003). Partnerships are also envisioned at the management level (Rao et al, 1995). However, Leithwood et al (1991) argue that it looks at the transformational leadership that aspires to change through the provision of efforts and capacity to perform the implementation.

The link between commitment and the field of study is based on achieving sets of implementation outcomes through a commitment to the intervention and buy-ins. Commitment strategies contribute to the development of policy and achieving outcomes (Leithwood et al, 1991). Hence, the misunderstanding of implementation, the problem, and the intervention are key to poor buy-in and consequently result in a lack of motivation for implementation success (Malhotra & Galletta, 2003). Rao et al (1995) argue commitment should foster a successful implementation system with competitive advantage and performance.

Commitment links to the attributes of communication of results as it has enhances performance from interested groups and the failure in results. Rooney, Hearn, and Ninan (2005) point out that commitment requires communication of results with interested groups and the formation of a consensus. The failure of such leads to fruitless performance expectations and activities (Malhotra & Galletta, 2003).

Commitment links to the question on 1.2.3.4, through the analysis of the group's interest and assessing commitment. During the implementation groups of mutual understanding shared values, and promotion of learning should be identified, as such guides the identification of challenges to commit to implementation (Rooney, Hearn & Ninan, 2005). This also leads to the assessment of the implementation commitment through the degree of acceptance, the level of practice, and participation (Rao et al, 1995). However, challenges can be understood when the adoption of incentives, rewards, or punishments, is instilled to ensure commitment (Malhotra & Galletta, 2003).

Data can be obtained through interviews, analysis of documents, and mailing questionnaires and questionnaires to participants. Interviews, analysing of weekly logs activities and mailing questionnaires to understand commitment strategies for policy implementation are used for data collection (Leithwood et al, 1991). Questionnaires were completed by participants for six weeks during training sessions (Malhotra & Galletta, 2003). Based on the above, surveys can also be mailed to participants available in the database to gather information.

2.5.4 Feedback on results

Feedback means the systems used to ensure that actions on interventions, operations, and processes are noticed and provided in terms of results. The systems require frequent monitoring of processes, operations, outcomes and impact, and provision of corrective strategies and actions that align performance indicators to strategic plans and policies (Cele, 2004). It also measures systems that facilitate change over time (Roussos & Fawcett, 2000). However, Guskey (1994) argues that it refers to reporting on the actions and reinforcing changes through effects and efforts of implementation. Given that the feedback on results links to implementation through management of performance and measurements for improvement to assist towards accountability.

Factors of policy achievements should be identified as potential opportunities for the improvement of performance implementation (Snyder et al, 1996). This ensures accountability in the processes (Roussos & Fawcett, 2000). Regular feedback on assessments also assists in programmes (Guskey, 1994). Cele (2004) also argues that management of performance aligns with strategic goals, interventions, and programmes.

The feedback on results links to the attribute on the setting of the implementation process. Snyder et al (1996) note that this attribute deals with the political, legal, economic and environmental constraints which can have a positive or negative impact. However, Guskey (1994) connotes that during the provision of feedback, the context of the implementation should be considered. Based on the above, the feedback on results links to the research question, on 1.2.3.3, as it focuses on compliance and quality assurance.

Increasing compliance is connected with the development of economic assistance and the provision of feedback based on the implementation of the policy (Snyder, Berry &

Mavima, 1996). Feedback requires evidence for success and development efforts (Guskey, 1994). Ongoing documentation of feedback also helps in assessing and redirecting efforts of implementation (Roussos & Fawcett, 2000). Hence, reasonable quality assurance influences and promotes accountability and compliance (Cele, 2004).

The provision of feedback on results can take the form of data from the literature review. Quantitative and qualitative data about processes and outcomes are used to gather information on the feedback on results (Roussos & Fawcett, 2000). Given that, interrogative literature reviews can also gather data through mixed messages from the research.

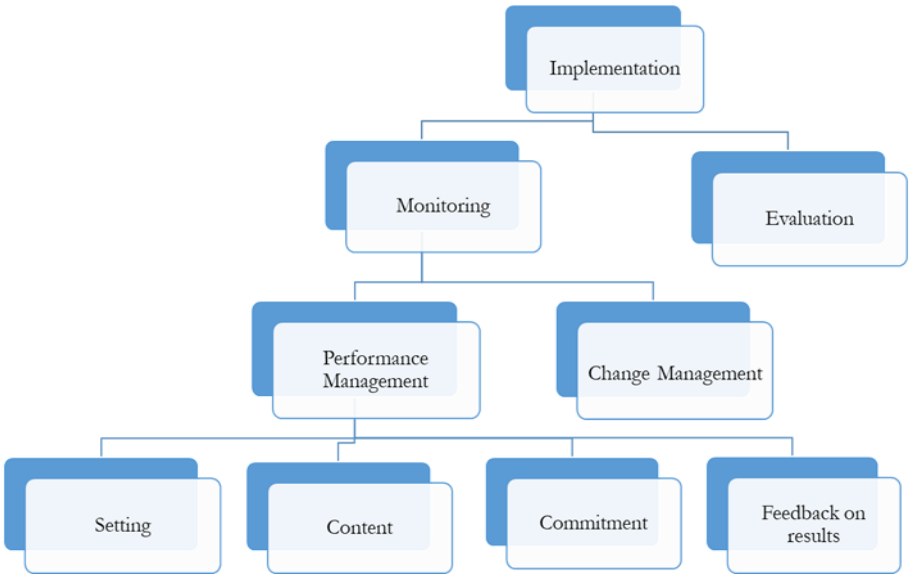


Figure 4: Implementation of core components, subcomponents, and attributes

In summary, understanding these attributes contributes towards answering the research questions stated in 1.2.3 concerning factors affecting the implementation of the SAPS directive on accessibility infrastructure. Therefore, this section assessed the attributes as setting, content, commitment and feedback on results concerning the research linking to the research question in chapter one. The section also links to section 2.6 looks at the frameworks linking them to the research questions and the attributes.

2.6 Implementation frameworks for interpreting empirical results arising from the accessibility infrastructure directive

This section discusses the theories used to interpret the research results. These are contextualised with implementation in (section 2.4) and linked to the key attributes of implementation on accessibility directive in (section 2.5). Therefore, this section

recognises and deliberates the frameworks that this research will employ to derive the empirical results in Chapter five. According to Nilsen (2015), implementation provides theoretical approaches on how and why implementation prospers or becomes unsuccessful. This section discusses the theoretical frameworks as follows: the implementation theory in section 2.6.1. Section 2.6.2 discusses the institutional theory, whilst section 2.6.3 looks at the COM-B theory. Section 2.6.4 discusses the RE-AIM theory coherently, as it assists to interpret the implementation thereof.

2.6.1 The implementation theory

2.6.1.1 The event of the development of the implementation theory

Implementation Implementation theory addresses maladministration, public policy challenges, and the allocation of resources and following corrective steps to ensure proper implementation. According to Montjoy and O'Toole (1979), the development of the implementation theory is to identify problems within the nature of the policies. Hill (1997) narrates that it addresses problems in public administration within the organisational theory and the implementation of policy processes.

The understanding of institutional designs also contributed to the development through individual interaction, rules, and the impact of strategic behaviour on members of the society (Jackson, 2001). Thus, it also assists to address administrative issues to implementation. Sabatier and Mazmanian (1978) purport that the theory aims at capturing implementation with a focus on changes in socio-economic conditions, public opinion, and factors that impede the process of implementation. Therefore, understanding problems in practice and policymaking guides the evaluation of interventions (May, 2013).

2.6.1.2 Development and purpose of implementation theory

The implementation theory was developed to explain and set principles for achieving implementation through its process and outcomes. This also includes the application of correct steps to ensure that government programs are implemented correctly and public policy is achieved. It also focuses on the discussions about the top-down and bottom-up implementation processes and challenges.

According to Montjoy and O'Toole (1979), it serves the application of organisational theory to address governmental programs and problems during implementation. This

also guides outcomes at different levels (Bullock et al, 2021). It is a branch for implementation design or reverse engineering process of the game theory (Jackson, 2001), to address policy implementation and policy agenda (O'Toole, 2000). However, Hill (1997) argues that implementation of the central rule preoccupation is grounded on the debates around top-down/bottom-up challenges and implementation structures. Sabatier and Mazmanian (1978) conceptualise the findings of implementation to understand the policy implementation process. In the same way, it sets conceptual tools for the identification, description, and explanation of elements of implementation processes and outcomes.

2.6.1.3 The implementation theory

The framework relates to the notions of management from the top-down to the bottom-up. It is characterised by how policy decisions are carried out and fulfilled to realise government decisions. According to Montjoy and O'Toole (1979) and Sabatier and Mazmanian (1978), the implementation theory refers to the decision made in policy, the fulfilment of policies and public regulations that guides on what to be executed or not be executed and the actions that effect as impact, made in a statute by identifying the problems, objectives, and, ways to resolve that particular challenge. This is the study of the relationship between the institutions' structure and individuals' interactions and the outcome of the desired impact (Jackson, 2001).

The framework deals with what has been established based on the intentions and the government actions (O'Toole, 2001). This includes the policy actors, activities, and the cause or effect links concerning their activities and results. However, Hill (1997) sees the theory as the process where the 'top' management makes institutional changes at the lower level. This process requires management from its inception to the final product (May, 2013). Given that, the theory is characterised by the process of administrative, political, experimental, and symbolic implementation.

2.6.1.4 The advantages and usefulness of implementation theory

The advantages include the identification of individual and organisational activities that may start or skip implementation levels, multi-actors and resource identification. Montjoy and O'Toole (1979) point out that individual activity and intra-organisational problems between the new and old can be compared. Using the top-down or bottom-up debate suggests that there are choices in policy processes, which has methodological

advantages (Hill, 1997). Thus, implementation can be done at any level and may skip levels to achieve goals (Bullock et al, 2021). This means that the theory conceptualises problems and characterises what can be implemented.

However, Sabatier and Mazmanian (1978) argue that its process analysis involves a series of games to protect the interests and gain, actors, access to program elements not under their control and context as well as affirming policy legal mandates. This encourages the understanding and recognising of multi-actors and characters of policy actions and implementation (O'Toole, 2000).

2.6.1.5 The disadvantages and limitations of implementation theory

The disadvantages include the use of secondary analysis to seek desired outcomes and the methodologies employed. According to Montjoy and O'Toole (1979) using secondary analysis may not lead to desired outcomes and impacts negatively on outcomes. Hill (1997) infers that it may be difficult to separate the methodological issues from the normative issues of implementation. However, O'Toole (2000) denotes negative implementation actions across institutional boundaries and the public purpose and management of challenges. Based on the above, the outcomes of the implementation may be impacted.

In summary, the implementation theory guides the identification of individual and organisational activities at any level. It has the potential of identifying multi-actor involvement, resource identification, and activities. As highlighted earlier, it also guides the methodology processes such as the top-down/bottom-up approach. Using the implementation theory is model in the study by linking the use of the top-down and bottom-up discussions that are useful to respond to the questions in 1.2.3.1 and attributes in 2.5.1 content and 2.5.2 setting.

2.6.2 Institutional theory

2.6.2.1 The event of the development of Institutional Theory

Institutional theory analyses the factors of a larger institution to a smaller institution, thus, determining the consideration for factors of a wider against a narrower scope of institutionalisation (Berger & Luckman, 1967). It also addresses the myths on understanding institutionalised products, services, techniques, policies, and program functions (Meyer & Rowan, 1977). The theory presents a paradox and analysis of social

facts between interest justifications, ideational and normative clarifications (Hinings & Tolbert, 2008).

However, Tolbert and Zucker (1995) and Thoenig (2003) argue that it investigates a range of phenomena, from policies to redefining organisational mission, and guides the development of domestic and international policies, which defines public administration and political life. Additionally, the initiation of institutionalism was to address issues in economics, sociology, political science and ecology and to understand the foundation of organisational institutionalism (Mohamed, 2017).

2.6.2.2 Development and purpose of Institutional Theory

The purpose is to understand the development of institutions from their sociological inceptions, historical existence and resource dependency. The institutional theory explains the historical organisational existence, processes, and control of human behaviour by setting up predefined patterns of conduct (Berger & Luckman, 1967). This maintains conformity, through organisations rules and actual work activities (Meyer & Rowan, 1977). These addressed organisational problems by providing social and economic results to polities, markets and societies and resource allocation (Thoenig, 2003; Tolbert & Zucker, 1995; Berthod, 2016).

Hinings and Tolbert (2008) argue that institutional theory characterises the roots of sociology to understand social actions through interest, motivation and conscious choices by actors. Mohamed (2017) concludes that the environment, formal structure development and market pressures of the institution are an influence of the institutional theory. Hence, the theory guides the development and organisational actions that are reliant on resource dependence.

2.6.2.3 The Institutional Theory

The institutional theory occurs as a process of reciprocal actions that are achieved through working together of different actors. This includes showing commitment, understanding the organisational structure, engaging in actions that influence change, and abiding by the rules and norms set within an organisation.

Berger and Luckman (1967) define the theory as a process of reciprocal symbols of habitual actions from different actors. The theory draws from the formal structures of

an organisation and its day-to-day work duties (Meyer & Rowan, 1977). The mandate includes policies and goals that are fitted as processes of the organisation and active agents, to interpret and establish connotations of the processes (Hinings & Tulbert, 2008). However, Tolbert and Zucker (1995) suggest that this framework offers the appreciation of approaches of organisational structure in policymaking.

The theory as a perspective is associated with background matters that build public administration realities and processes and the renewal of its agenda (Thoenig, 2013). These are the social and routine programs or rules that shape an organisational structure through its characteristics, the commitment of its participants, environmental influences, and constraints (Mohamed, 2017). In addition, it relates to the rules, norms, roles, and symbols that represent an organisation to influence its resource utilisation (Berthod, 2016). Therefore, the theory is dependent on actions by different actors which lead to resource mobilisation.

2.6.2.4 The advantages and usefulness of Institutional Theory

The advantages draw from social theories and processes of social change, as it supports organisational actions and decisions. It also identifies social life and actions to influence decision-making. Berger and Luckman (1967) mention that it relies on identifying societal problems with similar solutions and all social actions are institutionalised, embrace social life, and unify institutional performances.

Meyer and Rowan (1977) highlight that institutional procedures works as myths within the organisations that co-exist with gains legitimacy, resources and stability. It also has the potential of separating discretionary choice and implementation, identifying the instrumental superiority of bureaucracy, and maximising the level of management or administrative principles (Thoenig, 2013). However, Hinings and Tolbert (2008) and Mohamed (2017) identify that it draws from social theories and processes of social change and links to the understanding of institutions. Thus, it enables and supports organisational actions and decisions.

2.6.2.5 The disadvantages and limitations of Institutional Theory

The disadvantages include that it does not identify choices of socialism, and daily activities to create uncertainties and myths. In addition, public policy outcomes do not reflect the preferences and interests of actors. According to Berger and Luckman (1967),

the theory does not identify choices of socialisation. This leads to concerns about the efficiency of daily activities creating uncertainties and generalised myths (Meyer and Rowan, 1977). At most, the consequences of public policies do not replicate the competitor's preferences or interests (Thoenig, 2008). However, Hinings and Tolbert (2008) argue that it also has little explanation of resource problems that determine constraints on results in adaptations and complete patterns of institutionalisation.

These are problems of power that lead to interest-driven behaviour, setting organisational institutionalism, and historical and social contexts (Mohamed, 2017). Resource-dependency approach is, therefore, adopted which results in insufficient institutional argument (Berthod, 2016). This means that, the institutional theory deals with systems of policy collectiveness, resource dependency, self-interest, and not societal problems; and is crucial to understanding the question in 1.2.3.4 and the attributes discussed in 2.5.3 commitment, is also important in interpreting this research.

2.6.3 The COM-B theory

2.6.3.1 The event of the development of the COM-B theory

The The COM-B theory also referred to as the Behaviour Change Wheel (BCW) determines events that respond to interventions on how interventions and why they have worked. This theory was developed to respond to the implementation of programme or interventions during their design, interventions, and evaluation. It analyses the levels of change as well as its influential determinants. According to Michie et al (2011), the COM-B theory was developed to respond to interventions on what works, how it works, and why it works.

Mitchie et al (2013) also suggest that COM-B theory reports on interventions, synthesises evidence, and designs interventions, to determine the competencies of interventions and results. Barker et al (2016) also highlight the development as part of the system of behaviour to analyse problems and intervention design through an evidence base. This is to understand systematic and theoretical evidence-based change (Richardson et al, 2019). However, Mayne (2016) and Coupe, Cotterill, and Peters (2021) note that the COM-B model analyses behaviour change interventions through the behaviour (B) generated from interacting with the capabilities (C), opportunities (O), and motivation (M). This is, therefore, contextualised at the levels of change to achieve organisational change, linking it to the Behavioural Change Wheel (De Leo et al, 2021).

This means that is through evidence-based tools used during designs, choosing from interventions and policies based on analysis that leads to the desired behavioural change and mechanisms.

2.6.3.2 Development and purpose of COM-B theory

The COM-B theory determines and maps interventions by analysing the change brought by implemented interventions that result in organisational change. Michie et al (2011) highlights that it serves as an interventional mapping by comprehensively analysing the change in interventional behaviour by focusing on the internal conditions of individuals, and their social and physical environment, considering the motivational system influences change.

Mitchie et al (2013) and Barker et al (2016) also observe the replication of mechanisms of an intervention intended to change or readdress causal processes that control behaviour through feedback, monitoring, and reinforcement. This serves as a systematic pathway for moving from behavioural analysis to identifying working interventional functions and policies that achieve change through clear specifications. Thus, the theory determines the implementation of strategies used for change.

2.6.3.3 The COM-B theory

The COM-B theory explains the behavioural system that determines the understanding of how capabilities, opportunity, and motivation have been used to create actions that impact interventions and change during implementation. According to Michie et al (2011) and De Leo et al (2021), the COM-B framework determines the capability, opportunity, and motivation interaction to influence change. The framework is dependent on identifying the presence and descriptions of interventions through systematic reviews and outcomes datasets (Mitchie et al 2013). Step-by-step operationalisation from problem explanation to intervention development and evaluation of the behavioural context should be clarified in this framework (Barker et al, 2016). Richardson et al (2019) also highlight that it helps in identifying components that require change and guides the modification of strategies.

In summary, the COM-B theory aligns with Capability as knowledge, skills, and abilities; Opportunity as the combination of capacities that lead to change, and Motivation as the combination of opportunities that results in a change in attitudes, new aspirations, and

changed behaviour. Figure 4 below illustrates the components and variables of COM-B, as proposed in Richardson et al (2019).

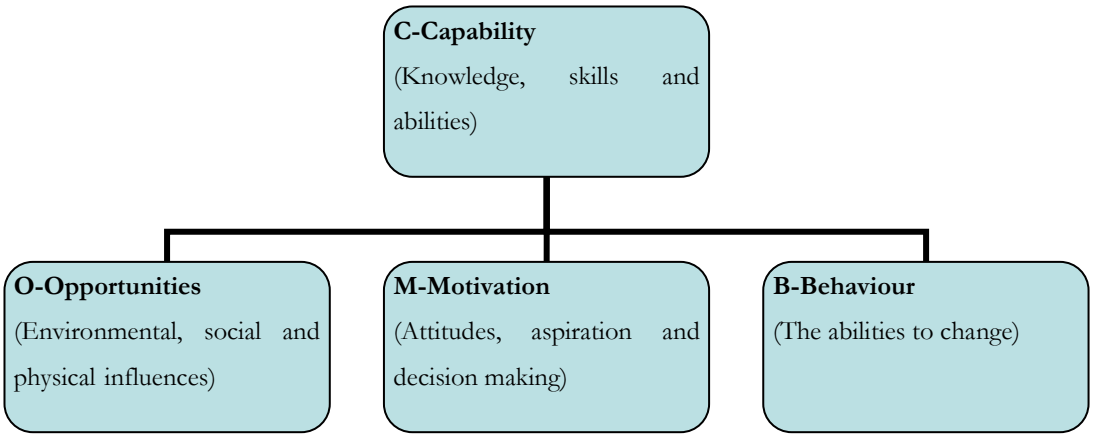


Figure 5: The components of COM-B Theory (by Author)

2.6.3.4 The advantages and usefulness of the COM-B theory

The advantages are inclusive of evidence-based intervention and the presence of adequate COM-B. The theory helps to understand the types and level of interventions that guide towards implementation of change (Michie et al, 2011). Mitchie et al (2013) indicate that it maximises scientific advancements, and collaborative work, and identify shortcomings in achieving change. Barker et al (2016) infer that it allows for a systematic approach to be incorporated with development and evaluation. Conversely, Mayne (2016) argues that the change assumption includes the presence of adequate COM-B. It also has the potential of informing and influencing effective interventions and change in many contexts (Coupe et al, 2021). Therefore, using evidence-based interventions determines change.

2.6.3.5 The disadvantages and limitations of the COM-B theory

The disadvantages include its applicability limitations in certain environments and the inability to co-exist with other frameworks. Michie et al (2011) note that the COM-B the systematic review of theory and intervention functions, as judgement to conceptualise intervention functions and policy categories can be missed. Based on the above, the theory becomes difficult to use because to its comprehensive characteristics of intervention use.

In summary, the COM-B theory emphasises the importance of understanding the behaviour of the implementers, recipients as well as the environment. This includes

identifying factors that may impede implementation and addressing the COM-B. Hence, it links to the question in 1.2.3.2 and the accompanying attributes in 2.5.1 setting and 2.5.3 commitment, respectively.

2.6.4 The RE-AIM theory

2.6.4.1 The event of the development of the RE-AIM theory

The RE-AIM theory is the result of implementation evaluations through the focus on systems-based, social-ecological thinking, community-based intervention as well as public health interventions. The theory means Reach, Effectiveness, Adoption, Implementation, and Maintenance framework to enhance interventions and impact.

Gaslow and others (1999) notes that the theory was proposed as an evaluation framework that focuses on systems-based, social-ecological thinking and interventions to address community-based and public health implementation interventions.

The theory was primarily used as a conceptual ideal for evaluate research, interventions, and community initiatives and evaluate impact (Lee et al, 2017). The theory works positively in the implementation planning and evaluation of interventions in healthcare and non-health-related fields (D'Lima et al, 2022). Arguably, the theory encourages consistent reporting of results, information, reviews, and management in various settings (Nhim et al, 2019). Thus, the theory was established to improve the influence of interventions by evaluating implementations and their settings.

2.6.4.2 Development and purpose of RE-AIM theory

The RE-AIM theory ensures the evaluation of the implementation of health and non-health-related interventions. It further guides the assessment of planning and evaluation of evidence-based interventions by addressing the settings of implementation. The theory clarifies the concept of bottom-line and public health impact on interventions by comparing implementation performance to the five evaluative dimensions (Gaslow et al, 1999).

Diana et al (2010) suggest that it guides the planning and evaluation of evidence-based interventions through addressing the socioecological model, behavioural change, and increasing intrapersonal, organisational, and community resource support. According to D'Lima et al (2022) and Lee et al (2017) such contributes to the planning and evaluation

of the implementation of interventions in public health and health behaviour change. Therefore, the theory guides the conversion of research into practice, to appreciate the effectiveness of programmes.

2.6.4.3 The RE-AIM theory

Component	Explanation
R= Reach	- Method to identify the population - Inclusion and exclusion criteria
E= Effectiveness	- Measures of results on outcomes
A= Adoption	- Explanation of intervention location - Narrative of delivered intervention - Settings and level of adoption
I= Implementation	- Intervention duration - Measures of cost of implementation - Time/frequency of the implementation
M=Maintenance	- Assesses the outcomes - Maintenance of indicators - Measure of the cost of maintenance

Table 2: The components of RE-AIM theory (by Author)

As adapted in the Table 2 above, the RE-AIM theory is defined as the acronym of Reach, Effectiveness, Adoption, Implementation, and Maintenance of intervention during the planning or evaluation of implementation interventions. This theory assesses the end-user and the product delivery, to calculate costs and conclude on the effectiveness of the programme.

Gaslow et al (1999) and Nhim et al (2019) refer to the RE-AIM evaluation theory as conceptualising the impact of intervention into five factors of policy, community program or group intervention. These five components guide the assessment of the impact of implementation on the end-user and delivery agent (Sweet et al, 2014). The RE-AIM theory can be applied in the evaluation of programmes, procedures, policies, or scientific studies (Lee et al, 2017). Conversely, King et al (2010) argue that the reach component is characterised by different meanings. D'Lima (2022) purports that this theory can be used in the planning or evaluation of an implementation intervention. Therefore, the theory uses multiple interventions to contribute in different content areas, settings, and populations.

2.6.4.4 The advantages and usefulness of the RE-AIM framework

The advantages of RE-AIM theory are inclusive of multi-sectoral settings and partnerships. It also serves as a tool used to evaluate the implementation and planning of interventions and projects, to determine the achieved impact. Using this theory can provide a concrete framework to assess the implementation and its contribution (Nhim et al, 2019).

However, King et al (2010) argue that it can be applied in planning and evaluating projects. The theory has the potential of being relative, applicable and has vigorous evidence of interventions, populations, settings, and health behaviours (Lee et al, 2017). Thus, the theory encourages that implementation can be done in one year and maintenance in three to five years.

2.6.4.5 The disadvantages and limitations of the RE-AIM theory

The disadvantages include its limited information on the application of timeframes. It does not have set guidelines on collecting information, monitoring, and analysing the impact as it may be difficult due to limited application of all dimensions. Gaslow et al (1999) note that the model is silent on its timeframe for the evaluation. It also has difficulties in employing all five dimensions as it is conceptual and does not provide guidelines on the type of data to collect, the ways of collecting the data, monitoring, and the impact achieved over time (King et al, 2010).

Given that, the RE-AIM theory as an evaluation framework is useful in this context as implementation progress can be determined and the communication of results be assessed through the five domains. This links with the question in 1.2.3.3 and the component 2.5.4 feedback on results.

In conclusion, the theories assessed in this section are anticipated to give direction toward answering and interpreting the research questions in 1.2.3. In addition to this, these frameworks also have the potential of linking their components to the attributes of the research in 2.5.

In summary, section 2.6 identified and discussed the framework to be used to interpreting the research study by explicitly reflecting on its development, purpose, advantages and disadvantages.

2.7 A conceptual framework for factors affecting the implementation of the South African Police Service directive on accessibility infrastructure

The research discusses the research problem statement, the methodology, and the literature reviewed to assist in the conceptualisation of the factors affecting the implementation of the South African Police Service (SAPS) directive on accessibility infrastructure. As Wotela (2017) points that using a methodology assists in decoding complexities. This section delivers a comprehensive plan of exactly how the research evolved after the literature review.

The National Development Plan Vision 2030 prioritises the reduction of inequality in the society. In recognising the challenges experienced by society, the revised Medium-Term Strategic Framework (2019-2024) emphasises issues of persons with disabilities as cross-cutting focus areas.

Firstly, an in depth narrative of the SAPS is discussed in section 2.1, where mandates are based on the history of the organisation from its pre-apartheid and post-apartheid; and the organisational structure in terms of national, divisional, and provincial levels. The research further discusses the context of the aspects of infrastructure and accessibility directives in SAPS.

The introduction to the research in section 2.2 presented the challenges of accessing the built environment in South Africa and the interventions thereafter. This is due to buildings barriers which consequently lead to discrimination (Salha et al, 2020). Thus, this section analyses the challenges in accessing the built environment in detail, with a focus on section 2.2.1 the symptoms of the challenges of accessing the built environment. This includes the lack of recognition of disabled persons (Salha et al, 2020), inconsistent policy implementation (World Health Organisation, 2011), and unaffordable universal access (Chiwandire & Vincent, 2017) as reasons of exclusion.

Section, 2.2.2 the root causes, present issues of the old building; budgetary constraints (Murwira & Bekker, 2017); non-compliance to legislative instruments, lack of awareness of disability (World Health Organisation, 2011) and challenges in universal accessible designs as leading towards inaccessibility. Section 2.2.3 focused on the consequences. The last section 2.2.4 presented the results framework as an intervention to the research problem.

Section 2.3 reviewed different methods, data findings, and conclusions of studies on the implementation of the accessibility infrastructure directive for studies conducted in South Africa and other countries. This was done on qualitative and quantitative studies, concerning assessing challenges faced in the implementation of built environment accessibility, to evaluate this research. The literature review further proved that although policy implementation has been done, it continues to exclude disabled persons (Hayati & Faqih, 2013). Thus, validating the knowledge gap.

The SAPS's Service Delivery Improvement Plan (SDIP) highlights services to disabled people as a priority, through the Policing of Persons with Disabilities Action Plan and improving access to SAPS infrastructure for disabled people (SAPS AR, 2021/22). Studying the public systems structures that support the implementation of policies such as inclusive practices, development and reasonable accommodation is important in implementation studies (Govender, 2019). Therefore, there remains a need to close this gap and assess the implementation of the SAPS infrastructure accessibility directive progress and challenges to determine success. As a result, the research study addresses the research questions based on processes, attitudes, progress and challenges.

Section 2.4 introduced the implementation studies and their components and processes as the academic field of the study. Section 2.5 of the research explored the key attributes in the implementation of accessibility infrastructure directives. These attributes included setting, content, commitment, and feedback on results. Thus, studies highlight that the implementation of programmes and interventions is reliant on contextual factors, staff morale, competence, resources, and the settings (Hawe et al, 2004). As a result, Roussos and Fawcett (2000) noted ongoing documentation of feedback as important in assessing and redirecting the determinations of implementation.

In section 2.6 the study focused on the implementation frameworks for interpreting empirical results arising from the accessibility infrastructure directive. This links to the research questions and the component of the research. The frameworks as theories used in studying implementations were identified as implementation theory (Montjoy and O'Toole, 1979), institutional theory (Meyer & Rowan, 1977), COM-B theory (Michie, Van Stralen & West, 2011), and RE-AIM theory (Glasgow, Vogt, & Boles, 1999). These theories highlighted the importance of understanding the setting, content, and

commitments to provide concrete feedback on results and consequently be able to deal with other limitations.

Constructed on the reviewed past studies this research committed to a qualitative research strategy using a case study research design, by employing purposive sampling and semi-structured interviews to collect data and interpret the research on the factors affecting the implementation of the SAPS directive on accessibility infrastructure for people with physical disabilities. Lastly, this section provides a detailed plan for the headway of the research after reviewing the literature.

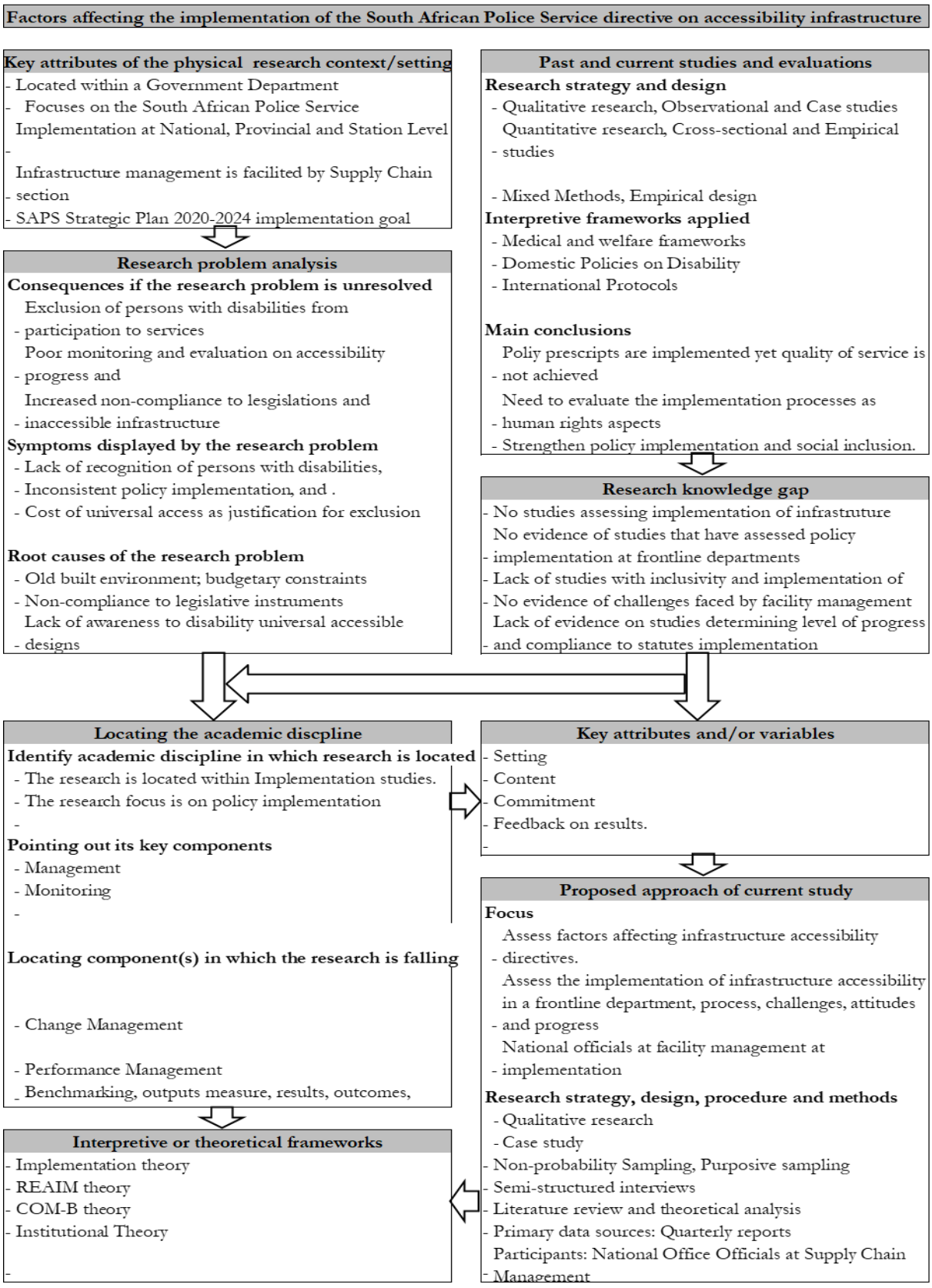


Figure 6: Research conceptual framework

3 RESEARCH STRATEGY, DESIGN, PROCEDURE AND METHODS

In Section 1.2.3, we have asked four questions that this research report aims to respond to, 'What are the processes in place in the SAPS to ensure the effective implementation of accessibility infrastructure directives?', 'What is the attitude of facility management towards accessibility infrastructure directives within SAPS?', 'What is the implementation progress on the accessibility infrastructure directive in SAPS?', and 'What are the challenges faced in the implementation of the SAPS accessibility infrastructure directive?'. Earlier, we reviewed the literature and established an interpretative and conceptual framework that will guide the choices of techniques we will use. This chapter recognised and defined the research approach, design as well as procedure, and methods that we employed in this research to collect, process, and analyse empirical evidence. Largely, it has three aims; namely, to identify and describe the research strategy in Section 3.1, the research design in Section 3.2, as well as the procedure and methods in Section 3.3. The chapter also described the reliability and validity measures in Section 3.4 that this research applied to make it credible as well as the technical and administrative limitations of the choices we made in Section 3.5.

3.1 Research strategy

Bryman (2012), and Babbie, (2016) define a research strategy as the general way of conducting social research. The strategy also considers the step to step in researching a certain problem, its questions, methods, and procedures. Research approaches are concerned with the style of the research through using quantitative experiments or qualitative case studies and the methods used (Creswell, 2014). Thus, research strategies entail three areas namely: quantitative, qualitative, and mixed methods. Quantitative research uses quantification to collect and analyse data while checking linkages concerning theory and research, whereas qualitative research uses words to collect and analyse data (Bryman, 2012).

The identified research approach to assess the factors affecting the implementation of the SAPS accessibility infrastructure directive is a qualitative research strategy. Qualitative research is an approach that emphasises an inquiry that supports the individual meaning, of a complex situation with a focus on historical experiences, social meaning and interpretation, and feelings (Creswell, 2014). This approach focuses on

words and not numbers in its data collection (Brynman, 2012). Employing this approach assisted the researcher to obtain rich data. The qualitative research approach is inductive; the researcher generates rich meaningful data and interpretation from collecting data in the field (Babbie, 2016; Creswell, 2014). Amongst other, qualitative research obtains its rich data from autobiographies, incident reports, and accounts, experiences, and accounts of implementing policies (Babbie, 2016). Given that, this research used the qualitative method to identify the factors affecting the implementation of accessibility infrastructure directive.

Past studies such as the study of Chiwandire and Vincent (2017) used qualitative strategy, to assess the access and exclusion of wheelchair users in South African higher education. The strategy was selected as it provided rich information and allowed participants to relate to their social context and experiences. Through employing semi-structured, in-depth, face-to-face interviews with disability unit staff members. Using this strategy will enable the researcher to relate to the social context and experiences of facility managers during the implementation of infrastructure directives.

McKinney and Amosun (2020) assessed the impact of built environment experienced by disabled people in South Africa. The researcher used a qualitative exploratory study to prepare civil engineering students towards contributing to the expansion of an inclusive society, by understanding the experiences of disabled people in their contact with the buildings. The strategy allowed the researcher to find sufficient data from the participants, through using a purposive sampling method and in-depth, semi-structured interviews with participants, as part of data collection. The target population was considered to be knowledgeable in the field of disability legislation in South Africa.

Banda-Chalwe et al (2013) assessed the impact of inaccessible environment for the involvement of people with mobility limits in Zambia. A qualitative design was used to gather data, through focus group discussions and personal interviews to study the accessibility of the built environment and its impact to participation. This strategy assessed the participants' feelings and opinions.

Additionally, Shumba and Moodley (2018), assessed the implementation of the disability policy framework, using a qualitative study. The use of a qualitative study with explorative, descriptive, and contextual elements produced rich data to address the

needs and rights of disabled persons. A purposive sampling method was followed to identify participants who were knowledgeable about the subject.

The reviewed studies used qualitative strategy for its potential to produce rich data that contribute towards gaining insight and probing for more information. Therefore, this research recommended the use of a qualitative research strategy to assess the factors affecting the implementation of the SAPS directive on accessibility infrastructure. This study also collected data by interviewing twelve participants. The interviews were able to provide rich data.

3.2 Research design

Bryman (2012) describes that a research design communicates the standards that are used when assessing social research. This involves the frameworks that guide towards generating evidence and answering the research questions by assessing the research reliability, replicability, and validity to ensure quality. Creswell (2014) defines a research design as the plan to conduct and a procedure of inquiry for the research and that it assists in the method and data collection. It also focuses on the perspective of the research (Babbie, 2016). In ensuring that the plan is followed, researchers should think of the design as a worldview. Bryman (2012) outlines five research designs namely: experimental designs, cross-sectional designs, longitudinal designs, case study designs, and comparative designs. Importantly, a research design is an approach that a researcher gathers data.

Given the ideas by Bryman (2012), the research employed a case study design, administered through interview schedules to assess the factors affecting the implementation of the SAPS directive on accessibility infrastructure. A case study design focuses on a single social phenomenon (Babbie, 2016). Furthermore, it consist of the comprehensive and rigorous analysis of a case in a particular setting or organisation (Bryman, 2012). Additionally, it supports qualitative methods, such as observation of participants, unstructured interviews, focus groups, and in-depth interviews, to obtain rich data (Bryman, 2012; Creswell, 2014). Therefore, using this a case study enabled the researcher to focus on a single social phenomenon, gather enough rich data and responded to the research questions.

Similar past studies by Van Der Waldt (2014) assessed challenges of infrastructure project for the Dr. Kenneth Kaunda District Municipality. This research used a case study to obtain data that is empirical and that responds to the research questions of the subject. Although a case study refers to a single unit or unit of a target population (Babbie, 2016). This research focused on a larger sample of the South African municipality, which paved similar results in identifying challenges in the implementation of the projects. This design further yielded rich data obtained from the participants involved.

Baris and Ulsu (2009) investigated the access to the built environment, problems, and participation in urban life for disabled people in Ankara. Although this study used a mixed method, the qualitative study used a case study design to obtain data. This qualitative data was obtained from written documents, in-depth interviews with subject institutions and people, and observations were also ensured for accessibility of people with disabilities to the built environment. By employing this design, the researchers concluded that by evaluating this study, relevant information was generated relating to the problems experienced, usage of the built environment, and participation in social life.

Furthermore, Danso et al (2017) assessed the accessibility of facilities for disabled persons for the Sofoline Interchange. A case study design was used with a population of three groups of participants with sufficient knowledge of the subject.

The research followed a case study design for its characteristics of using in-depth information gathering on a single unit, to gather comprehensive, complex and relevant information to gain insight on the factors affecting the implementation of the directive on accessibility infrastructure.

3.3 Research procedure and methods

In this section, we documented the procedures and the methods employed in this research to collect, process, and analyse empirical evidence. This section presents a broad discussion of the data and information collection instruments in Section 3.3.1 as well as the target population and sampling of respondents in Section 3.3.2. Furthermore, this section discusses the ethical considerations in Section 3.3.3, data and information collection process and storage in Section 3.3.4, data and information processing and

analysis in Section 3.3.5 used in this research. Section 3.3.6 concludes the background description of the respondents who provided empirical evidence for this research study in.

3.3.1 Research data and information collection instrument(s)

Data collection instruments include the steps that are taken in setting limits for the study, this includes information collection instruments through unstructured or semi-structured observations and interviews, documentation, visual materials, and the procedure for recording the research information Creswell (2014). Bryman (2012) refers to data collection instruments as the methods of data collection such as interviewing and questionnaires which can be used in a structured or unstructured approach to respond to the research questions. These instruments contribute to the gathering of data to address the research questions. In qualitative observation data collection instruments, record interviews through unstructured or semi-structured interviews, and the researcher makes field notes (Creswell, 2014). Data collection instruments become tools that contribute towards obtaining important data to respond to the research. Qualitative research employs some of the data collection instruments namely: observation schedule and interview schedule.

Based on the above literature, this research employed interview schedules to gather data. The researcher used these interview schedules as they enabled obtaining rich data from participants.

Babbie (2016) refers to interviews as a data-collection technique in which a researcher asks questions to a respondent, either face-to-face or via telephone encounter. Bryman (2012) claims that in qualitative research, conducting interviews with concrete and accurate scenarios can provoke a sense of understanding of how contexts shape behaviour. During these interviews, the respondents are capable of describing their experience, while allowing the researcher to use an in-depth collection of data through probing (Creswell, 2014). Thus, interviews are administered through interview schedules to allow the participants to respond to questions with answers that are elaborative without the researcher probing for more understanding (Babbie, 2016). Bryman (2012) alludes that the use of an interview guide is not precise as compared to the use of a structured interview schedule.

An interview guide or schedule is a sequence the researcher follows when gathering data, it begins with asking direct questions and reflecting on the feelings or responses of the participant, to elicit more thinking and elaboration (Bryman, 2012). In qualitative research, the researcher becomes interested in what and why participants respond or say the way they do in their responses. Creswell (2014) points out that being specific on the schedule, helps the researcher to plan, and manage units of the session and to be guided on writing. Additionally, when conducting qualitative in-depth interviews the schedule should include a summary of the topics to be addressed in the interview. Methods of interviews such as face-to-face allow the researcher to assess the clients feeling about certain questions as well as body language and the whole process, as compared to conducting telephone interviews (Babbie, 2016).

The research used interview schedules to assess the factors affecting the implementation of the South African Police Service directive on accessibility infrastructure, as it guided participants to share their experiences and feelings and ensured that questions yielded the desired results.

Interviews in qualitative research are ordered in different forms and structures, that the researcher should follow when gathering data for a study. Qualitative interviews use unstructured and structured interviews (Bryman, 2012; Creswell, 2014). However, mostly unstructured or semi-structured interviews are the structure that is followed by most qualitative research, used when collecting information (Creswell, 2014). This includes asking questions that the researcher may be interested to know before and during the interview through probing.

Bryman (2012) highlights that the structured approach to data collection guides the researcher toward designing the instruments needed to gather the responses of the research, thus contributing to obtaining rich data. The structure allows the researcher to ask questions in an open-ended manner, which in turn contributes to eliciting ideas, views, and opinions to contribute to the research (Creswell, 2014). Babbie (2016) adds that a clear interview structure allows the researcher to delve into the research and administer in-depth interviews which are often conducted in qualitative research. Qualitative interviews are categorised into three structures namely: the three structures: unstructured, semi-structured, and fully structured interviews. For this research, semi-structured interviews were employed to gather rich data.

Bryman (2012) infers that conducting semi-structured interviews is generally used in qualitative research as these are not structured approaches to data collection and are open-ended in nature to gather the information that responds to the research questions. Semi-structured interviews are designed to inspire discussions and to permit participants to provide their interpretation of the phenomenon.

Bryman (2012) opines that in a semi-structured interview, the researcher uses a list of specific questions, referred to as an interview guide, and guides the discussion on how participants should reply. The list of questions may not be followed as defined on the schedule. Although the researcher may ask questions that are not on the schedule based on the discussion, the interview schedule rewording should always be followed when necessary. Babbie (2016) points out that unstructured interviews give a sense of ownership of information to the participants as it allows the participants to hold a conversation, face-to-face with a stranger, on the telephone, and the ability to be aware of their independence in giving information.

Conducting interviews takes a different form to guide towards responding to the research questions, this can be through an open-ended interview, taking of interview notes, audiotaping the interview and transcribing it, e-mail or internet, face-to-face, focus group, online focus group, and telephone interviews (Creswell, 2014). Qualitative researchers record and write down, all information obtained from participants during the semi-structured interviews (Babbie, 2016). This method assists the researcher to remember all information collected in the field, to transcribe and obtain rich data from different populations such as communities, life, and organisations.

The research used a qualitative semi-structured interview schedule as the researcher conducted face-to-face interviews with participants. The interviews were also unstructured and guided by open-ended questions to produce opinions and ideas from the participants regarding the study.

Past studies by Chiwandire and Vincent (2017) assessed wheelchair users, access, and exclusion in South African higher education, to describe measures to be taken by South African universities for built environments to ensure accessibility, by employing semi-structured interviews. The researchers used qualitative research, which was applied in a case study design, and employed semi-structured interviews on in-depth face-to-face interviews with University staff within public universities in South Africa. The

participants shared their insights about the subject during the interviews, which resulted in them describing many challenges that they faced.

Shumba and Moodley (2018) used semi-structured questionnaires to collect data to assess the implementation of the disability policy framework in Namibia. The interview schedules were divided into Section A which had four closed-ended questions and Section B which had three open-ended and non-directive questions. In Section B, questions based on participants' awareness and experiences in policy implementation were assessed. The researcher also reworded the questions and further engaged in probing, as eluded by Bryman (2012). The interviews were also audio-recorded.

Van Der Waldt (2014) used semi-structured interviews to obtain manifold answers to questions and this also allowed for in-depth responses, when assessing the infrastructure project challenges of the Dr. Kenneth Kaunda District Municipality. The researcher had the chance to ask follow-up questions on specified topics and the respondents had a leeway to reply (as agreed in Bryman, 2012: 471). The interview schedules were constructed uniformly. Using semi-structured interviews was beneficial to the research as the researcher was able to obtain in-depth information from participants.

The literature reviewed here provided a direction to the researcher on scoping relevant questions. The literature reviewed in Chapter two also gave a direction to formulate questions that contributed toward responding to the research questions. The research used the information provided in 1.2.3 the research questions, this is where the research began as the researcher understood the questions based on the statement problem.

The research questions were also derived based on 2.2 the challenges of accessing built-environment: symptoms, root causes, consequences, and interventions, which sets the tone for the questions to assess and understand the study. Understanding 2.5 the key attributes in implementation that are key to accessibility infrastructure directives was very important as it complemented the study and the importance of 2.4.5 major components of implementation. Therefore, in understanding the questions, the key attributes identified as the setting, content, commitment, and feedback on results were important as stepping stones towards the formation of the research questions.

3.3.2 Research target population and selection of respondents

3.3.2.1 Research target population

According to Bryman (2012), a target population is the sequence of elements or units where a sample can be selected. This can include the diversity of the target population such as sampling nations, cities, regions, and firms. Creswell (2014) infers that it is important for a researcher to identify the population, to be able to determine its size and the target population. Identifying the target population includes clustering or single-stage sampling which are the population elements. Babbie (2016) defines the target population as the elements of the study which include groups or people that the researcher wants to conclude the research on. The research used a single-stage sampling procedure with employees from junior management to senior management positions within the SAPS.

In the study by Van Der Waldt (2014) assessing the infrastructure project challenges of the Dr. Kenneth Kaunda District Municipality, to explore the best practises and challenges in infrastructure design. The respondents were targeted based on their managerial level, their years of experience in infrastructure projects, and their managerial position. This was viewed as important in the interpretation of responses. The target population included eighteen respondents that were interviewed to generate insightful information for the study.

Shumba and Moodley (2018) targeted participants with the potential in providing information moving from twelve key participants until data saturation at 21 participants. These participants included middle and senior management who were actual implementers such as national programme managers, heads of national organisations of persons with disabilities, and disabled persons. The participants were also selected based on their roles in the departments and work experiences ranging from ten or more years of experience.

Chiwandire and Vincent (2017) assessed wheelchair users, access, and exclusion in South African higher education, to ascribe actions to be employed by South African universities for built environments to be accessible. In their study, the target population included 28 respondents who are Disability Unit Staff members within ten universities in South Africa. These participants were considered to be knowledgeable in the subject as well as in the unit.

It is for this reason that this research drew insight from the previous studies and selected junior management to senior management as the target population for the study. Therefore, the target population included twelve employees from junior to senior management who were knowledgeable in the subject of infrastructure accessibility within the Supply Chain Management, component: Facility Management as a target population to the study. The population contributed towards obtaining rich and accurate results.

3.3.2.2 Sampling or selecting respondents from the target population

According to Bryman (2012) sampling is choosing the section of the population that is particular for investigating the study. This method of choice may be based on a probability or a non-probability approach. In quantitative research, sampling involves discussions on probability sampling, and sampling in qualitative research involves the idea of purposive sampling (Bryman, 2012). Sampling can be through a single-stage sampling procedure where the researcher has access to the names of the target population; or through multiple or clustering procedures where the researcher, identifies groups or organisations, compiles a list of individuals, and obtains names of people to be part of the study and then select the target population (Creswell, 2014).

Sampling is the process and procedure of selecting observation units that are generalised from the population based on their probability through random selection and non-probability (Babbie, 2016). The decision on choosing the sample is highly influenced by personal judgements, prospective respondents' availability, and implicit criteria for inclusion (Bryman, 2012). The types of sampling in qualitative research are non-probability sampling and include purposive, snowball, convenience, and quota sampling. This research used non-probability sampling: purposive sampling.

According to Babbie (2016), non-probability sampling includes a technique where samples are not selected in a manner that is recommended by probability theory. Bryman (2014) infers that non-probability purposive sampling positions the researcher's research questions at the exact place for sampling considerations, the research questions serve as guidance to the units to be sampled such as which people, organisations, documents, and departments to be sampled. Creswell (2014) points out that purposive sampling collects open-ended data, and selects the analysing of text or pictures,

information presentations, and individual interpretations to reach data and gain knowledge in qualitative methods.

Purposive (judgmental) sampling refers to the type of non-probability sampling where the respondents are selected based on the researcher's judgment about their appropriateness, most useful, or representative (Babbie, 2016). This further includes their knowledge, thus, purposive sampling sometimes uses pre-tests on a larger or smaller population to determine participants. The selected respondents or participants also tend to answer questions directly as they are more knowledgeable about the subject. Furthermore, in purposive sampling, the research questions provide guidelines for analysing the sample to be involved (Bryman, 2012). Thus, this sampling takes account of the case which is the problem and the theoretical background of the study (Babbie, 2016).

It is for these reasons that the researcher used purposive sampling, since Facility Management deals with infrastructure management and they were in a position to know more about the implementation of infrastructure accessibility. The sample was also selected based on the group's ability to provide answers to the research.

Banda-Chalwe et al (2013) assessed the impact of inaccessible spaces on community participation using a similar sampling method. The study used a stratified, purposive sampling method with five provinces. The sampling used the statistics of disabled persons in the five provinces and the geographical locations. Documented reports such as the National Census of the population were consulted to determine participants. Thus, the collection of data from the five study locations was driven by the research being its first exploratory investigation on the impact of inaccessibility on people with mobility limitations and their livelihood.

Similarly, Shumba and Moodley (2018) sought to assess the implementation of the disability policy framework in Namibia. This study also took a similar sampling method is that of the current study. The researchers used purposive sampling to identify key participants in the study. The key participants were identified from the government websites and through referrals by staff during a manual examination of policies and acts.

The study on assessing the infrastructure project challenges: the case of Dr. Kenneth Kaunda District Municipality by Van Der Waldt (2014), used a similar sampling method,

purposive and convenience sampling. The respondents were targeted as they were readily available and they were considered to have a vast knowledge on the subject. In this study, the researcher was employed by Dr. Kenneth Kaunda District Municipality as a member of the Audit and Risk Committee and had access to the documentation of the organisation. Thus, the selection of participants ranged from senior managers of the Departments of Infrastructure (local municipalities) and managers in Project Management Units.

This research employed a non-probability purposive sampling for its good characteristics of inclusion. The inclusion in this research was junior management to senior management within the Component: Facility Management. The researcher selected twelve employees to participate in this research ranging from Warrant Officers to Brigadier. All these employees were selected based on their knowledge of the subject and their business process mandate.

3.3.3 Ethical considerations when collecting research data

The subject of ethical consideration is very important in research. Ethical considerations should be safeguarded by the research as research consists of collecting data from people, and about people, therefore, participants should be protected, a level of trust be developed, integrity is maintained and misconduct is guarded (Creswell, 2014). This also includes seeking approval and explaining the research purpose to participants. Bryman (2012) and Babbie (2016) highlight important principles to be considered and avoided when conducting research such as causing harm to participants, lack of informed consent, and invasion of privacy, instead, researchers should maintain confidentiality and anonymity, and any form of deception involved, rather participation should be voluntary.

Apart from seeking approval and ensuring that the research is conducted in fair principles, the research should be transparent to everyone involved in its agreement and proper conduct of scientific inquiry (Creswell, 2014). Creswell (2014) also adds that these ethics guides as principles and rules for professional associations and disciplines and that personal disclosure of participants, authenticity, credibility, personal privacy, and the researcher's role in cultural diversity are of importance in research.

The researcher obtained approval from the University of the Witwatersrand, on 21 February 2023. An application was made with the SAPS (Component: Research), and an initial approval was granted, on 03 March 2023. The SAPS applied to the Division: Supply Chain Management, for the researcher to conduct the proposed research and approval was granted, on 17 March 2023. The final approval was granted by the Component Research, on 28 March 2023. Before the process of data collection, a meeting was held with all participants to pilot the research and to highlight the importance of taking part willingly, as alluded to by Bryman (2012) that participants may withdraw when they wish to in the voluntary process.

Participants were also informed that the data collected will be destroyed and their anonymity will be maintained during the process. The participants were granted an opportunity to read the consent forms and research information guides which contained the process and purpose of the research before starting with the interview. Participants were also assured protection from exposure to any harm during the process of the research. An illustration of the letter that was given to participants which detailed the research intent and researcher credentials is included in Appendixes.

All participants were briefed by the researcher before conducting the study to understand the research intent and the participant's right to continue or withdraw from the study, their right to confidentiality, and also to assure them that any form of uncertainties would be attended to during the process. A consent form was distributed to all involved participants, where assurance was made that all information would be treated with confidentiality and to request permission to use audio recording devices to capture the interviews.

Finally, issues of anonymity were addressed with participants as the researcher assured that their names would not be shared with anyone during and after the research process. Appendix 1 has been included in this report and it presents the profile and steps taken by the researcher to protect participants during the process of this research.

3.3.4 Research data and information collection process

Bryman (2012) points out that data collection is concerned with research processes and procedures, while also administering the quality of the data being collected. Commonly, qualitative researchers use different designs for data collection such as oral history, focus

group, participant observation, community discussion, and reflective journal logs to collect data from participants (Kumar, 2011). Data can also be collected through observations, mail, telephone, Internet, personal interviews, or group administration with participants (Creswell, 2014). It is important to consider all ethical considerations when preparing for data collection (Bryman, 2012). This also includes the rationale for the procedure, costs, data availability, and convenience as well as the strength and weaknesses of the argument during analysis.

There are four modes by that data collection can be conducted namely: participant observation or ethnography, interviews (face-to-face, telephone, or internet-based), focus group discussion, and documents. This research used semi-structured interviews (face-to-face) which were recorded with the permission of the participants.

Kumar (2011) points out that a face-to-face interview means an encounter between the researcher and participants to understand their perspectives, experiences, and situations in their own words. This interview seeks to allow the participants to express themselves as well as for the researcher to note any signs and feelings expressed by the participants at first hand. The aforementioned process as an interaction between the researcher and participant is the completest condition of partaking in the mind of the next human being (Bryman, 2012). Creswell (2014) defines face-to-face interviews as the up-close gathering of information from participants directly to observe their behaviour, and actions as they interact with the researcher during the interview. This becomes a natural setting between the researcher and the participants.

While face-to-face interviews are generally the best to obtain in-depth information, Babbie (2016:255) points out that interviewers may miss questions, lose their place, and become frustrated and flustered. However, this form of data collection is cheaper as compared to conducting telephone or internet interviews (Bryman, 2012). Largely, a researcher makes great observations when conducting face-to-face interviews aside from receiving responses from planned questions. For this reason, the study used this mode based on its characteristics of evoking observations, its affordability, and the fact that in-depth information was obtained.

Past studies by Maja and others (2011) assessed the employment of people with disabilities in South Africa, where the research was aimed at policy implementation to identify knowledge, attitudes, perceptions, and experiences of employers when hiring

persons with disabilities. This research used a qualitative study approach collective with case study design and documentation, archival records, interviews, direct and participant observations, and physical artefacts. The semi-structured face-to-face interviews were conducted at the organisations business premises. All interview questions were based on the questionnaires completed by the Human Resource Managers before the interview. These interviews were conducted for approximately 40-60 minutes each and participants were digitally audio-recorded during the interviews. Using face-to-face interviews helped the researcher to obtain first-hand information and to observe all interactions with the participants.

Shumba and Moodley (2018) aimed to understand the experiences of national programme managers, heads of national organisations, and interested individuals during the implementation of a legal framework. The duo used semi-structured face-to-face interviews in English, to ensure that every participant understood the language. The interviews were held at the offices of the nominated participants, where an information sheet and consent forms were given to all participants preceding the interview. Participants were fully engaged and all instructions were explained relating to the interviews. Additionally, the interviews took 45 to 60 minutes each and participants were all audio-recorded with their permission.

Furthermore, as part of the preparation of undergraduate civil engineering students in a local university to contribute to the development of an inclusive society through a built environment, McKinney and Amosun (2020) assessed the impact of lived experiences by disabled persons when interacting with the built environment in South Africa. The study used semi-structured face-to-face interviews to gain insight from participants. Audio recordings were also maintained by the researcher to capture all the information provided by participants. Clarity was also offered whenever needed by participants. The mode of data collection provided the researcher with insightful information and identified emotions, feelings, and experiences about improving an inclusive society through the accessibility of the built environment.

The research used this mode of data collection for its flexibility in observing emotions and extracting insightful knowledge through probing. The research also noted that this mode enabled participants to seek clarity when needed to be able to respond to the

questions asked. As these interviews were semi-structured, the researcher engaged in a conversation with participants which resulted in obtaining rich data.

Babbie (2016) highlights that data storage or archives are sources or libraries for the storage and distribution of data for secondary analysis. These data can be through CD-ROM or other digital storage methods. For this study, participant data from the interviews were filed with the participant's number such as (Participant 1 or Participant 2) on a database to ensure easy access.

The researcher used a recording device, thereafter, transferred all the audio recordings to an external hard drive on a laptop, renamed and arranged the files with the participants numbering and stored these data in a password-protected folder in his laptop. The data obtained from the semi-structured interviews were not shared with any individual outside the research project and were kept confidential, private, and safe. This ensured that participants are not exposed to harm, and victimisation and observe anonymity.

The data collection took place for a period of four weeks. The researcher gained entry to the research site on 20 March 2023 and began with the collection of data on the same day until 14 April 2023. The researcher collected data on three participants on every second day of the week and all twelve participants took part in the study.

3.3.5 Research data and information processing and analysis

3.3.5.1 Research data and information processing

According to Kumar (2011), data processing depends on how the researcher plans to communicate the research findings such as developing a narrative to define a condition and identifying themes in interviews while quoting participants in verbatim format. Babbie (2016) infers that data processing is more like an art or science in qualitative, as this is a process of transforming the data collected into proper files to ensure manipulation through analysis. During the processing, researchers check the raw data to establish whether there are any noticeable errors in the data collected Bryman (2012).

Creswell (2014) data coding is the process of organising the data by bracketing chunks, taking text data or pictures gathered in data collection, segmenting sentences or paragraphs, or images into categories, and categorically labelling them. Bryman (2012) opines that data coding is a process whereby the data are fragmented into parts and

giving labels to all these parts. During coding, the researcher aligns recurrences and classifications of coded text across cases and connects them between different codes. The coding process includes listening to recordings, analysing and interpreting transcripts to link the data with research questions, literature, and theoretical ideas of the study. The coding process needs the researcher to understand the meaning of responses, possible misinterpretation, and researcher bias (Babbie, 2016).

This research stored all files recorded during the interviews and label them per participant and number (Participant 1, Participant 2, etc).

Transcribing refers to the process of creating written texts of the data collected from interviews (Babbie, 2016). This process involves scanning through the materials by typing up field notes, arranging all visual materials, and sorting and arranging the data into different types provided by the foundations of information (Creswell, 2014). Here, the researcher gives participants names either by a number or alphabet to ensure that transcriptions align with the interview as well as to easily find information passages when reviewing the interview. Interviews are habitually audio-recorded and then afterward transcribed, here, the researcher should be aware of the possible hearing mistakes that have the potential of influencing the meaning of participant's responses (Bryman 2012).

The data were transcribed and analysed manually to identify themes. All data collected from the interviews were portioned into themes as such themes recurred during other interviews, to ensure better understanding. Other information which contained the themes was categorically analysed.

Creswell (2014) highlights that by coding the researcher generates themes ranging from five to seven, and these themes are used to discuss the research findings as they emanate from the participant's perspectives and are supported by different quotations and evidence. These themes are interconnected into storylines such as narratives or are developed into theoretical models. According to Kumar (2011) thematic analysis involves organised writing majorly on the themes of the study that is theme should contain information that is in an integrated manner and have a logical progression of thought.

Thematic analysis as a method that is interpretative can be applied in different research as the researcher searches for latent content to be able to probe further into what is happening about the phenomenon to respond to the research questions (Bryman, 2012). Qualitative research connects theme descriptions and identifications in a more complex form to be able to respond to the research questions. In narrative analysis coding has the potential of leading to data fragmentation whereby the narrative of participants gets lost as narrated by the researcher (Bryman, 2012). The research further examined all the interviews and ensured that limitations and fragmentation were addressed. The researcher ensured that participants' experiences were captured and narrated as themes in a verbatim format.

3.3.5.2 Research data and information analysis

Qualitative data analysis is defined as the non-numerical inspection and interpretation of observations and interviews of a study to determine the meanings, patterns, experiences, and relationships of a phenomenon (Babbie, 2016). Qualitative research analyses data through a process of identifying themes and defining the findings of the interviews or observations as compared to using statistical procedures (Kumar, 2011). Data analysis primarily acts as data reduction by decreasing the outsized amount of information gathered by the researcher to make meaning out of it (Bryman, 2012).

This is through grouping information into themes to make clear interpretations. The data analysis begins immediately after collecting data and such guides the processes that follow after data collection. The theming of data can be guided by questions relating to frequencies, processes, structures, causes, consequences, and magnitudes. Some of the analysis mentioned by Bryman (2012) includes content analysis. However, to analyse data in qualitative research, there are several methods that one can employ such as narrative research, grounded theory analysis, cluster analysis, and case study analysis.

The researcher used thematic analysis as the preferred analysis tool to analyse this research.

On the other hand, the thematic analysis looks at the category that the researcher recognised in the data, it links to the research questions, builds on the codes and transcripts outcomes, and then provides a theoretical meaning towards contributing to the literature relating to the topic (Bryman, 2012). During the thematic analysis process,

the researcher analyses the records of the interviews or findings and then links them to themes (Creswell, 2014). Kumar (2011) notes that this analysis is based on the key themes, sequence, logic, and different arguments. In general, the thematic analysis identifies key themes in the collected data. In applying these analysis tools, the researcher ensured that interviews are transcribed, read and edited for the removal of mistakes and ensured the accuracy of the data. The main themes were identified with ideas on the topic, recurring ideas, and finally writing conclusions based on the outcomes of data.

Shumba and Moodley (2018) assessed the implementation of the disability policy framework and used thematic analysis to transcribe data. The audio recordings were written down in a verbatim style and aliases were used to disguise participants. The researcher had a preliminary report for all the interviews that were given to participants for corrections and themes were also generated based on the ideas of the topic. The use of this analysis tool helped the researcher to identify themes in understanding the experiences surrounding disability policies and frameworks.

Chiwandire and Vincent (2017) studied wheelchair users, access, and exclusion in South African higher education and used thematic analysis to analyse the research. The tool was found suitable for the study as the data from the interviews was themed into the focus of the study through issues such as ramps, railings, stairs, staircases, curbs, sidewalks, narrow passages, pathways, and parking spaces. Using a thematic study helped the researcher to have codes and make verbatim transcripts. The interpretation also took the form of classifying information for easy understanding.

On the other hand, Banda-Chalwe et al (2013) studied the impact of inaccessible spaces on the community participation of people with mobility limitations. Although this study took a different approach of nominal technique for a focus group, themes were also identified. The data from interviews were transcribed and codes and themes were created on emergent issues. Triangulation of findings was used to ensure the identification of common themes. Using assistant research to assist in the identification of errors and mistakes. Transcribing the data and identifying themes, allowed for a better understanding of the research and answering the research questions.

It is for this reason that the research used thematic analysis for the research, as ideas and responses during the interviews were identified. During the analysing of the research,

the research questions in 1.2.3, the literature review in 2.2, and the key attributes in 2.5 were taken into consideration. This guided the researcher to understand the research.

3.3.6 Description of the research respondents

The range of respondents is from the level of Brigadier, Colonel, Lieutenant Colonel, Captain, and Warrant Officer in the SAPS. Most of the participants were at the management level and the average at senior, middle and junior (supervisory) management. The inclusion criteria were based on the participants with twelve months and above experience within the section. This inclusion criterion was aimed at assisting the researcher in getting responses that represent their understanding of the subject of facility management and disability management. The participant's ages ranged from 28 to 60 years for both female and male participants in the structural-demographic section. In addition to the above, the research was conducted with twelve participants who are employees of the SAPS, under the Division: Supply Chain Management, Facility Management.

The table below provides a breakdown of respondents by position, work experience, gender and unit.

Table 3: Description of respondents by position, work experience and unit.

Respondent	Position	Work experience	Section/Unit
1	Project Manager	33 years	Infrastructure Management Services
2	Deputy Director	31 years	Project activation: Norms and standards
3	Deputy Director	39 years	User Asset Management
4	Director	5 years	Infrastructure Management Services
5	Deputy Director	39 years	User Asset Management: Procurement specifications and processing
6	Artisan Superintendent	15 years	Infrastructure Management Services

Respondent	Position	Work experience	Section/Unit
7	Project Commander	12 months	Infrastructure Management Services
8	Deputy Director	36 years	Building Administration
9	Assistant Director	24 years	User Asset Management: Procurement specifications and processing
10	Assistant Director	11 years	Infrastructure Management Services
11	Provincial Coordinator Infrastructure	27 years	Infrastructure Management Services
12	Artisan Forman	02 years	Infrastructure Management Services

3.4 Research strengthens—reliability and validity measures applied

Reliability is the process of ensuring consistency of the research in its findings when used continually (Kumar, 2011; Bryman, 2012). This is to ensure that the research results are repeatable and can be duplicated when applied in any other setting. Creswell (2014) also notes that qualitative reliability looks at the consistency of the researcher's approach through different research and projects. In general, the research questions should maintain consistency and be repeatable to ensure reliability and quality.

On the other hand, validity refers to the truthfulness of the conclusions and results of the research (Bryman, 2012). Kumar (2011) refers to validity as the step taken by the researcher to ensure that what was sought to be measured has been measured.

This looks at the position where the results of the study are following what was designed to find out. Qualitative validity infers the researcher's ability to check for the accuracy of results by administering certain procedures such as trustworthiness, authenticity, and credibility (Babbie, 2016). Broadly, validity focuses on appropriateness and accuracy applied to research, as inaccuracies may be experienced at any stage of the research process such as during the design, sampling, or data collection methods.

In qualitative research, reliability can be observed by answering research questions through several methods and procedures that are flexible and changing and ensure homogenous research tools (Kumar, 2011). Reliability can be ensured by: checking transcripts to eliminate mistakes, and the coding process is well captured through comparing data, and cross-checking codes and themes developed (Babbie, 2016). Bryman (2012) identified two forms of reliability external reliability with its focus on replicability of responses and internal reliability, with its focus on checking consistency in terms of participants' responses in situations of multiple observers.

Earlier in this section, we discussed that validity looks at the research appropriateness and accuracy at any level of the research process (Kumar, 2011). It is therefore important to note that when ensuring the appropriateness and accuracy of the research the following viewpoints on validity should be considered: whether the research study responds to the research questions and also if answers are provided, to check if the research uses appropriate methods and procedures to get the responses (Kumar, 2011). This is very important to understand as it leads to the understanding of the research, broadly. For example, Kumar (2011) noted that in measurement procedures, validity may check whether the instruments measure what was planned for.

Validity can be addressed through trustworthiness, authenticity, and credibility (Babbie, 2016). Additionally, it can be ensured by administering the following approaches: member checking, triangulation, using rich description to deliver the results, self-reflection and clarify biases, presenting negative or discrepant information that runs counter to the themes, spending more time in the field, peer debriefing, appointing an external auditor for review (Babbie, 2016). Furthermore, Bryman (2012) identifies forms of validity as internal validity focuses mainly on the causality factors between the researcher's observations and theory; and external validity with focuses on whether the results of the study can be applied widely outside the research context.

A past study by Shumba and Moodley (2018) assessed the implementation of the disability policy framework and applied reliability in the sampling method. The research study used purposive sampling to obtain rich data and participants' descriptions of the progress of disability policy. This assisted the researcher to ensure transferability. The researcher also used the field notes and audio recordings to double-check the transferred scripts as well as to verify information that was captured on the themes. This

includes the checking of information that has been coded as advised by Creswell (2014) to ensure quality and hence, a rich description was ensured during transferability. All of the audio recordings and maintain consistency.

Additionally, McKinney and Amosun (2020) assessed the impact of the experiences of people with disabilities in the built environment in South Africa and used purposive sampling. Using purposive sampling allowed the component of transferability which allowed for rich data and descriptions that paved the way to apply similar research in any other setting. The documentation and audio recordings allowed for the confirmability of the results which also proved that the research could be replicable.

The research noted the concept of trustworthiness which ensured that the results are believable. This research used purposive sampling, to ensure reliability. The researcher also transferred data with the understanding that it is rich and applied to other or similar studies. It is for this reason that during data collection, documentation was made and audio recordings were maintained to ensure that the data is of quality and replicable.

Bryman (2012) notes that validity clarifies that empirical explanations must be reasonable or believable and credible or trustworthy as well as be evident. It describes the extent that presents what the research intended to measure and it should not be confused with reliability (Babbie, 2016). While this is, the use of validity in qualitative research is controversial and credibility tends to be the most prevalent indicator of internal validity as it is refereed by respondent's feedback (Kumar, 2011). There are four main types of validity in qualitative research strategy and that is credibility, dependability, transferability, and conformability.

Credibility means a state where the outcomes acquired are agreeable to the research participants (Kumar, 2011). Assessing this component is through confirmation, congruence, validation, and approval of the participant's results. Creswell (2014) also identified the importance of checking the accuracy of the information to ensure credibility. Bryman (2012) notes the importance of the researcher to carry out a study that has good practise as well as to confirm if the findings were correctly understood. For this research, participants were followed up after each session to confirm the notes made by the researcher as directly the participant's responses.

Dependability refers to the process of ensuring that records are completed and kept throughout the research process (Bryman, 2012). This includes records during the problem formulation, selection of research participants, fieldwork notes, interview transcripts, and data analysis decisions. Kumar (2011) and Babbie (2016) submit that dependability is similar to reliability in quantitative research, however, in qualitative research, it is around the notion that research can be dependable when it yields the same results if the same processes have been undertaken in another similar research.

The application to simplify the same results in a similar or different setting was achieved by comparing the research question. This was due to the application of the research question in any organisation both the public and private sector. Therefore, the researcher was dependent on the field notes and audio recordings to qualify the dependability of the research.

Bryman (2012) infers that transferability is dependent on data that has rich and thick descriptions to make decisions about the possibilities of transferring that particular data. In external validity, the establishment of rich, thick, and detailed descriptions is very important to ensure transferability that has a compacted background (Creswell, 2014). Here the results can be generalised and transferred to other settings or contexts through the replication of similar processes (Kumar, 2011). To ensure transferability, the research generalised the results based on the research topic and the participants involved. The rich data served as a guide for benchmarking in another context. Therefore, the researcher transcribed the data with the understanding that other settings could have paved similar ideas.

Confirmability means that the researcher cannot confirm objectivity; however, it should be proven that the researcher did not allow personal values or theoretical linkages to influence the findings of the study (Bryman, 2012). Although Kumar (2011) notes that confirmability is also similar to reliability in quantitative research, in qualitative research it means that results can be confirmed by others. The research also confirmed this by ensuring that despite his experience in the field of disability management, such information did not influence the objectivity of the research. Therefore, the researcher separated his understanding to ensure that the in-depth interviews brought a different understanding.

Shumba and Moodley (2018) conducted a qualitative study to assess the implementation of the disability policy framework, in their study, the pair ensured that reliability was followed. The study ensured trustworthiness through the strategies of Lincoln and Guba (1985) to ensure credibility, transferability, dependability, and confirmability. To ensure credibility, the study applied purposive sampling, hence, a rich description was ensured during transferability. All of the audio recordings and written field notes ensured dependability and confirmability.

McKinney and Amosun (2020) applied a used rigour to check validity to assess the impact of experiences. Bryman (2012) defines rigour as rich data provided in great quantity and appropriately. The study applied similar strategies as that of Shumba and Moodley (2018) namely: credibility, transferability, dependability, and confirmability, were undertaken.

The credibility was achieved by avoiding misrepresentation of data and prolonging fieldwork to confirm member checking. Transferability was achieved by using purposive sampling and thick description to permit replication by future researchers on similar studies. Dependability was addressed through documenting and audit recording, thus, ensuring confirmability and reflexivity, where the researchers endlessly interrogated their tendencies and how they influenced or informed the research.

3.5 Research weaknesses—technical and administrative limitations

The study chose a qualitative study to research the topic based on its ability to produce rich and thick data through using a case study that was engaged with purposive sampling and employing semi-structured interviews with senior, middle management, and supervisors (Brigadier, Colonel, Lieutenant Colonel, Captain, and Warrant Officer) in the SAPS. However, the exclusion of lower levels staff such as sergeants, Constables, Administration Clerks, and secretaries was observed due to the time limitations of the study to get findings that represent the management views on the factors affecting the implementation of the directive on accessibility infrastructure.

Furthermore, a case study means that the department of the South African Police Service was in segregation and the factors affecting the implementation of the directive on accessibility infrastructure were not a benchmark of any department. The research

interviewed twelve participants who were directly involved in infrastructure management services, and all participants were available throughout the data collection.

Time limitations to probe questions due to participants' commitments considering their level of work, posed a limitation during the research. This resulted in the data collected to only a few senior management, due to their unavailability and busy schedules. Out of the twelve participants, four participants refused to be recorded as they were uncomfortable with the exercise. However, the researcher continued and maintained field notes to capture all responses and not omit any necessary data.

The researcher has worked in the disability management of the department and is currently working in the Component Strategic Management, the previous responsibilities did not influence the researcher and participant's responses as the research was about infrastructure. In addition, since the researcher is working outside the facility management fraternity, there was a lot of reluctance during piloting and during the interviews to provide information, hence, the researcher probed often.

4 PRESENTATION OF RESEARCH RESULTS

This chapter presents the research results gathered during the data collection period and seeks to discuss the findings of the four research statements derived from the research questions in 1.2.3, which are presented as follows: Section 4.1 what are the processes in place in the South African Police Service (SAPS) to ensure effective implementation of accessibility infrastructure directive? Section 4.2 what is the attitude of facility management towards accessibility infrastructure directive within SAPS? Section 4.3 what are the challenges faced in the implementation of the SAPS accessibility infrastructure directive? While Section 4.4 discusses the question what is the implementation progress on the accessibility infrastructure directive in SAPS?

Chapter two, Section 2.7, presented the framework for the study, Section 2.1 and 2.2 explored the research problem. Section 2.3 elaborated on the knowledge gap, as well as the presentation of implementation as a field of study in Section 2.4 and the attributes of implementation. Section 2.5 and 2.6 presented the framework for the interpretation of the empirical research results. In Chapter three, we have detailed the research strategy, which we discuss in Chapter five. The presentation of the findings also takes account of the factors of implementation discussed in Chapter two, which guided the research focus.

4.1 The processes followed by facility management in the implementation of the directive on accessibility infrastructure.

According to Agyepong and Adjei (2008), the content of a policy requires processes that are linked to the interactions of setting, the actors, decision making and processes of agenda-setting for implementing a programme. This also includes the processes of provisional change and implementation of change (De Coning & Fick, 1995). Data collection revealed the importance of understanding the implementation of the directive in the SAPS context. In several interviews, participants highlighted progress in all the years of its implementation. Other ideas pointed at the implementation section responsible for the subject as effectively contributing towards universal access. During the gathering of information, different ideas were recovered concerning the first question. The study recovered two themes and three empirical themes that emerged in this question and include the following:

4.1.1 Presentation of empirical research results

4.1.1.1 The SAPS infrastructure accessibility directives processes

Understanding the processes of implementation is important as it guides toward progress. This includes compliance, reasonable accommodation and challenges on access. All participants discussed the SAPS infrastructure accessibility directive as a work in progress. Three participants mentioned compliance with the directive as there was reasonable accommodation within the buildings. This includes the budget prioritised for the universal access project. Another participant amongst the three added that in a particular financial year, the section Infrastructure Management Services, achieved over twenty-four projects from a target of twenty. Participant 4 stated that:

> *"Since I joined this specific section, we have always achieved our targets. We should have maintained and done 20 buildings in the previous year but we did 24 in the previous financial year. We have since requested for needs from provinces, but we did not receive any response".*

Participants highlighted that, although there are challenges concerning access to ablution facilities, ramps shortage, and bathrooms, there was enough knowledge on the implementation processes and progress. Such was achieved through regular meetings on universal access. Participant eight noted that:

> *"I think it is quite sufficient because we have got emails and regular meetings. With regard to accessibility, I think there is a challenge when it comes to people with disabilities because we do not have the facilities here to accommodate like ramps and you know toilets, bathroom facilities"*

As a process of understanding the implementation of the directive, reasonable accommodation attests to compliance. Participants held different views that reasonable accommodation was not achieved because of issues of non-compliance and not following the directives. Four participants shared their views individually, that accessibility should be universal for everyone to access buildings. One participant noted that this was very important in the society. Challenges of accessibility were also noted in police stations to ensure universal adaptation. This challenge needs to be taken into consideration as participant nine noted that *"it is very vital to the community at large, to have the accessible infrastructure".*

Another participant that had little knowledge of the subject alluded that it was a good initiative. The participant's lack of understanding of the directive, indicated a poor understanding of the processes, posing a challenge in implementation.

4.1.1.2 Facility Management's implementation of the directive on infrastructure accessibility

The need to understand the processes prompted the need to understand implementation by the facility management section, management of a project, reporting and the use of a demand list. Given the participants' ideas, the inference made by most participants verifies that the SAPS daily activities to ensure the implementation of the infrastructure accessibility directives is vast. These include that five participants clarified the steps taken to ensure that there is accessibility and that buildings are adapted. Four participants noted that the Office of facility management manages its projects through the Programme Project Management (PPM) office, which transfers a list of demands to the Infrastructure Management Services (IMS). Within the IMS, an analysis is made and structures identified, to begin with, the procurement of material, execute the work, evaluation and complete the adaptation of structure. Furthermore, hazards are also identified during inspections and station visits. For example participant four and ten mentioned that:

> *"Ours is to receive a list for a demand that this financial year we need to do this structures, as remember they do their demand analysis, we just get advice, so from our part as IMS is to ensure that the planning instructions are received and done accordingly, in terms of the procurement process done speedily and then obviously obtain materials to execute and then we manage the project during the execution phase. Our project commander compiles the scope and engages the station commander with their needs or the Community Service Centre (CSC), on how can we be competent to serve the public, that's how wide should the disabled facility be or where should we lower the counter" (p4).*
>
> *"IMS receives a list from PPM on the adaptation of structures than as key executive of tasks" (p10).*

One participant from the five added that before the PPM issues a demand plan, there is a request received that requires the need for universal designs. Participants identified that there are regular quarterly meetings in the section holds to provide feedback and discuss issues of buildings accessibility and parking lot. This also includes quarterly

reports on the status of facilities that do not comply and plan or prioritisation model to address any challenges. Participant eight pointed that:

> *"We regularly have meetings to transfer important information to the people, also I cannot say fortunately but at this stage, we do not have people with serious disability concerns here. But when there is a person that needs to, when they come here you know we got the disabled parking and then we later park at the back by the stores to get access to the offices".*

Projects that are in progress are updated and benchmarked on advise to ensure service delivery improvement. Another two participants highlighted that within the section there was an employee with a disability, who was accommodated on the ground floor for easy access as offices use staircases. The participant narrated that:

> *"..In our building, there is one disabled person, she is in an office close to the main entrance, where no ramps and rail are required. There is a toilet available for her and if she needs anything or anybody from the first floor, we go down to her office".*

Besides the above idea, three participants held different views from the rest. One participant did not know about the daily activities as the participant works in administration. One participant indicated that some of the daily activities included the maintenance of existing structures. The idea was verified by another participant who added that:

> *"..In terms of plumbing, we normally convert the normal current toilets into disability-friendly toilets. The toilets should be useable inside by a person who is disabled so that he can be able to access a basin. We also install grip rails for balancing purposes".*

Although these views differ from participants, the process was also important as highlighted reflects the compliance with prescripts, and reliance on other sections to ensure proper implementation. Furthermore, challenges will be discussed further in this section.

4.1.1.3 Monitoring of the implementation of directive on infrastructure accessibility

The need to monitor the progress of the implementation of the directive remains important within the department. This is through the allocation of budget, reporting on implementation, inspections and observing of standards. Most participants stressed that the reporting of the directive forms part of the main goals of SAPS through the availability of budgetary allocations and capital works on asset projects. In the realisation

of this implementation set, the SAPS has an open platform for discussion on a monthly and quarterly basis. Thus, participant one further alluded that:

> *"We have many platforms of discussion of reports regularly, either monthly or quarterly. The execution department or unit in-house is the Projects and Programme Management and Infrastructure Management Service. We also use the Infrastructure Development Plan, which is external through consultants and the National Department of Public Works and Infrastructure, this should be complied with and we provide progress and reasons for deviations and the Annual Performance Plans for targets should be met".*

During the discussion in the meeting, the core report is discussed which forms part of the progress monitoring, here, the programme management is formed by the project commanders and project coordinators. The project status report verifies progress phases such as planning, execution and benchmarking standards to expedite intervention for success.

Participants highlighted that at times officials are deployed to monitor progress on weekly reports and through regular site inspections such as written reports and photographs. The monitoring of progress also checks the linkages with the building standards through ramps, disabled toilets and parking. Participants further indicated the PPM checks on the completion of projects, execution and finalisation through evaluating, analysing, managing and reporting infrastructures.

On the contrary, despite the participant's lack of information, participant one argued that it is impossible to monitor the implementation of the directive, SAPS should continue to ensure that all the infrastructure is accessible. This includes the conversion of spaces to be friendlier for disabled persons. Although the participant was not familiar with the Building Codes and Standards regarding universal access, in terms of the height and the width of the doors and other accessing areas, the importance remains. One participant argued that marketing should also be through the accessibility of buildings, such as Safety Health and Environment representatives. Such relates that the marketing of the directive remains a need to ensure that every member is conversant in the subject. Participant eight also highlighted that the monitoring of the directive is a direction of the Annual Plan projects, which is reported on yearly basis as guided by the parliamentary directives.

The idea was agreed by participant added that the IMS section also manages the implementation by sending monitors to provincial offices and receiving findings monthly. Participant twelve indicated that the SAPS infrastructure projects are also visited to ensure progressive reasonable accommodation and mentioned that "w*e do have projects whereby we have already converted them into the one that accommodates people with disability. So we normally monitor our progress, we visit the stations to check if they do accommodation".*

The study by Chenwi (2009) agrees that monitoring measures achievements by detecting failures and decline in progress to readjust actions, through regular reporting and target adjustments. Therefore, the monitoring enhances progress and suggests discussion for performance improvement, which will be discussed later.

4.1.1.4 The Linkage of accessibility directives and SAPS strategic objectives

The linkage to strategic objectives is important in ensuring that processes are followed. Most participants highlighted a commitment to the SAPS strategic objectives linking it to the accessibility directives and highlighted that SAPS infrastructure is aligned through user-friendly environments such as security upgrades and accessibility of the Community Service Centre (CSC) through ramps, and holding cells by visitors, service providers and the community at large. This was also attested by participant seven

> *"In our holding cells there are no ramps and they are not accessible. The goal here is public because we are making those ramps for them to access the CSC on a day-to-day. I think we are more focused on that and not the cells. When people come it is tough in the cells, there are no disabled toilets and ramps for our clients".*

In terms of the newly built police stations, two participants agreed that the involvement of the SAPS in devolved buildings which it has control over, and the payment of maintenance capital to the National Department of Public Works and Infrastructure (NDPWI) to ensure compliance. Thus, ensuring that new buildings are compliant SAPS ring-fences budget allocated for buildings maintenance. This is the budget that is aided by the NDPWI which does maintenance on existing buildings. The SAPS capitalises new buildings referred to as devolved and ensures compliance capital is paid to NDPWI. Participants also held similar views that the converted buildings are facilitated by extra allocation of funds for such projects. Participant twelve added that *"actually by converting buildings to accommodate employees who deal with disabilities and those with disabilities as well as the community around them".*

Conversely, in terms of the mission and vision, a participant argued that the SAPS deals with the combat of crime for everyone in implementing the directive. This is attested by a participant as the focus is on police safety, hence, the disability agenda is not attended to. Participant ten argued that although there is the alignment of objectives through the measurements of ramps, some places have toilets without rails and other disabled toilets are still in the process, *"we align to the objectives through the measurements of ramps, but some have no nails, toilets are not for disabled and it is still on the process"*.

The ideas in this empirical theme, link to the question of the processes for implementation as it deals with the information about the strategic objective of the SAPS in facilitating infrastructure directives.

4.1.1.5 Policy consideration

Policy considerations need to be adequate, as part of the process of implementation of infrastructure accessibility directives, such as clear implementation, Occupational Health and Safety, in-house National Instructions and departmental directives. In light of policy understanding, participants noted the setting of standards for compliance and mentioned that SAPS is a user-department, to ensure that newly built infrastructure complies with all the set standards. However, to ensure implementation, participant two pointed out that *"we also use the Infrastructure Development Plan, which is external through consultants and the National Department of Public Works and Infrastructure"*.

Participant three agreed that to certify completion, *"this includes the instructions on the project such as the pre-design, priority list, planning (site clearance), and design and tender which is the start and finishing and handing-over"*.

One participant held views based on Occupational Health and Safety by confirming that buildings can be occupied and free of hazards. Another participant noted that policy compliance is further ensured during the implementation of the Standard building codes and verification of measurements.

A participant also highlighted the importance of policy through the Occupational Health and Safety which deals with the confirmation of building safety for occupation through checking of compliance, executed at the provincial level to ensure accessibility. Participant ten understood that the policy on accessibility guides issues of compliance with the standard building codes and the verification of measurements.

The above ideas were viewed differently by the two participants. Participant one held that *"there is still a grey area for us if you are daily doing this because we do not know what the 'real makoya' (the real thing) is"*. This is inclusive of the high level of unclear policy implementation concerning the infrastructure accessibility directives such as the measurements on doors and heights, despite the building codes. In addition to that, the participant also highlighted the fact that the SAPS does not have its own National Instruction which could serve as an internal directive. One participant did not understand the directive as they have not been exposed to it.

4.1.2 Comparison of research results to other similar studies

This section compares empirical results with similar studies reviewed in Chapter two (Section 2.3). The research aim was to uncover the knowledge gap on the factors affecting the implementation of infrastructure accessibility directives in the SAPS; the researcher used this knowledge gap to suggest research strategies that were used in Chapter three. The comparison in Section 4.1 is based on previous studies that suggested the factors affecting the implementation of infrastructure accessibility.

Moreover, the results are similar to the results of Maart et al (2007) who pointed out that participants understand the implementation processes, however, challenges exist due to poor implementation. Thus, the conclusion by Hayati and Faqih, (2013) also confirms the above that policy is implemented, however, inaccessibility still exists. Shumba and Moodley (2018) also concluded the need to review inclusive policies and conduct an evaluation to check efficiency and effectiveness. In Tudzi et al (2017) inaccessibility made students feel left out and policy implementation strengthening was required.

Furthermore, Banda-Chalwe et al (2013); Hayati and Faqih (2013); Shumba and Moodley (2018) narrated that implications exist due to inaccessible designs of public facilities, and the implementation of universal designs. While the studies reflected the processes, the studies did not uncover information relating to the monitoring of implementation which was mentioned by the participants of this study.

4.2 The attitudes towards the directive on accessibility infrastructure

This section presents the results based on the attitudes toward accessibility infrastructure directives. In their study of implementation, Hawe et al (2004) pointed

out that contextual factors of a programme or an intervention take into account where the intervention is implemented. This is inclusive of the way through which it is received such as morale, attitude, competence, and resource availability. Such factors play a major role in ensuring the positive receipt of the intervention. The participants in this section provided their views based on the attitudes of SAPS as well as their experiences. The presentation of the results pointed to two themes and two empirical themes, which are presented as follows:

4.2.1 Presentation of empirical research results

4.2.1.1 Attitudes to disability mandate

The attitude towards disability mandate is an important aspect to receive, implement and assess an intervention, this is despite challenges on any responsibilities. Some of the factors include the human rights importance, the removal of barriers and training needs. Most participants pointed out that the SAPS is addressing infrastructure accessibility and ensures compliance through accessible buildings. This has been through adequate reasonable accommodation with a success rate of 125% on disability projects in the police station. The ideas were agreed upon by two participants who stressed that policy is well complied with and management is involved through the allocation of budget for disability projects.

Most participants identified that accessibility to infrastructure means that all buildings of the SAPS should remove restrictions or barriers, for proper service delivery. The accessible structures should also accommodate those who are using wheelchairs, blind and deaf. Participant eleven and twelve highlighted that accessibility involves an area where persons with disabilities should be accommodated. On the other hand, participants pointed out that the SAPS portrays a negative attitude towards disability mandates as disabled persons experience challenges in reaching all aspects of its buildings; although the SAPS tries to comply with the disability mandate, compliance is not achieved due to shared responsibilities, as it is not the custodian of adapting public building.

Participant eight further instilled that similar human rights and opportunities and reasonable accommodation should be afforded to everyone. Direct notes by participant eleven pointed that *"I think we need to do it, we need to make places adaptably friendly. There must also be inspections done and updates to ensure that they are satisfied with the service received".*

Although the SAPS is still far from universal access as some buildings are deteriorating. Participant seven narrated that a sufficient budget for cost allocation to facilitate accessibility projects should be made available. Whilst, participant eight shared that at the police station, people with disabilities should be catered for through ramps, for easy access to wheelchairs.

Additionally, a participant highlighted the importance of abiding by the prescripts and added that *"we should promote, protect and monitor the real realisation of human rights in the organisation"*. The participant also added on issues of training for disability management and infrastructure, which was an idea similarly held by most participants. Participant three narrated that to ensure a positive attitude:

> *"I think workshops by disabled persons to sensitise all non-disabled members regarding this issue and practical practises. This can be through putting a fully-abled person in a wheelchair for one day and letting him or her move around police buildings"*.

The initiative is meant to advance understanding and create awareness of universal designs. Several aspects of training needs require attention, participants noted training needs for the service provider and end-user on Occupational Health and Safety. This was agreed by two participants who indicated that training should ensure that technologies and skills transference is attained, especially in-house training of artisans. Participant eleven noted training of inspectors to ensure that there are proper inspections regarding infrastructure accessibility. A participant also highlighted a humanitarian aspect, which suggests that training concerning disability management should focus on disability types.

Understanding the attitude on disability mandate is a human right aspect. A participant highlighted that the SAPS is guided by the human rights mandate that everyone has a right to life, freedom of movement and access. This idea was also attested by another participant that the SAPS has a section that deals with universal access for easy access to infrastructure.

Participants also had contrary reviews which included that there is a negative attitude and issues of accessibility are a problem as there is always a need to ensure access to the parking lot, office space and office movement for persons with physical limitations. Participant four also concluded that:

"I think maybe if you take it to a technical perspective, the management of spaces. Remember we are dealing with facilities that are already fixed you know. So maybe the training will be then how you manage existing spaces and to create suitable access for disabled members of SAPS or members of the public".

4.2.1.2 Understanding of accessibility in infrastructure directive

In response to the understanding of accessibility to infrastructure as part of the attitudes towards disability as accessibility meant that the building should be free from barriers and sufficient budget. Three participants suggested that the accessible structures should be accessible for everyone including those that use wheelchairs, blind and deaf. The participants also narrated that accessibility should also accommodate disabled persons. Participant twelve mentioned that *"like it should be the facilities that people who are disabled can access".*

However, one participant stated that accessibility concerns immovable assets for persons with disability and the community at large such as the availability of ramps, rails, lowered counters, ablution blocks and parking signs. This is also attested by the need to have resources to ensure implementation as participant seven added that "c*ost allocations should be in-line with the budget, you cannot go above this. Sometimes buildings are deteriorated and need to be started afresh or you need to revamp the whole building".*

Although the SAPS is still far from universal access as some buildings are deteriorating. Participant eight shared that at the police station, people with disabilities should be catered for through ramps, for easy access to wheelchairs. The ideas shared here verify that participants are aware of the aspects of accessibility and plans have been made to achieve these indicators in the SAPS.

4.2.1.3 The current infrastructure accessibility

The participants collectively identified aspects that render the current infrastructure inaccessible and inappropriate. Some of the outstanding aspects reviewed by four participants noted that the infrastructure is not fully accessible and functional as it makes it difficult for police officers to provide services to physically disabled community members. This is due to factors that include the abandonment of residential or offices used by physically disabled employees and the prioritisation of public spaces; the SAPS has many buildings resulting in slow adaptation and poor access to infrastructure by persons with disability. Three participants concur with the views that the infrastructure

is not accessible due to poor adaptation of vehicles for employees with disabilities incurred from Injury on Duty as well as poor adaptations of historical buildings.

On the contrary, different views existed from other participants, participant six argued that the infrastructure is appropriate but not operational for use as there are still challenges with the design rendering the infrastructure inaccessible for disabled persons. This is also due to mismanagement of resources allocated to disabled persons such as designated parking lot and ended up being vandalised and used by persons without disabilities.

Participant seven also argued that "*it is but it needs some touch-ups, there and there",* which infers that the current infrastructure is appropriate. Two participants noted that community members can SAPS buildings such as police stations. Thus, participant eleven added that "*I think it is appropriate, we've got lots of people that have a disability in the stations that I could see they are accommodated".* Another participant further added that there was a difference from the previous infrastructure to the current which makes it accessible.

4.2.1.4 The concept of management buy-in

Management plays an important role in the implementation of an intervention or policy. Agyepong and Adjei (2008) inferred that management buy-ins are important aspects that are influenced by environmental characteristics such as internal and external factors. This is a true reflection as mentioned by eight participants that the management of the SAPS is well conversant and understands the concept of disability. The participants highlighted that the management understanding of disability included that the IMS held core meetings to discuss the implementation of disability regularly. There was also good cooperation at all management levels which was received from the User Asset Management Plan, a section where projects are planned, prioritised, executed and completed as per the project phases

Another vital point narrated by two participants highlighted that instructions on implementation are issued following the Top-Down implementation approach, as the instructions are issued from top management, which has a large influence on both the buildings owned by the SAPS and those that are leased or under the NDPWI. According to Mthethwa (2012), the top-down approach emphasises the adherence to implementation by policymakers and managers to improve performance.

Other participants held an arguable point that although there was buy-in, however, proper involvement would result in sufficient budget allocation as well as skills transference amongst professionals. Participant five pointed out that *"management can assist if there could be workshops. They may issue circulars and encourage funding allocation to improve facility adaptations that will be user-friendly"*.

On the other hand, conflicting ideas were pointed from four participants and they individually believed that management buy-in was very limited. Participant two felt that the mandate should form part of the department, as *"SAPS management can ensure that disability management receives the necessary attention and priority it deserves by making it part of the SAPS Strategic Goals, objectives and plans"*. Participant nine felt that involvement would result in sufficient funding and mentioned that *"remember the management are the main people in the organisation, so they are the ones who can make the budget available and then they can assist as well with planning"*. Additionally, the implementation of the infrastructure directive can be motivated by their involvement, as alluded to by participants.

4.2.2 Comparison of research results to other results

This section compares empirical results with similar studies reviewed in Chapter two (Section 2.3). The research aim was to uncover the knowledge gap on the factors affecting the implementation of infrastructure accessibility directives in the SAPS; the researcher used this knowledge gap to suggest research strategies that were used in Chapter three. The comparison in Section 4.2 is based on previous studies that suggested the factors affecting the implementation of infrastructure accessibility.

Past studies by Chiwandire and Vincent (2017) concluded the failure to address inaccessibility and the approaches used to implement the programme. Thus, sensitisation and awareness were identified as important to address inclusion as a fundamental right. Maja et al (2011) identified the knowledge, attitudes, perceptions, and experiences of employers as important when hiring persons with disabilities. The World Health Organisation (2011) also noted that the lack of removal of these physical barriers results in a negative attitude toward implementation.

McKinney and Amuson (2020) further revealed negative emotions on understanding the impact of the experiences of people with disabilities and their participation within the built environment. As Shumba and Moodley (2018) also added that achievement can be through awareness, capacity building, improving supply chain management, monitoring

and evaluation of programmes. These ideas were mentioned by participants in the study as they contribute to the question of the attitudes toward accessibility directives.

Although, Chiwandire and Vincent (2017) noted that challenges with a lack of information such as narratives held by society lead to a negative attitude. While the studies mentioned above, the study did not point to training directly as a major need, the inclusion of plans on strategic documents and the concept of management buy-in as factors affecting the implementation of the directive. This remains a knowledge gap in the literature.

4.3 The implementation progress on the directive on accessibility infrastructure.

According to Mthethwa (2012) giving feedback on implementation progress is important as it lays the foundation for working strategies and the need to alter others to ensure positive results through stakeholder involvement; planning and resource mobilisation; operations and feedback on progress and results. As part of monitoring progress, Chenwi (2009) highlighted the importance of identifying indicators and benchmarking achievable targets, as this contributes towards performance progress. Thus, achievements are identified as opportunities for the improvement of performance implementation, as they ensure accountability (Snyder et al, 1996; Roussos & Fawcett, 2000). Therefore, it is important to provide regular feedback on intervention, as it assists with the ring-fencing budget for achieving the set goals.

During the collection of data, findings pointed to the understanding of the progress of the implementation. In several interviews, participants highlighted progress in all the years of its implementation. The presentation of the results revealed one theme and three empirical themes, which are presented as follows:

4.3.1 Presentation of empirical research results

4.3.1.1 Progress of Accessibility to infrastructure

Progress on the implementation of accessibility directives was perceived differently by the participants. The progress includes that performance has always been highly maintained by the SAPS, provincial compliance and slow progress due to resource allocation. The views shared by two participants provided that the SAPS is progressing well and compliant with the implementation of the directive. Participant three noted

that: "w*ithout the availability of statistics, I would guess that SAPS is in the region of 80% compliant with the act at this stage".*

Several factors lead to compliance, this includes the processes followed to ensure that all plans are completed. Participants pointed out the use of demand plans to ensure that implementation takes place. The assumptions here were that provincial achievement was at 100% for the financial year, as requested were not received translating to progress. Despite compliance at the provincial level, the inability to reach full accessibility means a satisfactory performance. Participants pointed a satisfaction as some projects on adaptation were incomplete. Participant five highlighted that *"it is still far from developing because places such as bathrooms that are for disabled persons are still difficult to access. I recently heard that there is one downstairs, but the department must still do more".*

However, despite the pointed progress by different participants, slow progress was also noted. Participant one highlighted a slow due linked to the capacity of workmanship to execute duties. An argument from participant six also stressed that the implementation has been conducted for over ten years and the involvement of end-users and experts is still absent. The involvement of experts for new designs has the potential of driving force to progress on universal designs. Another view by one participant pointed to delayed procurements which lead to slow progress on the implementation. Finally, one participant realised that such experiences of poor adaptations and lack of access meant that the progress on implementation was not fully at 100% in the SAPS.

Issues of resources are also crucial to understand progress, this includes the purchasing of materials that may impact positively or negatively on performance. Participants ten shared frustration based on procurement and noted that *"the procurement process such as buying material takes too long to finalise. The completion can take long such as two to three months for upgrades that are done in-house".* This also results in poor performance as agreed by participant twelve that the SAPS *"is not fully progressed to 100%. I would say we are getting there and we have achieved many projects, converted as per our plan".*

4.3.1.2 Improvement in performance

Improving performance is important in ensuring that set targets are achieved. This includes the suggestion of using a three-year rolling period, feedback meetings, skills sourcing and training. Cele (2004) suggests that the alignment of strategic objectives, interventions and programmes, requires the involvement of management to ensure that

performance is in line and progress is achieved. Given the improvement of performance progress, participants held that feedback by all divisions and provinces on a semester basis directly to the National Commissioner on progress and performance and regular feedback meetings rolled out by the Department of Planning Monitoring and Evaluation to SAPS to address this issue have a potential to improve progress. One participant added that provincial visits to understand and deal with issues first hand may also improve performance, as opposed to implementation that is coordinated at the national level, where dependency is relatively high.

The idea of competent and skilled personnel has been recovered mostly in this research. The idea is agreed by participant twelve that *"skills sourcing to have extra members"* is important. Participants four and six explained the importance of having skilled artisans and architects to be able to deal with non-devolved buildings and having a three-year implementation plan compared to the annual plan they are currently working on. The idea of the plan has, in turn, a ripple effect of improving performance, as incomplete projects can be rolled over.

Despite these ideas, resources and budget remain important aspect of implementation. Participants emphasised the need for an extra budget as a positive way to improve the adaptation of facilities. The effective use of and sufficient budget translate toward project adaptations. Participant nine narrated the measures that *"I think in terms of measures, must be put in place such as being effective, reliability and the budget to be able to maintain this project and I think the performance can improve"*.

Participant eleven also agreed to the idea and added the importance of training that *"through workshops and disability training. Disability management projects should be made with an increased budget"*. Apart from the ideas shared here, adhering to standard codes remains an important part of performance. Participant ten noted that *"ensuring compliance to the building codes emphasised by the directives, attending to buildings on time and guaranteeing that training is performed with understanding",* has the potential of increasing performance.

Divergent ideas were also highlighted in this theme, a participant held that aligning requirements and plans on the directives by following the standard building for access by disabled persons may improve performance. Participant two also explained that:

"I think SAPS already has accessibility as a focus area and funding allocation per financial year linked to that project. Maybe the government Infrastructure Units should assist all state departments to comply".

Thus, the improvement of compliance audits remains important to ensure accountability. Participant eight also narrated that having an evaluation or a study conducted by an external service provider as compared to internal Organisational Development can also guide good learning processes.

4.3.1.3 Project management

Project management plays a significant role in the management of progress and reporting on performance. The management of projects includes the IMS section, observing timeframes and working on operating steps. The participants collectively identified project management as contributing to the progress of the infrastructure accessibility directive. Participants highlighted that within the Division: Supply Chain Management, there is a component: Facility Management and within it there are four sections: Programme Project Management; Infrastructure Management Services; Asset Operations Management which deals with bigger projects and managing public works and Demand Management.

In terms of ensuring that the progress is managed, participant four elaborated that IMS engages with provinces to identify projects to ensure that police stations are accessible. The Project Programme Management section serves as a component that guides the infrastructure planning, and demand management. Managing a project requires conforming to timeframes to ensure progress, as participant eight noted that:

"There are time frames and time limits because we must ensure that we meet all our deadlines in the financial year. So if they gave us 55 disabled projects to do, we must make sure it's finished in that financial year".

Two participants noted that project management is working as it helps with projections, understanding the stages of development, and the level of progress in percentage. This is because the section produces reports in terms of percentages on the established projects, project progress and implementations of the work until completion.

The execution of a project requires a regulatory framework. Thus, participant one highlighted the importance of having Standard Operating Procedures (SOPs) as a

detailed matrix for disabled projects that will guide in terms of the correct measurements and the type of doors required for wheelchair users, besides the building standard codes. Apart from the views of having a working internal or external project management, participant seven indicated that the current project is working well, however, outsourcing of services disadvantaged SAPS employees.

4.3.1.4 Communication of feedback on infrastructure performance information

Snyder, Berry and Mavima (1996) connote that compliance and provision of feedback contribute toward economic assistance. It also requires evidence for success and development efforts (Guskey, 1994). The importance of communicating feedback is highlighted by participants, such as the sharing of information through reports, core meetings, dashboards, awareness and email publishing. Participants two, four and eight shared that feedback is communicated through directives of the Annual Performance Plans means are then derived to ensure accountability through Quarterly Reporting on Inter-Departmental Forums, Divisional Forums, Annual Performance Reports and the feedback on the Infrastructure Development Plan.

The core management reports to the Component Head on a regular weekly basis and to the Divisional Commissioner monthly, and showcases achievements through summarised reports submitted quarterly and annual basis which are presented by the principals, National Commissioner. The confirmation also highlights the administering of the top-down implementation approach.

Participants also pointed out the availability of communication platforms like circulars that are published by the Nodal Point to all email users, nationally. The means of communication further include pamphlets that are posted on notice boards, a compilation of monthly statistics for building compliance with Safety Health and Environmental Management, and weekly reports submitted to Human Resource Management. The idea of sharing progress on the core management report which is discussed weekly by the section, was prevalent amongst participants. Participant eleven mentioned that *"...in most cases, we sit in the meetings and update each other on each of the work we are responsible for and see if every task is completed"*.

Conversely to the above, the idea of the distribution of responsibilities from the top-bottom appeared as a driving force to performance. Participant one held that performance information is shared at a higher management level. Additionally,

participant three further highlighted that the *"…performance information is handled by another section as well as the division VISPOL"*. The tracking of performance, therefore, becomes difficult as it is the responsibility of the Division: Visible Policing and Operations. Conducting awareness campaigns to share performance information is an important aspect. Participant nine narrated that *"…the information is shared through communication and campaigns, that is the only that information can be shared"*.

Participant ten also added that *"we use dashboards, monthly meetings but we do not have posters and I have never seen any information on the nodal point"*. This idea contradicted the points shared by participants five, eight and nine. Maintaining records is also one significant aspect for communication of performance information, as participant twelve narrated that *"we do keep a record of every project according to its state. But the ones that are in completions like we normally go there to do some evaluation"*. Hence, reporting and communication of feedback require physical visitation.

4.3.2 Comparison of research results to other similar studies

This section compares empirical results with similar studies reviewed in Chapter two (Section 2.3). The research aim was to uncover the knowledge gap on the factors affecting the implementation of infrastructure accessibility directives in the SAPS; the researcher used this knowledge gap to suggest research strategies that were used in Chapter three. The comparison in Section 4.4 is based on previous studies that suggested the factors affecting the implementation of infrastructure accessibility.

Past studies by Van Der Waldt (2014) outlined reporting on progress as an important aspect to ensure the communication of progress made. Similarly, Chiwandire and Vincent (2017) purport that the progressive legislation has had minimal impact on improving accessibility as many buildings remain inaccessible. Roussos and Fawcett (2000) also narrated that ongoing documentation of feedback redirects implementation.

The current study reveals similar findings, however, the previous studies did not explore project management and platforms for communicating feedback. These findings suggest that there is a knowledge gap about the implementation progress and feedback which responds to the factors affecting the implementation of the infrastructure accessibility directive of the SAPS.

4.4 The challenges of implementing the directive on accessibility infrastructure

Challenges in implementation are experiences that impair implementation. The elements here include mutual understanding and values shared by a group of implementers, promotion of learning and commitment (Rooney et al, 2005). Some of the challenges are experienced due to poor incentives, rewards, or punishments (Malhotra & Galletta, 2003). The experiences of implementers further contribute to challenges such as budgetary constraints, shared responsibilities and understanding of the subject. In this section, participants answered their views based on challenges in the implementation of accessibility infrastructure accessibility, as their lived experiences. The presentation of the results pointed to two themes and two empirical themes, which are presented as follows:

4.4.1 Presentation of empirical research results

4.4.1.1 Challenges encountered

The challenges experienced during implementation are the objective of this research as problems are usually the reasons for lack of implementation. This aspect is identified by this research, as participants shared their lived experiences such as misalignment of bidders, training needs, budgetary constraints, and resource allocation. Most participants identified the lack of budget which results to delay procurements and obtaining of resources and the approval of adaptations from NDPWI which is not prompt as well as lack of capacity. These have negative effects on the roll-out of universal designs and timeframes on the application of the directive for compliance. Issues of unrealistic bidders and processes to be followed were highlighted by participant four:

> *"..Suppliers that we have to source the materials from, need to be registered on the Central Supplier Database (CSD). CSD has proven to be a big problem because people that are on CSD have proven to be chance takers and they cannot provide what you want. Sometimes they do not respond, meaning that we have to go out to tender another quotation, many times before we get what we decide to get".*

The participant further explained that police stations that are in rural places, experience more challenges as suppliers are not easily located or some are out of the town jurisdiction, leading to delays in obtaining resources.

The lack and shortage of resources such as types of equipment to work with, were also prevalent as impeding the implementation process and resulting in challenges. Participants further elaborated that, budgetary constraints and limitations result in poor implementation. Thus, misalignment with the project plans and poor completion of accessibility projects results in a limitation. Even though the challenges exist, until the involvement of the community through complaints, the elimination of these challenges requires that as mentioned by participant nine that *"the other challenge is the budget as well that is why we need the management to make the budget available, to construct this infrastructure accessibility and as well as the environment"*.

Training needs further appeared in this section, as participants further pointed out the lack of training to ensure compliance as a challenge. However, some participants, noted the lack of capacity, as affecting the roll-out of building adaptations. One participant pointed out that despite challenges with designated parking, managers were enforcing the implementation of the directive. This idea was also elated by participant five that directives are poorly implemented by ignorant officers which leads to complaints from the community and required the improvement of service delivery. The idea was also attested by participant nine that *"the challenges are there, whereby this infrastructure accessibility is not prioritised up until maybe there can be a complaint from the community"*.

4.4.1.2 The required capacity

Capacity is an important aspect that was pointed out as affecting implementation and a challenge. The idea includes the training needed to ensure compliance and the need for sufficient trades to implement the approved National Instruction. All participants provided their responses concerning the capacity required for the SAPS to implement the infrastructure accessibility directives. Participants highlighted the importance of outsourcing services such as expertise and capable contractors, and the involvement of the private sector to deal with leased and state-owned buildings as well as to execute various responsibilities towards the implementation of the directive. The capacity needs to be exposed to training, such training to ensure that CSC has enough queue controllers and persons with disability do not wait long for services at the police station. Despite training, participants also articulated that such training remains a challenge as there is a lack of sufficient budget to administer this indicator.

The need for skilled labourers was also a challenge, participants noted the need of having sufficient skills and experienced employees in the field of trade such as welding,

painting, plumbing and electrical related. Participant six agreed that *"skilled labourers are a problem"*. While this is, participant ten indicated that *"capacity depends on the number of projects. Currently, there are more projects whilst we lack on capacity and resources. We then have to outsource on some projects"*. Participant twelve was also in agreement with the idea and added that *"I am an artisan, but for now we are dealing with a lot of projects. So there is a lack of artisans to complete the projects"*.

Inversely, other participants held different views about the challenges. Participant three stressed the need for an approved National Instruction or policy that is monitored through semester or biannual feedback at the executive level such as the National Commissioner. The capacity such as architects to manage spaces also remains a challenge, as participant four noted that the involvement of architects will help with the reconfiguration of spaces and achieve implementation on both devolved and non-devolved. One participant noted that experts remain need to focus on the implementation. Another participant realised that in ensuring implementation, capacity should consider proper planning, prioritising and budgeting. In addition, one other participant concluded that the project area is also important to allocate employees' capacity, such as rural or urban areas.

While the idea was argued by participant seven, as the participant elaborated, *"I cannot say there is a shortage of people as we hire general workers. I think the capacity is okay. But we need relevant expertise or people for the job we do"*. Thus, a need for relevant expertise remains important to ensure proper implementation. The capacity further requires proper planning, prioritising, and budgeting for the purchase of building materials and payments to implement the infrastructure accessibility directives, as alluded to by a participant. Thus, the need for capacity is also determined by the environment as mentioned by participant eleven, *"the location is also a determination with regards to it being in town or rural area"*.

The views and experiences shared by participants about capacity express a major challenge in the implementation. While ideas explored different aspects, addressing the challenge is important.

4.4.1.3 Expert Services

Expert services were identified as a concern that contributes to the challenges. This includes artisans and sufficient resources. All participants shared their ideas based on the

challenges with the required expert services. Participants indicated that having expert services have the potential to add value to the already available in-house and internal services. These services include the appointment of skilled contractors and consultants, to expedite the implementation processes.

Arguably, participants shared similar ideas, as participant four highlighted that:

> *"We do have artisans at the moment. Though, what I'm saying is that if you are talking about ensuring that the 1300 and all police stations, meaning that the professionals should be improved and increase the number of artisans in terms of bricklayers, tilers and others. So that we focus on everything, all the devolved and the none-devolved".*

Consequently, the additional resources require a budget which is a challenge in the implementation aspects. Participant nine provides that management should prioritise expert services on the directive, *"I think it needs to be prioritised through proper planning and making the budget available"*, as their knowledge is important in implementation.

4.4.1.4 Shared responsibilities with other Departments

The sharing of responsibilities was a concern in the implementation of the directives as universal access lies with another department. Mostly, participants held the understanding, which results in implementation challenges. Participants highlighted that the NDPWI is a custodian of all state buildings and capital should be prioritised by the department to make sure that all buildings are accessible. Although, participant four noted that they do not deal directly with NDPWI, issues of inaccessibility are referred to the IMS to intervene for universal access and obtain approval thereafter.

The most prevalent idea shared by participants was about the implementation of devolved and non-devolved. An elaboration made by participant three stated that "*the SAPS deals with devolved buildings and currently, 289 buildings have been adapted to universal designs. The rest of the other buildings are none-devolved and leased under the NDPWI".* Participant four attests that challenges exist which require their involvement:

> *"The issue of Public Works is that we, as the IMS maintenance within SAPS focus on devolved stations that get drawn into non-devolved because of lack of performance by public works".*

The idea brought by the participants suggested that working with NDPWI is a challenge due to the prolonged permission and approval system. Participant six also argued that in

the devolved, SAPS have a sense of ownership for maintenance, whereas, in the non-devolved Public Works make all the arrangements. Contrary ideas narrated by participant one held that the NDPWI should invest in having more personnel to roll out the process on both states- and privately-owned buildings. One other participant indicated that the sense of ownership by SAPS can be achieved if all buildings were maintained by them. Thus, shared services results in challenges due to the reliance on other departments for the implementation of the directive.

4.4.1.5 The devolved and non-devolved buildings

As part of shared responsibilities, a challenge based on the implementation differences emanated, which further exacerbate the implementation delays. This includes the responsibilities of other departments. All participants held different opinions regarding issues of devolved and non-devolved buildings, as a contributor to implementation challenges. Three participants highlighted that the devolved buildings which are for SAPS are dilapidating, whereas, the non-devolved are buildings owned by the NDPWI. The participants elaborated that, SAPS has 1158 police stations and 289 are devolved, meaning that the remaining are non-devolved and belongs to NDPWI. Thus, participant four added that *"…the non-devolved buildings are under Public Works. Remember we have been focusing solely on police stations but other police stations, offices and training facilities are for public works"*.

Participants six and eight alluded that despite getting involved in the non-devolved, obtaining permission from the NDPWI to ensure universal access to the buildings owned by them takes longer. In addition, participant eight elaborated that as a process:

> *"There is a challenge when it comes to that because to work through NDPW you know, you are taking into account all the police stations nationally. I think there are 1058 police stations, of which we are only responsible I think 280. So when it comes to us we can initiate it, but if you have to wait for NDPW they have got other processes in place which can take longer"*.

Although this challenge exists, participants, argued that in terms of the devolved, all planned buildings have been achieved, the challenge remains as the SAPS is reliant on NDPWI to ensure accessibility on all the non-devolved buildings. This includes the provincial need analysis which has not been submitted translating a 100% compliance.

4.4.1.6 Adaptation of heritage sites

The issues on challenges do not discredit the adaptation of the heritage side, as it remains a challenge in observing accessibility, such as the maintenance of old appearance. Most participants highlighted challenges with historical sites and buildings that have been used as historical or memorial buildings. Participants highlighted that the adaptation of such buildings requires permission from senior management. At times permission is given to only renew the interior and not the exterior of the building, to maintain the vintage appearance. While such may be a positive practise, staircases at the entrance remain inaccessible.

A diversion by participant four manifested that some cells at the police stations form part of historical buildings, which should be maintained resulting in challenges. Thus, participant ten alludes that *"there are a lot of buildings that are historical buildings which are a problem, where people with disability are still not considered".*

The ideas shared by the participants attest that there remains a challenge in the accessibility of infrastructure, which is the response to the research question.

4.4.2 Comparison of research results to other similar studies

This section compares empirical results with similar studies reviewed in Chapter two (Section 2.3). The research aim was to uncover the knowledge gap on the factors affecting the implementation of infrastructure accessibility directives in the SAPS; the researcher used this knowledge gap to suggest research strategies that were used in Chapter three. The comparison in Section 4.3 is based on previous studies that suggested the factors affecting the implementation of infrastructure accessibility.

Previous studies by Van Der Waldt (2014) exposed that policies are complied with; however, there is a need of assessing implementation to check on progress, attitudes and challenges. These also include that expert services remained a crucial aspect, to ensure continued learning, as reflected also in this study. Maart et al (2007) also pointed out challenges experienced in the implementation of policies regarding infrastructure, as inclusive of shared responsibilities and budgetary constraints. Thus, Banda-Chalwe et al (2013) noted a setback for economic freedom, due to budgetary constraints. Danso et al (2017) also pointed out the need for audio communications, markings and handrails, on designs for the visually impaired.

While the literature pointed at challenges differently, Chiwandire and Vincent (2017) concluded on the preservation of heritage as justification to modify old buildings, failure to address inaccessibility and the approaches used to implement programme. The literature pointed at similar results to this study, however, the previous study did not reveal information on the devolved and non-devolved buildings which was outstandingly a point shared by participants of this study.

4.5 Conclusion

In this chapter, we presented the research results in themes that were uncovered from the collected data. The results are under the question statements: section 4.1 the processes followed by facility management in the implementation of the accessibility infrastructure directive; and Section 4.2 the attitudes towards the accessibility infrastructure directive. Section 4.3 challenges of implementing the accessibility infrastructure directive and section 4.4 looked at the implementation progress of the accessibility infrastructure directive.

Findings revealed the setting where the implementation takes place, the content of the directive as processes followed, and the commitment by the department and management buy-ins and the communication of progress or feedback on implementation as major attributes of the study. These findings link to the key attributes of the study in Chapter two.

5 DISCUSSION OF RESEARCH FINDINGS

This chapter interprets and discusses the research findings and empirical research results as presented in Chapter four, drawing from existing literature review, past studies and the theoretical frameworks discussed in Chapter two. The discussion of the research findings is divided into four sections as per the research questions as follows. Section 5.1 discusses the processes followed by facility management in the implementation of the directive on accessibility infrastructure. Section 5.2 discusses the attitudes towards the directive on accessibility infrastructure, while section 5.3 deliberates on the challenges of implementing the directive on accessibility infrastructure. Section 5.4 seeks to discuss the implementation progress of the directive on accessibility infrastructure.

This section discusses and analyses the research results in Chapter four, by using implementation frameworks. Chapter five intends to present the analysis and interpretation of the research findings of the research questions responded to by the participants.

5.1 The processes followed by facility management in the implementation of the directive on accessibility infrastructure.

The research question assesses the processes followed by facility management in the implementation of the accessibility infrastructure directive, to ensure effective implementation. Moreover, to ensure effective implementation of the directive the South African Police Service (SAPS) identified compliance with the directive on reasonable accommodation, where accessibility remains a challenge, the use of a demand list to identify projects, Programme Project Management and Infrastructure Management Service to ensure procurement of material, execution of work, evaluation and prioritisation plan as processes.

The research also revealed that monitoring the implementation of infrastructure accessibility directives, the linkage to strategic objectives and policy consideration assists towards universal access. These include processes such as regular meetings to discuss progress, the use of Infrastructure Development Plans, Annual Project Plans and Building Standard Codes as guiding documents. Literature also suggests similar ideas as that of the research as well as opposing views. This means that the policy needs to guide the processes of the implementation. Additionally, the institutional theory,

implementation and REAIM framework are important to draw strategic views on the processes.

Past studies such as that of Hayati and Faqih, (2013) and Maart et al (2007) confirm that policy is implemented, however, limited evidence exists as inaccessibility continues. One of the underpinning results is that of policy review and the need for evaluation. The results are also pointed out by Shumba and Moodley (2018) that reviewing inclusive policies and conducting evaluations to ensure effective service delivery, is an important process towards implementation. Furthermore, following standards and norms for accessibility is important in the implementation development and planning (World Health Organisation, 2011; Salha et al, 2020). Thus, the findings on policies such as Standard Building Codes, Infrastructure Development Plan, policy consistency and reporting methods were important in this research.

Diverting literature points at ideas that were not recovered by the research such as improper implementation and lack of guiding legislative mandates results in social exclusion (Maart et al, 2007). Tudzi et al (2017) commented that poor policy implementation results in exclusion, therefore strengthening is required. Furthermore, inconsistent policy implementation has the potential of incorrect implementation (World Health Organisation, 2011). The results of the study further revealed that when policies are not followed, implementation is likely to fail. Participants also noted the need for policy consideration within the SAPS. Resource scarcity needs to be dealt with to as it leads to poor implementation of the development of universal designs, leading to the failed implementation of policies that enhances accessibility (Chiwandire & Vincent, 2017; Salha et al, 2020). The findings further suggested that budgetary constraints affect the implementation and completion of universally accessible buildings.

According to the implementation theory, the application of organisational theory to address governmental programs and problems during implementation is important as it guides the intervention needed (Montjoy & O'Toole, 1979). The outcomes are therefore shared at all levels of the organisation (Bullock et al, 2021). While Hill (1997) points to the top-down and bottom-up challenges and implementation structures, the research narrated the alignment of the SAPS strategic objectives to ensure that all necessary budget is allocated for proper implementation. The research findings manifested an understanding of the process as it guides the need for planning, project planning and

management. Sabatier and Mazmanian (1978) and Salha et al (2020) also adopt the idea of understanding policy implementation process as a whole for planning.

Jackson (2001) advocates for the understanding of institutional designs such as interaction, rules, and strategic behaviour that assist towards the administrative issues of implementation. The research also pointed to the need for evaluation to understand progress and problems faced by implementers. The above idea agreed by May (2013) that the framework further stresses the evaluation of and implementation of an intervention to understand policymaker's problems. Despite the process layout, the framework acknowledges the presence of problems and requires mechanisms to address them in public administration (Hill, 1997). The results also pointed out by the research suggest that despite following all public administration processes, inaccessibility remains a challenge. The research also suggested the allocation of budget and training as part of addressing this deficiency.

According to the REAIM theory, the planning and evaluation of the implementation of interventions results in change (D'Lima et al, 2022; Lee et al, 2017; Sweet et al (2014)). The participants also pointed out that following the process of evaluating the implementation has the potential of resulting in changed perceptions by the SAPS.

Thus the review of policies to have clear goals was also pointed out by the research, as agreed by Lee et al (2017) that evaluation of programs, procedures and policies, context, practicality and having evidence is vital in implementation. Iteratively, the REAIM theory also guides the adaptations to interventions and implementation strategies and processes (D'Lima et al, 2022). Thus, receiving the project plans and demand list as noted by participants is important in understanding the processes followed in implementation.

According to the institutional theory, policy redefinition of the organisational mission have the potential of guiding domestic policies for public administration (Tolbert & Zucker, 1995; Thoenig, 2003). The participants uncovered that having an internal National Instruction as part of policy consideration is a vital step to fulfilling the processes. Thus the institutional theory also draws from the day-to-day work duties and maintains the conformity to organisational rules and actual work activities as important (Meyer & Rowan, 1977). The mandate is also important as it draws on the goals and actors of active agents to establish the meanings of those processes (Hinings & Tulbert, 2008). This type of thinking validates the ideas held by participants about the processes

followed by the SAPS in the implementation of the infrastructure accessibility directive such as being guided by policy, following the SAPS mandate, taking into consideration the strategic objectives and conducting daily inspections.

5.2 The attitudes towards the directive on accessibility infrastructure

The question on the attitude of facility management towards accessibility infrastructure directive within SAPS identified SAPS as having a positive attitude due to the number of completed projects, the affirmation of human rights aspects, the reasonable aspects and feedback receipts. While this is, the research uncovered the need for training to ensure that the directive is known by everyone. Furthermore, research pointed at SAPS not considering the rights of persons with disability as inaccessibility still existed.

In addition, the research revealed the working strategies in the current infrastructure accessibility, management buy-in to determine the level of involvement, and change of the infrastructure to be able to respond to the quests. The participants highlighted that the status proves a work in progress that requires the inclusion of accessibility in plans and strategic needs. Management buy-in was named important as reports are discussed during core meetings and implementation instructions take the form of the top-down approach. The highlight also noted the need for the generation of resource allocation by the involvement management. This means that the management attitudes and the implementation of directives require resources that are to be advocated for by the management. Additionally, the implementation, institutional theory, and COM-B framework serve the importance of aligning the attitudes of the implementation to the theoretical framework.

Studies by Mthethwa (2012) align with the findings of the research as the top-down is seen as an approach that emphasises the steps followed by implementers such as policymakers and managers to improve performance. The unremoved barriers have the potential of resulting in negative attitudes (World Health Organisation, 2011). The research revealed that implementation success is dependent on management buy-in that is the attitude of giving directions and ensuring the availability of resources to improve performance.

Additionally, Chiwandire and Vincent (2017) note the issues associated with inappropriate approaches and instructions as leading to inaccessibility failures and

approaches used for programmes. This includes issues of human rights that are addressed in management settings as narrated in this research. The findings of the research also pointed to understanding the implementation as a human rights mandate. Such requires the knowledge, attitudes, perceptions, and experiences of employers on issues of disabilities (Maja et al, 2011). Furthermore, McKinney and Amuson (2020) narrated that negative emotions impact the experiences and participation of people with disabilities within the built environment. This is because, persons with a disability require reasonable accommodation as found by the research, as well as the need to ensure learning, training and awareness, to reshape attitudes. Shumba and Moodley (2018) also pointed at a similar idea about disability awareness that can be through capacity building, improving supply chain management, monitoring and evaluation of programmes. The research further pointed to advancing the supply of resources towards universal design by the SAPS and ensuring that there is cohort training of plumbers and all the trades.

However, projects that are managed single-sided are likely to result in incorrect implementation of policies and administration of accessibility (Murwira & Bekker (2017). McKinney and Amuson (2020) identify the loss of independence and control which results due to poor access. Chiwandire and Vincent (2017) also pointed out to the narratives held by society which lead to a negative attitude. These studies highlight the issues pointed out by the participants of the research, thus, training and awareness were pointed as important to address issues of universal access. Mthethwa (2012) also identifies that although the top-down approach is also known as the rational or system model that emphasises policy adherence to implementation and improving performance, the bottom-up approach, focuses on implementers to achieve concerns. This idea was not uncovered by the current research.

According to the implementation theory, what has been established based on the government's actions and intentions is vital (O'Toole, 2001). This is inclusive of the role-players, actions, and the cause-effect relationship and outcomes. Hill (1997) points out the process where changes are made at the top (top-down) and shared with the lower level (bottom-up) through institutional changes. Thus management is required to ensure the proper implementation for the whole process (May, 2013). The research revealed similar ideas that are characterised by approaches to the actions or power distribution (top-down) as associated with attitudes. This also includes the

implementation levels as mentioned that training is required to ensure that policy is conversant to all.

The decision made to fulfil policy and public regulations that guide the expected execution actions identifies problems, and objectives and resolves challenges (Montjoy & O'Toole, 1979; Sabatier & Mazmanian, 1978). Thus the study also pointed to the concept of management buy-in as having an advantage to budget allocation, to complete all planned projects on the Infrastructure Development Plan and demand list.

As the research findings identified commitment to universal access and feedback on projects, the COM-B theory pointed out the capability, opportunity, and motivation as change management influences (Michie et al, 2011; De Leo et al, 2021). However, problems of power result, which leads to interest-driven behaviour, setting organisational institutionalism, historical and contexts of an institutional theory (Mohamed, 2017). In addition to this, the resource-dependency approach is vital as it relies on the institutional process (Berthod, 2016).

These institutional processes were suggested by the research, as participants believed that they are guided by the management on all implementation lists such as the Programme Project Management, hence, the understanding of the current infrastructure accessibility directive of the SAPS requires buy-ins and provision of feedback from the top management to the bottom level of implementation. The study revealed factors associated with SAPS attitudes. Although the reviewed literature showed little evidence on reporting platforms inclusive of the guiding tool as highlighted by the research such as Infrastructure Development Plan and Annual Project Plans as part of managerial documents.

5.3 The implementation progress on the directive on accessibility infrastructure.

The research question on the implementation progress of the accessibility infrastructure directive in SAPS identified findings on partial and slow progress on implementation, the use of demand plans, the saturation in the roll-out of the policy in provinces, and procurement challenges. In addition to the above, improvement in performance and communication of feedback on infrastructure performance information was also identified as a highlight that the SAPS is moving towards universal access.

Therefore, meetings are conducted to keep updates on progress, and reports and ensure skilled personnel and budget needs. The findings also highlighted project management which requires the projection of timeframes and the need for Standard Operating Procedures. In terms of the communication of feedback, meetings, reports, awareness, and dashboards were identified as important aspects in the provision of progress. This also includes the Nodal Point that is guided by the Section Infrastructure Management Services.

This section also highlights the literature that suggested similar ideas as that of the research as well as opposing views. Additionally, the implementation theory, COM-B, and REAIM framework are important to draw calculated views on the progress made in the implementation.

Past studies by Van Der Waldt (2014) prove that reporting on progress is important as it communicates the progress made in policy. Roussos and Fawcett (2000) also point out that ongoing documentation of feedback redirects implementation. These were also the research findings as the research suggested that communicating findings gives direction on working strategies. Making buildings universal, is ensured by the availability of building standards (World Health Organisation, 2011). This further requires the tracking of progress and plans for access (Salha et al, 2020). The research revealed that having provincial visits to ensure proper implementation guided positively on the needs of the projects and development phases. This also includes the inspection and compliance visits as well as the communication of progress every week to benchmark workable solutions. The results also proved that commanders and project coordinators have liaisons in the provinces who provide both written and photographed feedback.

However, Murwira and Bekker (2017) noted that by engaging in preliminary evaluations before beginning a project inaccessibility can be addressed. The research findings suggested that conducting impact evaluations can provide a progress overview of the impact of the implementation of the directives. Additionally, Chiwandire and Vincent (2017) also pointed out the absence of awareness of disability results, which was narrated by participants that awareness is made through the Nodal Point and published on internal email users.

According to Mthethwa (2012), the provision of feedback on implementation progress is vital for underpinning working approaches and ensuring that stakeholder involvement; planning and resource mobilisation; operations, and feedback on progress

and results are achieved. These views of the implementation theory are similar to those shared by participants that communicating feedback on progress assisted with the projection of resources, redrafting of project plans, needed resources, and the need for developing guidelines.

The REAIM framework also suggests the use of tracking outcomes at planning and evaluation, on the working reporting progress and sharing feedback as an evaluation tool (D'Lima et al, 2022). Nhim et al (2019) also encourage regular reporting on results, and information, reviewing of working methods, and advancing management. These are also similar to the findings of the study, as participants highlighted the platforms where progress is shared, such as core meetings and through the reports of the SAPS (quarterly and annually). This was also publishing to all email users, which was disputed by most participants.

According to the COM-B, observing the replication of components (capabilities, opportunities, motivation, and behaviour) as causal processes, not only does it regulate behaviour but it advances progress through feedback, monitoring, and reinforcement (Mitchie et al, 2013; Barker et al, 2016). Thus, following the theory serves as a systematic pathway for moving from behavioural analysis to identifying working interventions and policies that achieve change (Mayne, 2016). Participants of the research study also narrated that during the meetings held about progress, demand lists are distributed, and benchmarking on working solutions is also discussed.

As attested by Richardson et al (2019) that identifying components guides the modification of strategies. It also has the potential of influencing effective interventions and change (Coupe et al, 2021). Using evidence-based interventions also determines progress and change (De Leo et al 2021). This was also revealed by the findings that the SAPS documents its progress using the Annual Performance Reports, awareness, and the use of a dashboard as guided by the existing operating procedures. The research also pointed at the progress in implementing the directive as moving towards universal access. However, the literature had limited evidence on project management which requires the projection of timeframes and the use of an internal Standard Operating Procedure.

5.4 The challenges of implementing the directive on accessibility infrastructure.

The research question on the challenges faced in the implementation of the SAPS accessibility infrastructure directive identified the challenges encountered. The challenges were identified as budgetary constraints to facilitate the implementation, unregistered suppliers to the Central Supplier Database, training needs, and misalignment of plans. In addition, the capacity required, expert services, shared responsibilities with other departments, devolved and non-devolved buildings, and adaptation of heritage sites, were identified to respond to the quest.

Largely, the research findings pointed to the need to have enough specialised services which can contribute towards the implementation, training, and ensure the understanding of the directive. Further to this, issues of custodianship were mentioned as the National Department of Public Works and Infrastructure (NDPWI) is the sole implementer of state buildings' universal access, and as devolved buildings which are owned by SAPS receive enough attention as compared to non-devolved. Concluding to the challenges, are the heritage buildings which are maintained as vintage with older dilapidating appearance that impacts adaptation.

This section also highlights the literature that suggested similar ideas as that of the research as well as opposing views. Moreover, the implementation theory, institutional and COM-B framework, are important to draw a considerable conclusion on the challenges of implementing the accessibility directive of the SAPS.

Past studies by Chiwandire and Vincent (2017) indicated the need for awareness of disability to ensure the recognition of diversity. The findings of the research suggested that training ensures that there is awareness and understanding of universal design. Maintenance of new and traditional infrastructures was suggested by Wang et al, (2019, as a major problem in achieving universal access. The preservation of heritage was noted as a justification to modify old buildings, which leads to failure to address inaccessibility (Chiwandire & Vincent, 2016). The findings of the study also pointed out that old buildings remain a challenge as vintage appearance ought to be maintained. The advancing of the building is only on the outside rendering the entrance and inside inaccessible to wheelchair users.

Compliance with policies was narrated as positively followed by Van Der Waldt (2014), however, inaccessibility remained. This is an important aspect to address the need for expert services which was pointed out as a challenge in the SAPS, as the current plumbers and artisans do not have an understanding of architecture. The additional capacity was pointed out as positively adding to the rolling out of all non-devolved buildings. Budget constraints appeared as a finding in the study that impacts the rolling-out of universal designs, thus, management buy-in was suggested as a working solution. Maart et al (2007) also pointed out challenges in the implementation of policies including shared responsibilities and budgetary constraints. This is also an economic setback toward the freedom of persons with physical disabilities as suggested by Banda-Chalwe et al (2013). This also links to the findings of the study on shared responsibilities for non-devolved buildings with the NDPWI. The study revealed that non-devolved are the responsibility of the NDPWI as a custodian and adaptation takes long as SAPS have more than 1158 police stations.

However, Murwira and Bekker (2017) and Salha et al (2020) noted the misalignment in financial allocation and the importance of preserving old looks as a result of financial constraints. Less participation of persons with disabilities in the environment is also a result of an inaccessible built environment (Baris & Ulsu, 2009). These aspects held different ideas from those of the participants of the study concerning the implementation of infrastructure directives. Additionally, architects, construction engineers, and implementers have limited information on disability policy and measures to achieve accessibility (Salha et al, 2020). Thus, the findings of the research suggest training and capacity in terms of experts to ensure that there is enough understanding and maintenance of all the 1158 police stations including the number of other buildings that were undisclosed.

According to the implementation theory, the identification of problems in policies is crucial (Montjoy & O'Toole, 1979). The findings of the research identified the problems encountered when implementing the infrastructure accessibility directive. The central issues as highlighted by Hill (1997) are the top-down and bottom-up challenges and implementation structures, denote the ideas held by O'Toole (2000) that actions of implementation failures are due to institutional boundaries and challenges experienced by management and the public purpose. The findings of the research noted the challenges with shared responsibilities which results in delayed universal designs. Participants narrated that issues of clear communication and a memorandum of

understanding can resolve the challenge at the management level, whereby agreements can be reached between the custodian department and the SAPS. This means that sufficient budget allocation should reach all channels.

Mitchie et al (2013) about the COM-B state that collaborative work and identification of shortcomings towards achieving change contribute to implementation. In turn, study identified the collaborative work as shared responsibility which is vital for the responsibilities of NDPWI and the SAPS towards universal designs.

According to the institutional theory, organisational problems are addressed by providing social and economic outcomes to markets, polities, and societies and resource allocation (Thoenig, 2003; Tolbert & Zucker, 1995; Berthod, 2016). Thus, the findings of the research also suggest budgetary constraints that should be resolved through the allocation of funds. Hinings and Tolbert (2008) also identify resource problems that determine constraints on results in adaptations and complete patterns of institutionalisation. Additionally, issues of problems of power are also a result of interest-driven behaviour, setting organisational institutionalism and social contexts (Mohamed, 2017). The research findings also narrated the importance of service from the custodian to maintain buildings as well as capacity which requires resources such as architects as driven by the management involvement and buy-ins.

The results of the study pointed to the challenges in implementation. However, the literature did not uncover issues of devolved and non-devolved as well as the issues with unregistered suppliers on the CSD which was the case in the research, towards drawing out the challenges as contributing to the factors affecting the implementing the SAPS infrastructure accessibility directive. The absence points to the gap that is realised in implementation theory.

In conclusion, this chapter discussed the findings of the research linking them to research results in themes that were uncovered from the collected data. The discussion of findings are under the question statements discussed in chapter one. The findings revealed the attitude held within the setting of implementation, the content of the directive, the CSC delays, management buy-ins, and involvement of the NDPWI and the communication of progress through quarterly performance dashboard as well as the discussion the theories the implementation, institutional, COM-B and REAIM. These findings link to the research questions, theories in Chapter two and the findings in Chapter four.

6 SUMMARY, CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

This chapter reviews the research based on four objectives, discussed in section 6.1 summarising the research report, section 6.2 the conclusion, section 6.3 discussing the limitations of the research report, and section 6.4 suggesting recommendations for policy fundamentals and future research studies. Specifically, section 6.1 summarises the key aspects based on Chapter one the research conceptualisation, Chapter two the conceptual framework, Chapter three the research methodologies, Chapter four the presentation of research results, and Chapter five the discussion of research findings. Furthermore, the main purpose of this chapter is to respond to the research questions and the research problem as illustrated in Figure 7.

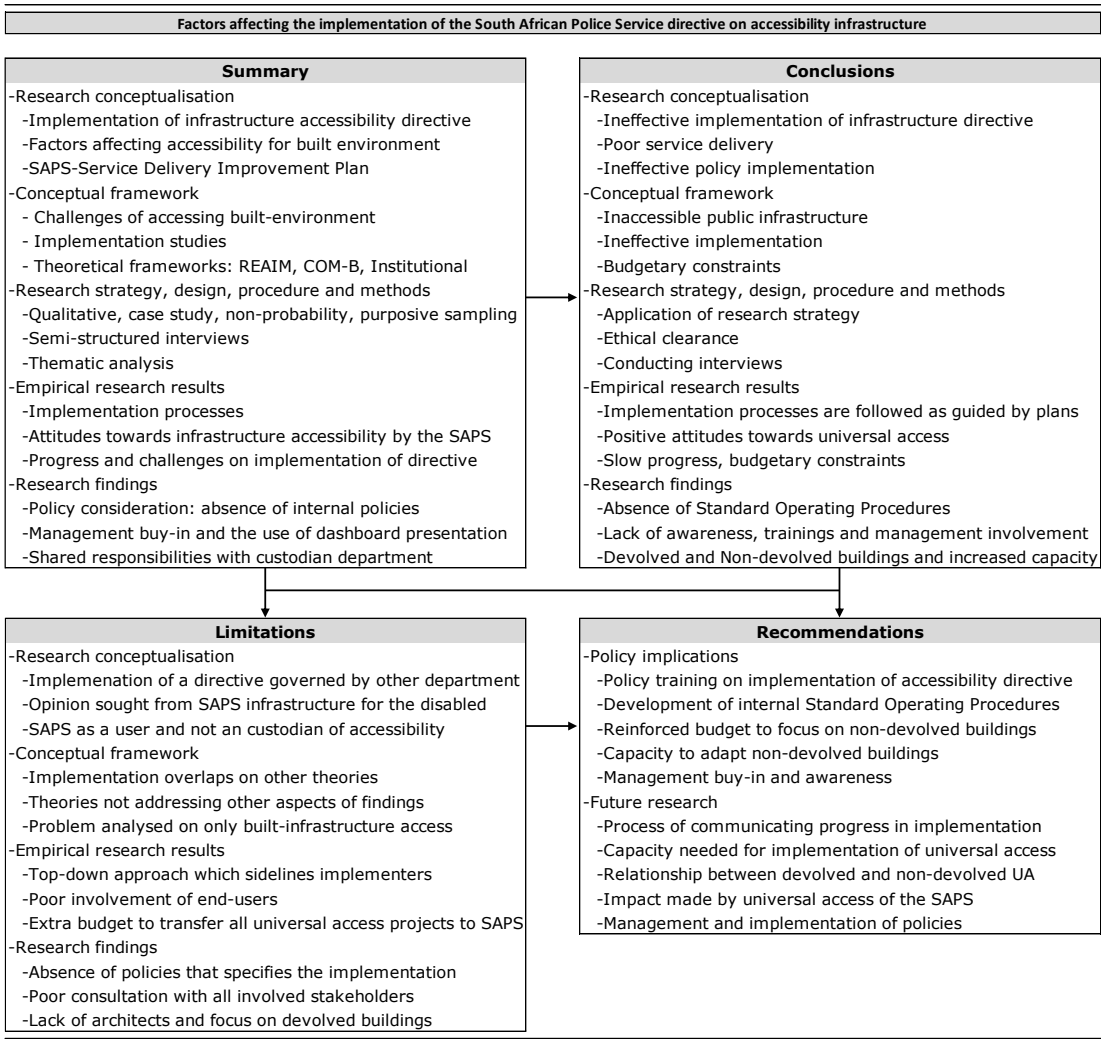


Figure 7: The illustration of the summary, conclusion, limitations, and recommendation for the study

6.1 Summary

The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) (2006) as a global policy, provides for infrastructure directives in the management of accessibility in both the public and private sectors. This international policy is implemented within the South African context through the White Paper on Rights of Persons with Disabilities (2016) and the National Strategic Framework on Universal Design and Access (2021) aimed at promoting equality, elimination of discrimination, and ensuring reasonable accommodation. This framework is adopted by the Department of Women, Youth, and Persons and implemented by all government institutions, including the SAPS.

As part of the implementation of universal aspects, the South African Police Service (SAPS) Strategic Plan 2020-2024, committed to advancing the internal environment and operational capabilities by implementing an Integrated Resource Strategy, this is also inclusive of the SDIP 2022-23, which commits to infrastructure access in all police stations. However, the implementation of universal access has resulted in challenges in the completion of planned projects and universal access because of delays from service providers, ESKOM, and construction groups in terms of the SAPS Infrastructure Development Programme. Kadir and Jamaludin (2012) cemented concerns about delays and challenges to accessing the public built environment as a challenge in physical disability and the architectural field. Additionally, universal access is vital to guide strategies for implementing usable and adaptable designs (Sholanke, Adeboye, & Alagbe, 2019).

Therefore, the purpose of the research study is to assess the factors affecting the implementation of the SAPS directive on accessibility infrastructure. To establish the factors, the study focuses on universal design for the physically disabled and it does not focus on all the implementation departments, but rather the SAPS. Equally, the study is limited to the implementation of a policy.

The study interrogated the following questions: 1.2.3.1 what are the processes in place in the SAPS to ensure effective implementation of accessibility infrastructure directive? 1.2.3.2 What is the attitude of facility management towards accessibility infrastructure directives within SAPS? 1.2.3.3 What is the implementation progress on the accessibility infrastructure directive in SAPS? 1.2.3.4 What are the challenges faced in the

implementation of the SAPS accessibility infrastructure directive? To respond to this research question, the study does not focus on the SAPS department as a whole, but rather, the Supply Chain Management, Section: Facility Management.

Chapter 2, interrogated the literature to develop a conceptual framework in Section 2.7. The physical context undertaken in this study guided the study on a research problem analysis with comprehensive challenges on the built environment, symptoms, root causes, and consequences. Moreover, the study reviewed the empirical past and current studies in Section 2.3 that aim to understand the challenges in the built environment and universal access. The section exposed the knowledge gap in this field of study the variables, research methodologies, and the theoretical frameworks that channelled Chapters 3, 4, and 5 results. The study was also located in the field of implementation studies and identified frameworks on implementation, institutional, REAIM, and COM-B theories.

Chapter 3 provided the methodologies used to assess the factors affecting the implementation of the SAPS directive on accessibility infrastructure. It deliberates on the procedures and methods used to collect data, inclusive of research strengths and weaknesses. A qualitative research strategy was employed with a case study, non-probability purposive sampling. These were employed through semi-structured interviews, where twelve participants were identified to respond to the research, ranging from Brigadier, Colonel, Lieutenant Colonel, Captain, and Warrant Officer.

Chapter 4 presents the research results and identified the influences on implementation based on the processes followed, the attitude held by the implementers, the progress made and the challenges encountered during the implementation of the SAPS directive on accessibility directive. The results highlighted the processes of implementation as compliance, reasonable accommodation, prioritised budget, and challenges on access. Furthermore, the monitoring of the implementation of infrastructure accessibility directives, linkages to strategic objectives, policy consideration, and concept of management buy-in, project management, and communication of feedback were identified as results of the research. The challenges were identified as capacity, expert services, shared responsibilities, devolved and non-devolved and heritage buildings.

Chapter 5 uses the implementation, institutional, REAIM, and COM-B theories, the research findings reveal a few main lessons: firstly, policy consideration is very important to follow in the implementation of the directive. Secondly, the absence of

internal policies such as the Standard Operating Procedures and National Instructions on implementing the directive. Thirdly, the forging of management buy-in resulting in the factors of implementation and, fourthly, the use of dashboard presentation to showcase performance information on universal access. Finally, the result identified issues of shared responsibilities with the custodian department of the NDPWI responsible for non-devolved buildings.

6.2 Conclusions

South Africa is a signatory to the UNCRPD (2006) Article 09 "accessibility" which requires the state to ensure access to facilities and the physical environment. As in the SAPS SDIP (2022/23) police accessibility and infrastructure, access remains a priority to ensure access to police services such as ramps, rails, parking, and ablution facilities for persons with disabilities. By obtaining data from twelve participants who occupy management and supervisory positions, the research used a thematic analysis to expose factors affecting the implementation of the SAPS directives on infrastructure accessibility.

The gaps suggest that the SAPS members that were part of the interview experienced challenges, as they identified issues about the progress, attitudes, progress, and challenges. These aspects resulted in the implementation challenge and the delivery of service for persons with disability as a requirement by the UNCRPD (2006) as aligned in South Africa through the White Paper on Rights of Persons with Disabilities (2016) and the National Strategic Framework on Universal Design and Access (2021).

Concerning the progress, implementation failures were identified as the compliance of the directive on reasonable accommodation, which is inaccessible, identifying projects through demand list, Programme Project Management and Infrastructure Management Service for procurement of material, execution, evaluation, and the prioritisation plan on accessibility projects. The factors on progress highlighted the implementation based on the context of the SAPS. The factors influencing the process include that policy guidelines should be followed to ensure that there is access. This also concerns the use of Standard Building Codes. Furthermore, the SAPS uses project management and has a section responsible for the implementation of the directive. Thus, project plans are also vital for the implementation process.

The contribution to this research as a concern was also understood from the policy consideration as suggested by the research. The research concluded on the importance of management buy-in as contributing towards policy consideration, budgetary allocation, and ensuring that all buildings are adapted. As mentioned in Hayati and Faqih, (2013) and Maart et al (2007) policy is well implemented, although, inaccessibility remains. Thus, proper policy implementation such as the presence of a Standard Operating Procedure and guidelines for implementation, influences the clear standards on buildings and codes to be followed and the need for evaluating policy during the implementation. The research also makes a theoretical contribution to the institutional theory, implementation, and REAIM framework which is the application of the top-down and implementation approach, the governance of resources, and the planning and evaluation of implementation (D'Lima et al, 2022; Lee et al, 2017).

Another significant finding based on the attitude was the need for management buy-in and training on aspects of disability. The SAPS considers the human rights aspects of accessibility and the exceptional completion of projects reveals that the attitude held by the SAPS is positive. Although, management buy-in exists as issues of disability do not always receive preference. The fact is based on the budget allocation as well as the need for training on issues of disability management and universal access as suggested by the research. While training appeared as an issue, the research revealed that through management buy-in, the notions of Top-Down implementation could improve decision-making such as the obtaining of approval for adaptations from NDPWI to be made without a longer waiting period. This is because the SAPS waits longer to receive approval on building adaptations from the custodian department. Thus, resource allocation was also linked to management commitment.

The institutional theory also attests that problems of power, result in the lack of interest-driven behaviour (Mohamed, 2017). Thus, the COM-B theory confirms the need for commitment to address the attitude of management. The identified issues contribute to the body of knowledge as it addresses the commitment issues leading to adequate training and resource allocation.

The results also suggested the use of a dashboard to port on performance information on infrastructure projects. The dashboard presentation which is absent results in challenges to ensure the transparency of information from the Nodal Point office.

In conclusion, the major challenge identified by the research concerning infrastructure for the physically disabled is the sharing of responsibilities with other departments, which results from the challenges with the devolved and non-devolved buildings. The research revealed that the devolved buildings (280) are under SAPS whereas, the remaining are non-devolved under the NDPWI. Suggestions were around the transferring of all buildings to be devolved to ensure that there is proper implementation of universal access.

Furthermore, the research revealed challenges not limited to the unregistered suppliers on the CSD, capacity required, expert services, and adaptation of heritage sites, which continued to contribute towards the lack of implementation of the SAPS directive of infrastructure accessibility. As highlighted by Weiner (2009) change management suggests that assessing an organisations policy readiness is important. In public management, this means that organisations should develop policies, ensure the involvement of management and stakeholders, set clear targets, avail budget and ensure proper communication (Dzirimbi, 2008; Carr Copeland & Waxler, 1995). These aspects were important in the research.

6.3 Limitations

This thesis extended the knowledge of the factors affecting the implementation of the SAPS directive on accessibility infrastructure. Although, there are several limitations discussed in this section. These limitations direct that the results of the study could have improved the understanding of the factors affecting the implementation of the SAPS directive on accessibility infrastructure. First, the research study used a qualitative strategy and case study of the SAPS which means that the results of the study cannot be generalised. The case study applied a purposive sampling with the section Facility Management, responsible for the implementation of the directive. The research noted that some participants will not provide credible information due to their direct involvement in the implementation. These limitations were addressed by probing the research questions.

Second, the researcher was also unable to obtain more information from interviewing executive management because of time constraints, hence, only one director was interviewed in the research. Additionally, the researcher was not known to the participants, which might have presented limitations to the openness of the participants.

Third, the study revealed the factors as influenced by the policy implementation, although, there was little evidence of an existing internal control, except for the use of project plan within Programme Project Management and infrastructure management services. Several factors were also identified as challenges in the implementation of the directive through the use of the implementation theory, COM-B, REAIM, and institutional theory. Due to limited time and scope, data collection could not be expanded, the data was confined to the completion of a master's degree.

Fourth, the use of thematic analysis to capture the correct information provided rich information. However, due to the organisational limitations on granting permission to content documents, content analysis from the archives would have reflected on information concerning published performance.

Lastly, the research applied the COM-B and REAIM theories as part of the four theories towards research. These theories are largely applied in public health-related interventions and evaluations, although they can be applied to any field. These theories have not been applied in the implementation of a disability directive study. Hence, linking to studies on challenges or factors that affect implementation could only be limited to the available data applicability.

6.4 Recommendations

The recommendations point out the areas that could have improved our understanding of the factors affecting the implementation of the SAPS directive on accessibility infrastructure. These policy implications and future research are presented as follows: first, the research revealed the importance of an internal policy directive through the development of a National Instruction and a Standard Operating Procedure to ensure implementation. Assessing the current internal instrument should assist in achieving the agenda. This also includes checking on the need for the policy guidelines. Sabatier and Mazmanian (1978) and Salha et al (2020) highlight the importance of understanding policy implementation processes for planning. Furthermore, the SAPS should amend and enhance the use and implementation of policy with proper training to ensure understanding by implementers.

Past studies by Mthethwa (2012) pointed at the top-down approach as a rational or system model to adhere to implementation and improve performance. Similarly, the research pointed at the implementation of the management buy-in, a top-down

approach, which has the potential in influencing performance and the attitude inclusive of budget allocation within the SAPS. Despite the development of Standard Operating Procedures; Employee Health and Wellness, needs to sensitise disability management to ensure accessibility audits. Additionally, the budget should be ring-fenced to address the non-devolved buildings which are under the National Department of Public Works and Infrastructure (NDPWI).

Studies by Van Der Waldt (2014) point out that reporting and communicating on progress is important for policy progress. Similarly, findings narrated the forms used for reporting such as core meetings, quarterly and annual reports, and publishing on email. This form of awareness needs to be retained. Therefore, the research recommends the use of dashboard information to showcase the performance and progress made in the implementation of the infrastructure directives. This also includes conducting an evaluation study to evaluate the progress that has been made on both devolved and non-devolved.

Furthermore, the study noted the challenges encountered in the implementation of the directive. Thus, the research concluded that the SAPS should address these challenges based on the capacity required and the shared responsibilities by the NDPWI on devolved and non-devolved buildings. The research recommends that the management buy-in can contribute to addressing this issue by ensuring that communication of the transfer of all buildings attached to the SAPS to the SAPS, as compared to the separation of responsibilities, whereby the devolved is maintained by the SAPS and the non-devolved by the NDPWI. This is also inclusive of the budget allocated to universal designs and capacity in terms of expert services to ensure that both the devolved and non-devolved are universally accessible. These aspects also take into account the alignment of the SAPS strategic plans with the issues of universal access.

The policy implications above suggest a few interventions that should be taken into consideration to address the limitations. First, the research recommends that future studies should focus on the process of communicating progress in the implementation of a directive, to be able to explain how the process follows as well as the drivers of the process. This is based on the assumption that management buy-in can lead the process.

Second, the research recommends that future studies should explore the capacity needed for the implementation of universal access. The research findings identified the

importance of having enough expertise in trade such as plumbing, artisans, and electricians to expedite the process of universal access.

Third, future research should also focus on the relationship between devolved and non-devolved universal access. During data collection, participants noted the delay in the universal access of non-devolved as these buildings are managed by the NDPWI. The research is a target of any public or government department. Although the research expressed limited information concerning public buildings like shopping malls, research focused on the aspects in future studies is paramount.

Fourth, future research to explore the impact made by universal access to the SAPS. This research can be an impact evaluation as a field of study. The research should also employ the REAIM framework to assess the impact of universal access within a department. The research will also guide the development of a policy, National Instruction, or Standard Operating Procedures to ensure the correct use of policy implementation by an end-user department as compared to the custodian department.

Lastly, the study recommends future research to look at the change management style in the implementation of public policies. As By (2005) suggest that assessing change management may assist in identifying progress delays. The research should focus on the implementation framework with a focus on the top-down, bottom-up theories. The assumptions here are based on the adaption of change management in the new public management to advocate for change leadership. The COM-B theory can be employed to assess the commitment, opportunities, motivation, and behaviour of management in policy implementation.

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APPENDICES

Appendix 1: Data collection instrument

REQUEST LETTER TO RESPONDENTS AND CONSENT FORM

Dear Sir/Madam

Invitation to be a participant in a research project: Factors affecting the implementation of the South African Police Service directive on accessibility infrastructure.

Mr Mduduzi Simanga Mahlalela is an employee in the South African Police Service stationed at the National Office Component Strategic Management under Monitoring, Reporting and Evaluations. Apart from the current responsibilities, he is also a registered and qualified Social Worker.

He is currently a student at University of the Witwatersrand School of Governance, where he is pursuing a Masters in Management: Monitoring and Evaluation. The researcher will require your assistance in providing information that will enable him to complete his thesis on assessing the factors affecting the implementation of the South African Police Service directive on infrastructure accessibility.

All participants will be briefed accordingly prior to the research being conducted on what the research seeks to achieve, all ambiguity that may arise will be addressed. Thereafter, a consent form will be distributed to all respondents; the consent form includes a section where assurance is given that all information will be treated in the utmost confidentiality and also requests permission from respondents to use recording devices.

I can assure you that your name will not be shared with anyone who is not part of the research process. An appendix has been included, which profiles the researcher and steps taken to ensure that the participants are protected during the implementation of the research project.

Kind Regards

Mduduzi Simanga Mahlalela (mduduzisimanga@gmail.com/ 072 374 6877)

Appendix 1.1: Consent Form

Research Title: Factors affecting the implementation of the South African Police Service directive on accessibility infrastructure

Name of Researcher: Mduduzi Simanga Mahlalela (1108473)

I_____ consent to participate in this research study. The research has been explained to me and I understand what my participation will involve. I agree to the following:
(Please circle the relevant options below)

I agree that my participation will remain anonymous.	**YES**	**NO**
I agree that the researcher may use anonymous quotes in his research report.	**YES**	**NO**
I agree that the interview may be audio recorded.	**YES**	**NO**

_____ Signature
_____ Name of participant
_____ Date

_____ Signature
_____ Name of researcher
_____ Date

Appendix 2: Interview schedule

Semi-structured Interview Guide

Introduction

Good morning/ day. My name is Mduduzi Simanga Mahlalela, I work for the South African Police Service: National Office, Strategic Management (Monitoring, Reporting and Evaluation). Let me take this opportunity to thank you for taking time out of your busy schedules to be present today. My role today is to facilitate the Semi-Structured interviews you have been appointed to be part of.

Objective of the research

Firstly, I would like to introduce the purpose and the objectives of this study to you. The purpose of this study is to assess factors affecting the implementation of the South African Police Service directive on infrastructure accessibility. Secondly, this interview seeks to gain your understanding on the mentioned research topic. The study aims at understanding fully the challenges and progress made on infrastructure accessibility directive to determine the attitude of facility management on the available minimum standards, examine the processes followed; and the processes and role of facility management to policy compliance on accessibility. The research will also evaluate the progress made in relation to victim-friendly environments as well as accessibility.

Signing of consent form

All the information gathered today will be treated with confidentiality. If at any point during the interview you do not wish to continue taking part in the discussion, please note that you will be at liberty not to respond to any questions. Furthermore, the information gathered today will contribute towards the fulfilment of the requirements for the degree Master of Management in Governance (Public and Development Sector Monitoring and Evaluation) that I am currently pursuing with the WITS School of Governance.

I will greatly appreciate it if you would grant permission for the session to be recorded to be able to have an accurate record of the discussion. This will augment the manual notes taken, because, it will not be possible to capture every word manually and this will also allow me to make reference to any information that I may have missed. Please note that during the interview, I will probe on your responses and follow-up to gain more understanding of the subject. Be assured that all the recordings and notes taken will be safely and securely stored. May you please acknowledge and sign the consent form, before we proceed with the interviews.

Section A: Demographics

Background information on respondent

1. How many years have you been in the department?

_____

2. What position do you hold in the department and what are your duties?

_____

3. How many years have you been in this position?

_____

Section B

What are the processes in place in the SAPS to ensure effective implementation of accessibility infrastructure directive?

4. What is your view of infrastructure accessibility in the department?

_____

5. Please explain what does infrastructure accessibility means to you?

_____

6. How do you implement infrastructure accessibility on your day-to-day activities?

_____

7. How do you monitor infrastructure accessibility progress in the department?

_____

8. How do you align infrastructure accessibility to the departmental strategic objectives?

_____

What is the attitude of facility management towards accessibility infrastructure directive within SAPS?

9. What are your views and attitude to disability mandate?

_____

10. What are your training needs on accessibility and disability management?

_____

11. Do you think the currently infrastructure accessibility is appropriate in the department and is it operational? If yes/no why?

_____

What is the implementation progress on the accessibility infrastructure directive in SAPS?

12. How do you think the current infrastructure accessibility can improve in the department?

13. How is the progress of accessibility to infrastructure in the department?

14. How do you think management understanding of disability can assist towards achieving infrastructure accessibility?

15. How does your department disseminate performance information on infrastructure accessibility?

What are the challenges faced in the implementation of the SAPS accessibility infrastructure directive?

16. What challenges do you encounter when implementing infrastructure accessibility directives?

17. What capacity do you think is required to implement the infrastructure accessibility directives of the department?

18. How best do you think the department can improve on infrastructure accessibility performance?

Your experiences have been very insightful and interesting. Let me take this opportunity to thank you for taking part in this research interview.

Thank you.

Appendix 2.1: Populated interview schedule

Researcher: Good morning, I am Mduduzi Mahlalela, the research student. As explained earlier, this is the consent form, about your confidential participation which is part of the research administration, please read and sign it. Before we start, I would like to explain that this interview have two sections, I will start with Section A and then move to Section B.

Participant: Good morning, we may start the interview.

Researcher: As part of your background information, could you please share with me, how many years of experience do you have in the department?

Participant: I have 31 years

Researcher: Please tell me, what is your position in the department and what are your duties?

Participant: I am a Commander.

Researcher: How many years have you been in this position?

Participant: It has been six years

Section B

Researcher: As part of our Section B, I would like to understand the processes that are in place in the SAPS to ensure effective implementation of accessibility infrastructure directive. Could you please share, your views of infrastructure accessibility in the department?

Participant: The SAPS is well aware of the legislation and try to comply with this by means of allocation of funding and the prioritisation of facilities without accessibility. Currently, all new buildings complies. Additionally, the SAPS is a user-department

Researcher: Please explain to me, what infrastructure accessibility means to you?

Participant: All buildings needs to be accessible to all people of South Africa, all communities and then also people with disabilities within the communities should receive the same service.

Researcher: Can you explain to me, how do you implement infrastructure accessibility on your day-to-day activities?

Participant: SAPS reports quarterly on the status of facilities which do not comply and plan or use a prioritisation model in order to address the short comings. Additionally, SAPS have park-homes which are made as victim-friendly. For the financial year

2022/2023, the target was to reach 20 adaptations, however, currently the Department of Public Works and Infrastructure is responsible for none-devolved and leases buildings through its owners.

Researcher: How do you monitor infrastructure accessibility progress in the department?

Participant: We have many platforms of discussions that reports regularly, either monthly or on quarterly basis. The execution department or unit in-house is the Projects and Programme Management and Infrastructure Management Service. We also use the Infrastructure Development Plan, which is external through consultants and the National Department of Public Works and Infrastructure, this should be complied with and we provide progress and reasons for deviations and the Annual Performance Plans for targets should be met.

Researcher: How do you align infrastructure accessibility to the departmental strategic objectives?

Participant: All new constructions and new lease buildings are compliant. The budget is allocated annually which is ring-fenced to address accessibility to police stations. The SAPS pays maintenance money to the NDPWI which does maintenance on existing buildings, repairing and cannot put new capitals into new buildings. Hence, it focuses on devolved, for an example, to ensure compliance SAPS needs to pay more to NDPWI.

Researcher: The questions that follows, are to address the attitude of facility management towards accessibility infrastructure directive within SAPS. I would like to understand your views and attitude towards disability mandate and by mandate, I mean the accessibility?

Participant: SAPS is addressing infrastructure accessibility and ensures that we comply by means of maintaining platforms of reporting.

Researcher: Please share with me, what training do you think is essential in accessibility and disability management in the department?

Participant: I think awareness and sensitising all members of SAPS and communities.

Researcher: Do you think the current infrastructure accessibility is appropriate in the department and is it operational?

Participant: Not yet. The focus is on buildings where the public need to access, that is for new police stations to comply in accessibility for communities. All other buildings that are used by our own members does not comply yet.

Researcher: The following questions focuses at the implementation progress on the accessibility infrastructure directive in SAPS. Please share with me on how do you think the current infrastructure accessibility can improve in the department?

Participant: The NDPWI as a custodian of all state assets such as buildings, should put capital budget aside in order to make all buildings accessible.

Researcher: How is the progress of accessibility to infrastructure within the department?

Participant: Progress is definitely visible and SAPS is held accountable to ensure compliance.

Researcher: How do you think management understanding of disability can assists the department towards achieving infrastructure accessibility?

Participant: SAPS management can ensure that disability management receives the necessary attention and priority it deserves by making it part of the SAPS Strategic Goals, objectives and plans.

Researcher: Please tell me, how does your department disseminate performance information on infrastructure accessibility?

Participant: By means of Quarterly Reporting on the Inter-Departmental Forums, Divisional Forums, Annual Performance Plans and the Infrastructure Development Plan.

Researcher: Is there maybe a dashboard that is also available to report on performance?

Participant: Yes, we use the core report.

Researcher: The following questions falls under the last main question, which is intended to understand the challenges faced in the implementation of the SAPS accessibility infrastructure directive. Please share with me, what challenges do you encounter when implementing infrastructure accessibility directives?

Participant: We experience challenges such as funding which results into a long process of obtaining resources. Resources also becomes a challenges. Issues of the approval from NDPWI takes longer and negatively impacts the process. As well as capacity, procurement delays and time limits on when to comply which is not feasible sometimes.

Researcher: You mentioned capacity, what are these capacity that you require to implement the infrastructure accessibility directive?

Participant: We require a strength on outsourcing expertise and capable contractors to carry out the job.

Researcher: In my final question, please share with me, how best do you think the department can improve on infrastructure accessibility performance?

Participant: I think SAPS already has accessibility as a focus area and funding allocation per financial year linked to that projects. Maybe the government Infrastructure Units should assist all state departments to comply.

Researcher: Thank you for sharing your information with me, I have learned a lot.

Participant: It is my pleasure to share my knowledge.

Appendix 3: Researcher's biography

Mr Mduduzi Simanga Mahlalela is an employee in the South African Police Service stationed at the National Office Component Strategic Management under Monitoring, Reporting and Evaluations. Apart from the current responsibilities, he is also a registered and qualified Social Worker.

He is currently a student at the University of the Witwatersrand School of Governance, where he is pursuing a Master's degree in Management sector Monitoring and Evaluation. The research is conducted only for compiling the research report in fulfilment of the Master's degree and with no other interests except for academic reasons. The researcher does not have any sponsor or interest groups in this research. The research on the factors affecting the implementation of the South African Police Service directive on infrastructure accessibility, will enable the research to have an understanding of the subject of infrastructure in relation to victim-friendly environment, thus, suggesting workable solutions to the matter. Research findings will be share with the SAPS and will serve as a resource of the department.

Appendix 4: Request for permission to carry out the research

Request for Permission to Conduct the Study

494 Attie Pelser Str
Elardus Park
0180

The Component Head: Research
South African Police Service (National Office)
152 Johannes Ramokhoase St
Telkom Towers
Pretoria
0001

Dear Sir or Madam

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH WITHIN THE SOUTH AFRICA POLICE SERVICE, NATIONAL OFFICE (SUPPLY CHAIN MANAGEMENT: FACILITY MANAGEMENT)

I, Mduduzi Simanga Mahlalela, a final year student enrolled for Masters in Management (specialising in Public Development Sector Monitoring and Evaluation) in the school of Governance at the University of Witwatersrand. I am conducting this research as a partial fulfilment of my degree; herein request permission to conduct research in South Africa Police Service, National Office (Supply Chain Management: Facility Management)

The title of my study is to assess factors affecting the implementation of the South African Police Service directive on accessibility infrastructure. My study is a case study research, using a qualitative research strategy; the research will bring no harm to any employees of the department, as data will be stored in safe and protected device. The Protection of Personal Identifiable Information Act will be observed at all times during this research.

The findings of the research will be shared with the department and a copy of the research will be shared with the Component Research to be published on the department's website.

I look forward to your kind consideration and approval.

Yours Sincerely;
Mduduzi Simanga Mahlalela
Contact number: 072 375 6877
Email: mduduzisimanga@gmail.com

Appendix 4.1: Approval letter from Supply Chain Management

G.P.S 002-0222 SAPS 21

SUID-AFRIKAANSE POLISIEDIENS SOUTH AFRICAN POLICE SERVICE

Private Bag X254, PRETORIA, 0001

Verwysing Reference	: 3/34/2
Navrae	: Lt Gen Fani
Enquiries	: Lt Col Te..lanche
Telefoon Telephone	: 012 841 7045
Epos E-mail	: terblanchel2@saps.gov.za

DIVISIONAL COMMISSIONER
SUPPLY CHAIN MANAGEMENT
HEAD OFFICE

The Head
RESEARCH

PERMISSION TO CONDUCT RESEARCH IN SOUTH AFRICAN POLICE SERVICE: UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG: MASTERS DEGREE: ASSESSING THE IMP MENTATION OF THE SOUTH AFRICAN POLICE SERVICE ACCESSIBILITY INFRASTRUCTURE DIRECTIVE: RESEARCHER: MS MAHLALELA

1. Your correspondence with reference 3/34/2 dated 2023-03-03 pertaining to the abovementioned research has bearing.

2. Permission is hereby granted for the researcher to collect data by approaching the approximately twelve (12) participants from Division: Supply Chain Management from Brigadier, Colonel, Lieutenant Colonel, Captain and Warrant Officer by taking into consideration paragraph 4 and 5 of your letter with reference 3/34/2.

3. Kindly note that this office will expect the signed undertaking from the Researcher which indicates that our processes and prescripts will be kept confidential and not made public or shared to anyone.

4. It is requested that a copy of the research be submitted to this office after finalization to determine the use of recommendations to benefit SAPS.

5. For further arrangements for the research study, the researcher may contact Col Terblanche on 012 841 7045 and e-mail address terblanchel2@saps.gov.za.

6. Trust you find the above satisfactory.

LIEUTENANT GENERAL
DIVISIONAL COMMISSIONER: SUPPLY CHAIN MANAGEMENT
MI FANI
Date: 2023/05/17

Appendix 4.2: Approval letter permitting the researcher to carry out the research (SAPS)

South African Police Service — Suid-Afrikaanse Polisiediens

Privaatsak Private Bag X94	Pretoria 0001	Faks No. Fax No.	(012) 393 4333

Your reference/U verwysing:

My reference/My verwysing: 3/34/2

THE HEAD: RESEARCH
SOUTH AFRICAN POLICE SERVICE
PRETORIA
0001

Enquiries/Navrae: Lt Col (Dr) Smit
AC Thenga
Tel: 012 393 4333
Email: ThengaS@saps.gov.za

APPROVED

MS Mahlalela
UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

RE: PERMISSION TO CONDUCT RESEARCH IN THE SOUTH AFRICAN POLICE SERVICE: UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG: MASTERS DEGREE: ASSESSING THE IMPLEMENTATION OF THE SOUTH AFRICAN POLICE SERVICE ACCESSIBILITY INFRASTRUCTURE DIRECTIVE: RESEARCHER: MS MAHLALELA

1. The above subject matter refers.
2. You are hereby granted approval for your research study on the above-mentioned topic in terms of National Instruction 4 of 2022.
3. Further arrangements regarding the research study may be made with the following office:

The Divisional Commissioner: Supply Chain Management:

- **Contact Person:** Colonel Terblanche
- **Contact Details:** 012 841 7045
- **Email address:** terblachel2@saps.gov.za

4. Kindly adhere to paragraph 8 of our attached letter signed on **2023-03-03** with the same abovementioned reference number.

MAJOR GENERAL
THE HEAD: RESEARCH
DR PR VUMA

Date: 2023 -03- 2 8

1

Appendix 5: Ethical clearance certificate

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

SCHOOL OF GOVERNANCE ETHICS COMMITTEE
CONSTITUTED UNDER THE UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)

CLEARANCE CERTIFICATE **PROTOCOL NUMBER:** WSG-2023-14

PROJECT TITLE	Assessing the implementation of the South African Police Service accessibility infrastructure directive.
INVESTIGATOR	Mduduzi Simanga Mahlalela
SCHOOL/DEPARTMENT OF INVESTIGATOR	Wits School of Governance
DATE CONSIDERED	21 February 2023
DECISION OF THE COMMITTEE	Approved unconditionally.
RISK LEVEL	MINIMAL RISK
EXPIRY DATE	Date of submission of the project Research Report

ISSUE DATE OF CERTIFICATE 22 February 2023 **CHAIRPERSON** Rekgotsofetse Chikane
Rekgotsofetse Chikane

cc: Supervisor:

DECLARATION OF INVESTIGATOR

To be completed in duplicate and **ONE COPY** returned to the Chairperson of the School/Department ethics committee.

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

Mduduzi Mahlalela
Signature

20 / 02 / 2023
Date

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES