AN ASSESSMENT OF THE PROCESSING OF CRIME SCENES BY DETECTIVES IN INFORMAL SETTLEMENTS IN GAUTENG

by

GEORGE ANTHONY PRINS

Submitted in accordance with the requirements for the degree of

DOCTOR OF LITERATURE AND PHILOSOPHY

In the subject

POLICE SCIENCE

at the

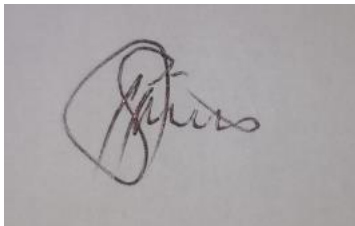UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROF J.S. HORNE

FEBRUARY 2024

DECLARATION OF AUTHORITY

I, George Anthony Prins with student number: 36781479, hereby declare that this dissertation titled "**An assessment of the processing of crime scenes by detectives in informal settlements in Gauteng,**" is my own work, and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I submitted the thesis/dissertation to originality checking software, and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa or at any other higher education institution for another qualification.

25 February 2024

Signature:_____   **Date:**_____

George Anthony Prins

ABSTRACT

A criminal investigation begins with the processing of the crime scene, which has to be properly protected against any form of contamination to the evidence. The success of a criminal investigation depends on its proper identification, protection, and isolation in order to secure it by restricting access and preventing evidence from being contaminated and destroyed. It is against this backdrop that the study was undertaken with the aim of assessing the processing of serious crime scenes by detectives in informal settlements. It is on the basis of the study's findings that recommendations were proposed for improved and viable procedures regarding the processing of serious crime scenes in these settlements.

Guided by its preferred constructivist research paradigm, the study adopted a qualitative research approach and its case study design to explore, describe and analyse the applicable trends, patterns and practices/ approaches applied by detectives in the selected informal settlements when processing complex and restricted cases. A non-probability purposive/ judgement sampling strategy was utilised for the selection of a total sample size of 35 participants, comprising 18 SAPS detectives and 15 LCRC members at the selected Gauteng Province Brigadier police stations, as well as two senior international police officers.

Data collection was facilitated by means of semi-structured in-depth interviews which the researched personally conducted with the selected detectives attached to the selected Brigadier police stations, as well as the selected South African Police Service members attached to the selected 4 (four) Local Criminal Record Centre Units in Gauteng Province. Additionally, online interviews were conducted with selected senior detective officers from two African countries experiencing the same problem of processing of serious crime scenes by detectives in informal settlements.

Thematic data analysis and content analysis were applied in the development of the findings, which then revealed the following five themes: training and involvement in processing of serious crime scenes; current method on processing serious crime scenes in suburban-and informal settlement areas; infrastructural-and environmental physical conditions that affect serious crime scenes in suburban- and informal settlement areas; practicality and adequateness of the saps policy on crime scene

management in informal settlements; and suggestions for improvement on the effectiveness in processing serious crime scenes in informal settlements.

It was on the basis of these five developed themes that the study developed conceptual standard operational procedure guidelines on the processing of serious crime scenes in informal settlement areas. In the context of the research aim and objectives, these guidelines are viewed as the study's significant contribution in the field of crime scene processing in informal settlement areas.

KEY TERMS

Crime; crime scene; crime scene management; crime scene manager; crime scene processing; crime scene processing team; crime scene technician; criminal investigation; detective service centre; detective/investigator; evidence; informal settlement; investigating officer; primary crime scene; secondary crime scene; robbery with aggravating circumstances; business robbery; residential robbery; robbery of a motor vehicle.

OPSOMMING

'n Strafregtelike ondersoek begin met die prosessering van die misdaadtoneel en sodanige misdaadtoneel moet behoorlik teen enige vorm van kontaminasie van bewyse beskerm word. Die sukses van 'n strafregtelike ondersoek hang af van die behoorlike identifikasie, beskerming en isolasie daarvan ten einde dit te beveilig deur toegang te beperk en te voorkom dat bewyse gekontamineer of vernietig word. Dit is teen hierdie agtergrond dat die studie onderneem is met die doel om speurders se prosessering van ernstige misdaadtonele in informele nedersettings te assesseer. Op grond van die studie se bevindinge word aanbevelings gemaak vir verbeterde en haalbare prosedures vir die prosessering van ernstige misdaadtonele in hierdie nedersettings.

Gelei deur sy konstruktiwistiese navorsingsparadigma van voorkeur, het die studie 'n kwalitatiewe navorsingsbenadering en gevallestudie-ontwerp aangeneem om die toepaslike tendense, patrone en praktyke/benaderings te ondersoek, beskryf en ontleed wat deur speurders in die geselekteerde informele nedersettings toegepas word wanneer hulle komplekse gevalle met beperkte toegang prosesseer. 'n

Niewaarskynlikheids- doelbewuste/oordeelsteekproefstrategie is vir die keuse van 'n totale steekproefgrootte van 35 deelnemers gebruik. Die deelnemersteekproef het bestaan uit 18 SAPD speurders en 15 lede van die plaaslike kriminelerekordsentrum (LCRC) van die geselekteerde Gauteng provinsie Brigadier polisiestasies, sowel as twee senior internasionale polisiebeamptes.

Datainsameling is deur middel van semi-gestruktureerde, diepgaande onderhoude gefasiliteer. Die navorser het persoonlik die onderhoude met die geselekteerde speurders van die Brigadier polisiestasies gevoer, sowel as met die geselekteerde Suid-Afrikaanse Polisiediens-lede verbonde aan die vier (4) gekose plaaslike kriminelerekordsentrum-eenhede in die Gauteng provinsie. Daarbenewens is aanlynonderhoude gevoer met geselekteerde senior speurbeamptes uit twee Afrika-lande wat dieselfde probleem met speurders se prosessering van ernstige misdaadtonele in informele nedersettings ervaar.

Tematiese data-ontleding en inhoudontleding is met die ontwikkeling van die bevindinge toegepas en die volgende vyf temas is blootgelê: opleiding en betrokkenheid by die prosessering van ernstige misdaadtonele; huidige metode in die prosessering van ernstige misdaadtonele in voorstedelike gebiede en informele nedersettings; infrastrukturele en fisiese omgewingstoestande wat ernstige misdaad in voorstedelike gebiede en informele nedersettings affekteer; praktiesheid en voldoendenheid van die SAPD-beleid ten opsigte van misdaadtoneelbestuur in informele nedersettings; en voorstelle vir verbetering van die doeltreffendheid van die prosessering van ernstige misdaadtonele in informele nedersettings.

Dit is op grond van hierdie vyf temas wat ontwikkel is, dat die studie riglyne vir konseptuele, standaard bedryfsprosedures ontwikkel het om ernstige misdaadtonele in informele nedersettings te prosesseer.

WOORDELYS

Misdaad; misdaadtoneel; misdaadtoneelbestuur; misdaadtoneelbestuurder; prosessering van misdaadtoneel; span wat misdaadtoneel prosesseer; misdaadtoneeltegnikus; strafregtelike ondersoek; speurdienssentrum; speurder/ondersoeker; bewyse; informele nedersetting; ondersoekbeampte; primêre

misdaadtoneel; sekondêre misdaadtoneel; roof met verswarende omstandighede; sakeroof; huisroof; roof van 'n voertuig.

TSHOBOKANYO

Patlisiso ya bosenyi e simolola ka go samagana le lefelo la bosenyi, le le tshwanetseng go sirelediwa sentle kgatlhanong le kgotlhelego epe ya bosupi. Katlego ya patlisiso ya bosenyi e ikaegile ka tshupo, tshireletso, le tlhaolo ya lefelo la bosenyi gore le sirelediwe ka go lekanyetsa motsamao le go tila gore bosupi bo kgotlhelege le go senngwa. Ke ka moo go dirilweng thutopatlisiso eno ka maikaelelo a go sekaseka tsela e babatlisisi ba kwa mafelong a baipei ba samaganang le mafelo a bosenyi jo bo tseneletseng ka yona. Go dirilwe dikatlenegiso tsa dithulaganyo tse di botoka le tse di dirisegang malebana le go samagana le mafelo a bosenyi jo bo tseneletseng mo mafelong ano, go ikaegilwe ka diphitlhelelo tsa thutopatlisiso.

E kaelwa ke pharataeme e e itlhophetsweng ya kago, thutopatlisiso e tsere molebo wa patlisiso ya khwalitatifi le thadiso ya yona ya thutopatlisiso ya tobiso go tlhotlhomisa, go tlhalosa le go lokolola mekgwa e e maleba, dipaterone le ditiragatso/melebo e e diriswang ke babatlisisi mo mafelong a a tlhophilweng a baipei fa ba samagana le dikgetse tse di marara le tse di nang le ditekanyetso. Go dirisitswe togamaano ya go tlhopha sampole e e sa neeleng batsayakarolo seabe se se tshwanang go tlhopha sampole ya batsayakarolo ba le 35, e le babatlisisi ba SAPS ba le 18 le ditokololo tsa LCRC di le 15 kwa diteišeneng tsa sepodisi tsa Porofense ya Gauteng, gammogo le batlhankedibagolwane ba sepodisi ba boditšhabatšhaba ba le babedi.

Kokoanyo ya datha e dirilwe ka dipotsolotso tse di tseneletseng tse di dirilweng ke mmatlisisi ka boene le babatlisisi ba ba kwa diteišeneng tse di tlhophilweng tsa mapodisi, gammogo le ditokololo tse di tlhophilweng tsa Tirelo ya Sepodisi sa Aforikaborwa tse di kwa Diyuniting tse nne (4) tsa Tikwatikwe ya Direkoto tsa Bosenyi tsa Selegae tse di tlhophilweng kwa Porofenseng ya Gauteng. Go tlaleletsa foo, go nnile le dipotsolotso tsa mo maranyaneng le batlhankedibagolwane ba dipatlisiso ba le babedi go tswa kwa dinageng di le pedi tsa Aforika tse di itemogelang bothata jo bo

tshwanang le jo jwa babatlisisi ba ba samaganang le mafelo a bosenyi jo bo tseneletseng mo mafelong a baipei.

Go dirisitswe tokololo ya datha ka merero le tokololo ya diteng go bona diphitlhelelo, tse di senotseng merero e metlhano e e latelang: katiso le go nna le seabe mo go samaganeng le mafelo a bosenyi jo bo tseneletseng; mekgwa ya ga jaana ya go samagana le mafelo a bosenyi jo bo tseneletseng mo metsesetoropong le mo mafelong a baipei; seemo sa mafaratlhatlha le tikologo se se amang mafelo a bosenyi jo bo tseneletseng mo metsesetoropong le mo mafelong a baipei; nonofo ya pholisi ya SAPS e e malebana le tsamaiso ya lefelo la bosenyi mo mafelong a baipei; le ditshitshinyo malebana le tokafatso ya nonofo ya go samagana le mafelo a bosenyi jo bo tseneletseng mo mafelong a baipei.

Go lebeletswe merero eno e metlhano e e tlhamilweng, thutopatlisiso e tlhamile tsamaiso e e rileng ya tiro e e malebana le go samagana le mafelo a bosenyi jo bo tseneletseng mo mafelong a baipei. Mo bokaelong jwa maikaelelo a patlisiso, kaedi eno e tsewa e le kakgelo ya botlhokwa ya thutopatlisiso mo lephateng la go samagana le mafelo a bosenyi mo mafelong a baipei.

MAREO A BOTLHOKWA

Bosenyi; lefelo la bosenyi; tsamaiso ya lefelo la bosenyi; motsamaisi wa lefelo la bosenyi; go samagana le lefelo la bosenyi; setlhopha se se samaganang le lefelo la bosenyi; motegeniki wa lefelo la bosenyi; patlisiso ya bosenyi; tikwatikwe ya ditirelo tsa bofokisi; lefokisi/mmatlisisi; bosupi; lefelo la baipei; motlhankedi wa dipatlisiso/lefokisi; lefelo la ntlha la bosenyi; lefelo la bobedi la bosenyi; kgothoso e e akaretsang tiriso ya dibetsa; kgothoso ya kgwebo; kgothoso ya koloi.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS AND DESCRIPTIONS

BNG   Breaking New Ground

BPDLP   Basic Police Development Learning Programme

CAS   Crime Administration System

CCTV   Close Circuit Television

CJS   Criminal Justice System

CPA   Criminal Procedure Act No. 51 of 1977

CPF   Community Policing Forum

CR & CSM Criminal Record and Crime Scene Management

CSC   Community Service Centre

CSCC   Community Service Centre Commander

CSF   Community Safety Forums

CSR   Crime Scene Reconstruction

DNA   Deoxyribonucleic Acid

DPCI   Directorate for Priority Crime Investigation

DSC   Detective Service Centre

DSCC   Detective Service Centre Commander

ICDMS   Integrated Case Docket Management System

ICT   Information and Communication Technology

IPID   Independent Police Investigative Directorate

LCRC   Local Criminal Record Centre

MDGs   Millennium Development Goals

NDP   National Development Plan

NUSP   National Upgrading Support Programme

RDP   Reconstruction and Development Programme

SAPS   South African Police Service

SDG   Sustainable Development Goals

SITREP   Situational Report

SOP   Standard Operating Procedure

UISP   Upgrading of Informal Settlement Programme

UN   United Nations

UNDP   United Nations Development Programme

UNISA   University of South Africa

VISPOL   Visible Policing

CHAPTER 1: GENERAL ORIENTATION TO THE STUDY

1.1 INTRODUCTION

A criminal investigation begins at the crime scene (Baxter, 2015:7). For that reason, it is supremely important for the evidence on a crime scene to be protected and processed in order to enhance a successful investigation on the strength of a properly identified, protected, isolated and secured crime scene. Essentially, the purpose of securing the crime scene is to restrict access and prevent evidence from destruction and contamination (Houck, Crispino & McAdam, 2012:59).

Successful, high-quality crime scene investigation is a systematic process that entails a set of principles and procedures to be followed in ensuring that physical evidence is discovered and completely investigated for the purpose of producing the required results (Chissum & Turvey, 2014:652). In this regard, the basic crime scene procedures encompass physical evidence recognition, protection and effective securing of the evidence, documentation, proper collection, packaging and preservation.

The SAPS is the sole custodian of the crime scene processing during the investigation of crime. Since 2005, the SAPS has implemented a policy (known as Policy 2 of 2005) for the management of crime scenes within the SAPS. This crime scene management policy is intended to guide SAPS members in ensuring that crime scenes are properly processed and managed, and that the integrity of items with potential evidential value on the crime scene is unquestionable (SAPS, 2005:2). Although the policy refers to "management" of crime scenes, the guidelines prescribed in this policy are projected and focussed more on the processing of crime scenes, which is the fundamental part of crime investigation. The SAPS Policy 2 of 2005 has since been repealed in 2015 and replaced with the National Instruction 1 of 2015 as the dominant policy on the management of crime scenes in the SAPS.

In essence, the purpose for the development and implementation of the National Instruction 1 of 2015 (on crime scene management) was to regulate the management of crime scenes by the SAPS, ensure that crime scenes are properly controlled, managed, documented, and investigated, and that the integrity of items on crime

scenes with potential evidential value is preserved and maintained (SAPS, 2015:2). Several other National Instructions have been developed and implemented by the SAPS such as National Instruction 3 of 2011, National Instruction 8 of 2017, National Instruction 12 of 2017, National Instruction 13 of 2017, and National Instruction 1 of 2018. Similar to National Instruction 1 of 2015, all of the other afore-cited National Instructions are functionally interlinked and focus on the management and processing of crime scenes within the SAPS environment. Furthermore, these National Instructions articulate and direct the different responsibilities and duties of the different role-players during the processing and management of crime scenes within the SAPS.

In the context and purposes of this study, the National Instruction 1 of 2015 and all other related and significant sections in other SAPS National Instructions are referred to, in the context of crime scene management. The National Instruction 1 of 2015 mentions the "management" of crime scenes synonymously with the application of organisational policy directives. In addition, these directives regulate the processing of crime scenes during the investigation of crime in the SAPS. The researcher refers to the processing of crime scenes in this study, which includes all the steps in the processing of a crime scene.

Based on the researcher's experience, the correct processing of crime scenes in informal settlements is hindered or adversely affected by various environmental and infrastructural factors and conditions which make it impossible to process crime scenes in accordance with the SAPS National Instruction 1 of 2015. These environmental and infrastructural factors and conditions in informal settlements, create enormous difficulties and challenges which complicate the processing of crime scenes in those areas. These challenges are related to aspects such as inaccessibility to the crime scene by police vehicle due to poor infrastructural development and the attendant lack of accessible roads in these settlements; dark alleys and passageways; densely populated shacks; restricted and limited shack space per 'yard'; absence of electricity and/ or poor lighting.

The potential for crime in these areas is compounded by inhuman and unhygienic living conditions in respect of the illegal dumping of waste. Such a state of affairs poses serious risks and problems that negatively impact on the correct processing of crime scenes in informal settlements; thus, aggravating the difficulties and conditions under

which SAPS personnel are expected to perform their duties and responsibilities at crime scenes.

This study mostly focused on the processing of serious crime scenes in informal settlements in the following trio crimes: non-residential (business) robbery, residential (house) robbery, and robbery of a motor vehicle (carjacking). All these unlawful deeds are categorised as robberies committed with aggravating circumstances, which is characterised by a degree of unlawfulness, intentionality, and forcefulness in the removal and appropriation of someone else's movable tangible property (SAPS, 2022:79).

1.2   PROBLEM STATEMENT

Creswell (2013:130) emphasises that the purpose of the problem statement in qualitative research is to provide a rationale for studying or investigating a particularly problematic issue, situation, or phenomenon. Moreover, the problem to be investigated in qualitative research could be the outcome of the researcher's experience in his/her social, personal professional life (Flick, 2018:89). According to Fouché, Strydom and Roestenburg (2021:467), the first phase of research is premised on the researchers' clear stipulation and description of the problem that has been identified as requiring an intervention or solution. On that note, a problem is a condition affecting a significant number of people in ways considered undesirable, about which it is felt that something could be done through collective action (Fouché *et al.*, 2021:467).

Problems are not only personal or individual, although many problems are identifiable at the individual level. As such, an intervention is always designed to help several people who have the same or similar problem (Fouché *et al.*, 2021:467). The investigated problem in this study is situated in the seeming inability of the SAPS Detective Service to process serious crime scenes[1] in the Gauteng Province informal settlements appropriately and effectively. The resolution of this problem could

---

[1] Serious crime scenes in this study will include crimes such as residential robberies, business robberies and motor vehicle robberies (hi-jacking). In the South African context these crimes are commonly known as "trio crimes".

positively impact on the progress of cases being investigated by these detective members.

Gauteng Province is considered the economic hub of the country, attracting migrants both internationally and nationally due to economic, social-political, cultural, environmental and other reasons (World migration report, 2013:14). According to the mid-year population estimates report by Statistics South Africa (2018:1), more than 1,02 million people immigrated to South Africa between 2016 and 2021, with about 47.5% settling in Gauteng Province. It is generally known that migrants are attracted to places that have high prospects for employment. However, some of these migrants find themselves living in infrastructural under-developed and socio-economically depressed informal settlements due to factors such as unplanned urbanisation and its resultant urban over population (Kanyane & Ilorah, 2015:3-4). According to Statistics South Africa (2018:1), Gauteng Province has one of the highest numbers of informal settlements, immigrants, and in-migrants (particularly for the 2016 to 2021 period) due to their hope for better economic opportunities, jobs, and the promise of a better life (Mohlala, 2020:18).

With regard to the Gauteng Province crime-related problems, the national trio crime statistics for 'the economic hub of the country' during the ten-year period between 01 April 2011 and 31 March 2021, are shown in Table 1.1 below.

Table 1.1:   Gauteng Province total of trio crimes:2011-2021 trends

CRIME CATEGORY	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	2020/ 2021
SOME SUB-CATEGORIES OF AGGRAVATED ROBBERY										
Carjacking	9417	9931	11 180	12 773	14 602	16 717	16 325	16 026	18 162	16 731
Robbery at residential premises	16 766	17 950	19 284	20 281	20 820	22 343	22 261	22 431	21 130	20 870
Robbery at non-residential premises	15 912	16 343	18 573	19 170	19 698	20 680	20 047	19 991	20 651	18 231

(Source: SAPS, 2022)

Table 1.1 above attests that, for the ten-year period between 01 April 2011 to 31 March 2021, there was a constant increase in the crime statistics for the different categories of serious trio crimes, namely: robbery of motor vehicle (or carjacking, from 9,471 to 16,731), residential robbery (or house robbery, from 16,766 to 20,870) and non-residential robbery (or business robbery, from 15,912 to 18,231) (SAPS, 2022:68).

The constant increasing number of serious trio crimes and incorrect processing of crime scenes, may indicate a significant issue in the management and processing of these crimes as reflected in SAPS crime statistics (SAPS, 2022:69).

Whereas Table 1.1 above presents the Gauteng Province context, Figure 1.1 overleaf is an illustration of the total national crime statistics of the known trio crimes over the ten-year period from 01 April 2011 to 31 March 2021.
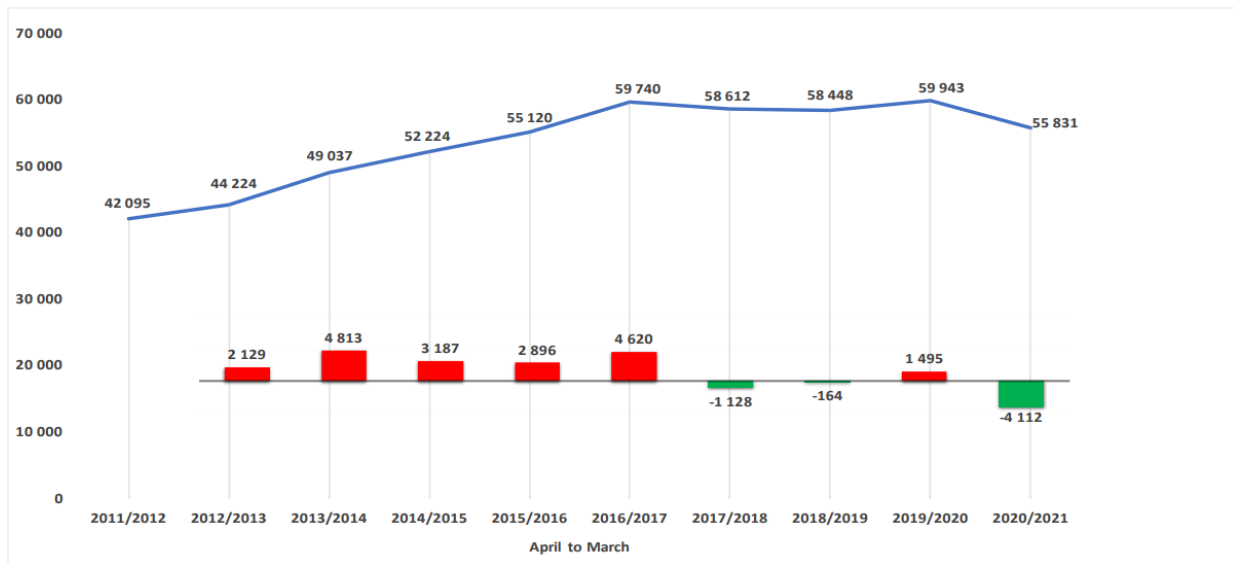
Figure 1.1: **National total of trio crimes:2011-2021 trends**
(Source: SAPS, 2022)

In terms of Figure 1.1 above, the total number of serious trio crimes for the ten-year period in question (i.e., 2011/2012 to 2020/2021) increased steadily between 2011/2012 and 2016/2017 from 42,095 to 59,740; as well as between 2016/2017 and 2019/2020 from 59,740 to 59,943 (SAPS, 2022:68). Between 2011/2012 and 2020/2021, the trio crimes were at their lowest only during the 2012/2013 period, with a total of 44,224 recorded incidents.

Robbery of a motor vehicle (carjacking or hijacking) relates to an intentional, unlawful, forceful removal and appropriation of a motor vehicle belonging to another person (SAPS, 2022:79). The continuous increase of this serious crime category for the 2011/2012 to 2020/2021 period indicates a total increase of 7,314 more incidents of motor vehicle robbery during this period (SAPS, 2022:79). Noticeably, there was also a steady increase of carjackings from 9,417 during 2011/2012 to 16,717 during

2016/2017. The highest incidences of 16,162 carjackings were recorded for the 2019/2020 period, with the lowest number of incidents (9,911) recorded during 2012/2013 financial year.

In addition to the escalating spate of carjackings or motor vehicle robberies, residential premises (house) robbery during the 2011-2021 ten-year have also shown some acute increases. The SAPS (2022:80) describes residential or house robbery as the unlawful and intentional forceful removal and appropriation of property from another person's residential premises. According to the statistical information provided by the SAPS (2022:80), incidences of residential robbery were the highest at 1,523 during the 2016/2017 financial year, and the lowest number 170 reported occurrences were reported during the 2018/2019 financial year. Moreover, the number of residential robberies reported during 2011/2012 increased by 4,104 in comparison to cases recorded during 2020/2021. Non-residential or business robbery relates to the unlawful and intentional removal and appropriation of property forcefully from the business premises of another person (SAPS, 2022:80).

During the period 2010 to 2017, the researcher visited several serious crime scenes in different informal settlements and suburban areas encompassing the Alexandra Cluster, Gauteng Province in his capacity as the Cluster Detective Service Coordinator. It was during these visits that the researcher observed some inadequacies on the part of the crime detectives. These weaknesses were underpinned by the detectives inaccurate processing of informal settlement serious crime scenes as stipulated (at the time) in the SAPS Instruction 2 of 2005 as the regulatory crime scene management policy. This policy was repealed in 2015 and replaced with the National Instruction 1 of 2015, both of which prescribe similar crime scene management procedures. The researcher further noticed that there was a difference in the processing of serious crime scenes in suburban policing areas and the informal settlements.

These compliance and adherence differences in implementation of the same policy could possibly be attributed to the discrepant practicality and feasibility factors in these areas. For instance, it is more practical and feasible to manage serious crime scenes in suburban areas due to their accessible and well-developed neighbourhood layout and infrastructural conditions. Such conditions are conducive to compliance and

adherence with the SAPS National Instruction 1 of 2015. In contrast, such compliance is difficult to attain in informal settlements due to their difficult-to-access physical infrastructural and environmental conditions. Such a state of affairs presents enormous difficulties regarding the effective processing and management of serious crime scenes in informal settlements. Both the SAPS Instruction 2 of 2005 and the National Instruction 1 of 2015, as well as the existing (post-2015) SAPS crime scene management policies have not considered such conditions and their effects on the processing of crime scenes in informal settlements.

1.3 DELIMITATIONS OF THE RESEARCH

The delimitations of a research study relate principally to the specific theoretical/ conceptual, methodological or practice related boundaries or parameters to which the reach of the study is restricted or confined (Grinnell & Unrau, 2014:634). There are often numerous potential limitations, even in a carefully planned research study. It is for the latter reason in particular that the delimitations are worthy to be considered in research, which is evidence of the researcher's realisation and understanding of the need to identify such possible restrictions (Marshall & Rossman, 2016:85).

This study is conceptually restricted to only the phenomenon of serious crime scene processing and management in the context of the "trio crimes" (i.e., carjackings or motor vehicle robberies, residential or house robberies, and non-residential or business robberies. There are also other forms of serious crimes, but the study only focused on the processing of these trio crime scenes in the Gauteng Province informal settlements. These are not necessarily the predominant crimes committed in these informal settlements. However, the seriousness of these crimes required a more concerted and intense processing of serious crime scenes with the effective utilisation of the Local Criminal Record Centre (LCRC) resources.

In the context of this study, both the methodological and practice-related delimitations or reach were collectively restricted to the sampling of only a particular group or category of *participants* who only performed certain *tasks* or *duties* in relation to the processing and subsequent investigations of the above-cited category of crimes. As depicted in Table 2.1 (see Section 2.5.1 of Chapter 2), the study included only the selected Gauteng Province Detective Service Centre (DSC) detectives (Sample A),

LCRC members (Sample B), senior Namibian Police official (Sample C) and a senior Zambian Police official (Sample D). All the Gauteng Province participants were selected on the primary basis of their extensive involvement in the processing of serious crime scenes in the Gauteng Province informal settlements and other eligibility criteria discussed in Section 2.4 and Section 2.5 respectively.

1.4 RESEARCH AIM

Babbie (2017:24) enlightens that a research aim is essentially the general statement depicting the researcher's intention for undertaking the particular study in question. On the other hand, Denscombe (2014:50) and Greenfield and Greener (2016:17) assert further that the research aim enables the discovery of new facts and their correct interpretations in order to test accepted conclusions, theories, or laws in accordance with the newly discovered facts. In this regard, the research aim also clarifies and directs the objectives the researcher intends to accomplish (Denscombe, 2014:50). Accordingly, the aim of this research study is: To explore and assess the processing of serious crime scenes by detectives in the Gauteng Province informal settlements.

1.5 RESEARCH OBJECTIVES

Research objectives refer to the specific intentions of the researcher in undertaking the study (Tight, 2019:11). In addition, the research objectives categorically clarify the specific measures, activities or processes by means of which the intended outcomes are to be accomplished in terms that are very clear and concise in relation to the more broadly defined research aim (Gray, 2014:53). According, the objectives of this research study are as follows:

- To describe and explore the best practices used during the processing of crime scenes.
- To determine what the existing policy of the SAPS, National Instruction 1 of 2015, regarding the processing serious crime scenes entails.
- To determine the physical conditions that complicate and influence the non-compliance and non-adherence of the SAPS policy requirements by detectives when processing serious crime scenes in informal settlements.

- To determine and assess the present procedure followed by detectives during the processing of serious crime scenes in suburban areas and in informal settlements (to establish the scientific reasons for a difference in the processing of serious crime scenes by detectives in suburban areas and informal settlements notwithstanding one policy on crime scene processing currently in use by the SAPS).
- To determine new knowledge on the aspects that negatively impact and obstructing the processing of serious crime scenes in informal settlements.
- To develop practical guidelines, procedures, and recommendations for the SAPS on crime scene processing of serious crime scenes in informal settlements.

1.6   RESEARCH QUESTIONS

Maxwell (2014:77) ascertains that research questions are essentially a vital mechanism for addressing a study's key concerns in relation to the identified research problem. Research questions are precise and specific, asking pertinent, revealing, and incisive questions about the issues driving the research (Denscombe, 2017:73). Research questions are crucial for data collection, analysis, and interpretation, as per them the core feature of a research project (Flick, 2014:145; Leedy & Ormrod, 2015:39). In that regard, the following research questions pertinently and incisively reveal their symbiotic relationship with the research objectives:

- What are the best practices used during the processing of crime scenes?
- What does the existing policy of the SAPS, National Instruction 1 of 2015, regarding the processing serious crime scenes entails?
- What are the physical conditions that complicate and influence the non-compliance and non-adherence of SAPS policy requirements by detectives when processing serious crime scenes in informal settlements?
- What is the present procedure followed by detectives during the processing of serious crime scenes in suburban areas and in informal settlements?
- What is the present procedure followed by detectives during the processing serious crime scenes in suburban areas? (Why are detectives following different methods in the processing of serious crime scenes in suburban areas and informal settlements in the existence of one policy on the processing of serious crime scenes in the SAPS?)

- What new knowledge became known and how can it be used on the aspects that negatively impact and obstructing the processing of serious crime scenes in informal settlements?
- What practical guidelines, procedures and recommendations can be offered to the SAPS concerning the processing of serious crime scenes in informal settlements?

1.7   PURPOSE OF THE RESEARCH

Research studies have multiple purposes, all of which may not necessarily be dominant in the same study, and it is in that regard that different authors consequently have different views regarding the purpose statement/s of research (Strydom, 2013:149). For Creswell (2013:134), the research purpose is essentially the researcher's declarative statement or road map concerning the overarching outcomes of the study. Qualitative research focuses on a central phenomenon, characterised by specific aspects, with purpose statements including participants and study location, aiming to understand the phenomenon being investigated (Terrell, 2016:21). Fouché (in Fouché *et al.* (2021:64)), emphasise that the study's purpose directly influences research approach and design, typically focusing on situation evaluation, exploration, applied research, and empowerment of those being researched. In the context of this study, the researcher considered the dominant actions of research to be fundamentally focused on: exploration and description of a situation; evaluation of a situation; as well as empowerment of those being researched. These dominant actions of research are in consonance with both the research aim and objectives as articulated in Section 1.4 and Section 1.5 respectively.

1.7.1   Exploration of a situation

Exploration is concerned with enquiring further or finding more information relating to the various aspects, manifestation and implications of a specific problem, situation, or phenomenon in order to gain more insights and knowledge (Maxfield & Babbie, 2018:10). This research explored various factors that impact negatively on the processing of serious crime scenes in informal settlements in Gauteng Province. Such exploration encompassed the inaccessible, underdeveloped and unstructured environmental and infrastructural conditions in the informal settlements under review. The afore-mentioned factors impact and influence the extent of the SAPS

investigators' non-adherence to, and non-compliance with the existing policy regarding the processing serious crime scenes in informal settlements.

Furthermore, the review of pertinent literature sources enabled the exploration of relevant knowledge from multiple scholarship perspectives, which also facilitated the study's contribution to the current body of knowledge in the field of study (Efron & Ravid, 2019:27). As such, the researcher identified links and associations in order to explore possible relationships that exist in the processing of serious crime scenes in informal settlements in the context of the explored knowledge. Ultimately, the exploration of national (South African) and international literature is a reflection of the researcher's attempt to expand the study and its discussions beyond the territory of mere narrative orientations or perspectives.

1.7.2   Description of a situation

Maxfield and Babbie (2012:30) suggest that description goes beyond exploration and can be done simultaneously, depending on the researcher's investigative skills. By itself, a description entails the provision of explanations or further details (i.e., 'sketching a picture') about the explored phenomenon, situation, person or event. Furthermore, such description involves an explanation of the association between, or among variables of the investigated phenomenon (Gray, 2014:36).

The descriptive aspect of research has been applied throughout this study, particularly in respect of the problem statement (Section 1.2), the research aim (Section 1.4), the research objectives (Section 1.5), and the research questions (Section 1.6) respectively. The central issue in all these descriptions relate to the various factors that impact negatively on the processing of serious crime scenes in informal settlements in Gauteng Province. Furthermore, the overall situation being described also focused on the recommendations for good practice that address problems and enhance the performance of SAPS personnel in the processing of serious crime scenes in informal settlements.

1.7.3   Evaluation of a situation

Patton (2015:18) defines programme evaluation as a systematic assessment of a situation's characteristics, activities, and outcomes to improve effectiveness and inform future programming decisions, including policies, organisations, and personnel.

In this study, the researcher evaluated the strengths and weaknesses of the current policies relating to the processing of serious crime scenes in informal settlements in Gauteng Province. It was on the basis of the evaluation aspect that the study was able to examine and assess the feasibility, uniqueness and extraordinary conditions that confront detectives in informal settlements in the context of the prevailing environmental and infrastructural challenges in informal settlements. The evaluation of the current SAPS crime scene management policy was initiated in order to determine the extent of investigators' non-adherence/non-compliance. Furthermore, the evaluation process provided a framework for developing practical improvement guidelines, procedures, and recommendations in fulfilment of the final research objective and research question as articulated in Section 1.5 and 1.6 respectively.

1.7.4   Empowerment of those being researched

Empowerment in research studies is demonstrative of its emancipatory effect and impact on the disempowered (i.e., disadvantaged, marginalised, voiceless) or poorly represented groups or communities (Denscombe, 2014:46). In this study, however, the empowerment purpose is particularly focused on those individuals or groups of participants whose "interest" would have been advanced through the agency of this study, its findings, and its recommendations.

In the view of this study, Section 2. 4 (study population) and Section 2.5 (sampling) respectively provide a clearer context and characterisation of "those being researched", who are in fact the selected Gauteng Province DSC detectives (Sample A), LCRC members (Sample B), senior Namibian Police official (Sample C) and a senior Zambian Police official (Sample D). Therefore, their "interest" and "empowerment" will be advanced within the combined framework of the reviewed literature, accumulated findings, as well as the proposed recommendations. Accordingly, all those being researched -as represented in Samples A, B, C and D – will benefit from the required new knowledge and best practices of crime scene

management in international contexts. Such knowledge and practices are envisaged to improve their job performance and inculcation of a culture of productivity and goal-orientedness, which would further contribute to the public's trust in both law enforcement and the criminal justice system authorities to fulfil their respective mandates effectively.

1.8 BENEFITS AND SIGNIFICANCE OF THE STUDY

It is the view of the study that the benefits and significance of the study accrue from the extent of its empowerment of various individuals, groups, or institutions to whom it (the study) is of value on account of its contribution to various. In that regard, the current study is beneficial to the academic community, the criminal justice system, the SAPS, as well as society at large.

1.8.1 Benefit to the academic community

The study makes a contribution to the academic community with additional research-based knowledge and information in the field of crime scene processing particularly in informal settlements, given their unique spatial, infrastructural and other features. Current and prospective students could utilise the research as reference material for study purposes and as sources of literature in their future research projects.

1.8.2 Benefit to the criminal justice system

Based on its findings and recommendations, the criminal justice system will benefit from innovative guidelines and procedures regarding the processing of serious crime scenes in unique conditions such as informal settlements. Consequently, the adoption of these guidelines will contribute in expediting the detection and arrest of offenders, as well as their prosecution and conviction).

1.8.3 Benefit to the SAPS

The final research objective (see Section 1.5) states: to develop practical guidelines, procedures, and recommendations for the SAPS concerning the processing of serious crime scenes in informal settlements. In that regard, the proposed guidelines could assist the SAPS policy and decision makers in their efforts to develop, revise, or improve the existing policy on the processing of serious crime scenes in informal settlements. The SAPS would be able to develop practical and feasible policy

guidelines that practically accommodate the informal settlements' uniqueness in respect of the processing of serious crime scenes. As such, the revised crime scene processing policy document should entail effective and practical procedures that consider the feasibility, uniqueness and extraordinary conditions that confront detectives and LCRC members when processing serious crime scenes in informal settlements.

1.8.4 Benefit to society

Based on the degree of the SAPS policy makers' adoption of the developed and revised guidelines, society in general will benefit when perpetrators or criminals are convicted due to the grounds and supporting facts to develop a more effective process for dealing with crime scenes in the informal settlement environment. Therefore, the researcher found it relevant to conduct this research in order to assess the situation with regards to the processing of serious crime scenes in informal settlements. The continuing spate of trio crimes has generated fear among communities (SAPS, 2022:79). Therefore, improved procedures and processes have the potential to render the living conditions and environments of communities in informal settlements safer.

1.9 DEFINITION OF KEY THEORETICAL CONCEPTS

The definition of key theoretical terms enables the readers' conceptualisation and understanding of the fundamental abstract ideas and their application in the study (Babbie, 2017:33). Furthermore, Creswell (2013:143) asserts that the underlying principle in the latter regard should be informed by the need to clarify terms and provide their exact meaning and application in various theoretical, methodological, and disciplinary contexts. The key concepts also reflect their thematic relevance to the core aspects of the entire study (Leedy & Ormrod, 2015:71). The following key theoretical concepts used in this research are briefly defined below, but discussed in detail in various chapters of the study.:

1.9.1 Crime scene management

Crime is basically the unlawful and blameworthy conduct for which punishment is prescribed by the State in criminal proceedings (Zinn & Dintwe, 2015:440). The crime scene is usually the place at which clues, and evidence of the unlawful act are to be found after processing by investigators. In that regard, the SAPS Policy for Crime

Scene Management National Instruction 1 of 2015 (SAPS, 2015:2), defines crime scene management as the process of planning and implementation of the following measures:

- taking control and securing the crime scene;
- ensuring the integrity and the originality of evidence and exhibits;
- investigating and processing the crime scene thoroughly and undisturbed;
- co-ordinating and maximising the collection of exhibits;
- optimally utilising the investigation support resources;
- recording the facts and events properly; and
- ensuring that the crime scene remains under police protection for the period determined by the crime scene manager.

1.9.2   Crime scene processing team

According to the SAPS Policy for Crime Scene Management (2015:2), a crime scene processing team is a collective of crime scene experts assigned to assist the crime scene technician with the processing of the crime scene for physical evidence. The crime scene technician is a specially trained member of the Criminal Record Centre (CRC) or Local Criminal Record Centre (LCRC), who takes control of the crime scene processing team (SAPS, 2015:2). In terms of the SAPS Policy of Crime Scene Management (2015:2), the entire crime scene processing team is under the supervision of a Crime Scene Manager who is a specially trained member of the relevant Investigation Unit on the crime scene.

1.9.3   Criminal investigation

Benson, Jones and Horne (2015:19) describe a criminal investigation as a systematically organised thinking, reasoning and analytic process focusing on the examination and search for the truth regarding the commission of all types of crimes or unlawful acts. Furthermore, Hess, Orthmann and LaDue (2016:8) define criminal investigation as the process of discovering, collecting, analysing and presenting evidence in a court of law in order to determine *what* happened and *who* is responsible.

In this research, 'criminal investigation' is understood as being synonymous with 'investigation of crime' and 'crime investigation'. Accordingly, criminal investigations

are conducted by the duly assigned SAPS investigators or detectives operating under the aegis of the DSC. According to the SAPS Policy for the Detective Service (2017:2a), the DSC is responsible for conducting preliminary investigation in all cases reported at a police station.

1.9.4 Evidence

Gardner and Krouskup (2019:5) assert that evidence relates to any object or material that could prove or disprove a fact in contention. In any investigation, the evidence presents itself as either testimonial evidence or physical evidence (Miller & Massey, 2018:3). Each is important, and each plays a role in helping the jury come to a decision of guilt or innocence. Physical evidence refers to any object or material that can be linked to a particular crime (Ogle, 2012:4; Osterburg & Ward, 2010:280).

1.9.5 Informal settlements

Huchzermeyer (2008:1) mentions that definitions of informal settlements in the South African context tend to encompass informal housing, shanty towns, shack-lands, squatter camps and slums. Furthermore, these structures are known locally in terms such as '*mkhukhu*' in places such as Gauteng Province and Northern Province, '*mjondolo*' in KwaZulu-Natal Province, or '*hokke*' (chicken or livestock pens) in Western Cape Province.

Meanwhile, the United Nations (2015a) defines informal settlements as human habitations where inhabitants have no secure tenure in respect of the land or dwelling that they occupy, which may or may not comply with city planning and building regulations. This study adopts both the localised and UN versions of informal settlements as representing the principal sites at which the processing of serious crime scenes by detectives in the Gauteng Province is assessed.

1.10 RESEARCH STRUCTURE

This research study is delineated into the following seven chapters:

Chapter 1: General orientation to the study

This chapter presents, the problem statement, delimitations of the research, the research aim, research objectives and research questions, purpose of the research,

the benefits and significance of the study, the definition of key theoretical concepts, as well as the research structure.

Chapter 2: Methodological framework of the study

The chapter presents the researcher's philosophical worldview, the research approach and design, the study population and sampling, data collection and analysis, trustworthiness of the study; as well as the ethical considerations applied in this study.

Chapter 3: The processing of crime scenes

This chapter basically focuses on the processing of crime scenes and the purpose and objectives thereof, and evidence in its various forms. The chapter further discusses the Locard Exchange Principle, the contamination of evidence and the chain of custody. The chapter concludes with a discussion on the fundamentals of crime scene processing and the application of the crime scene basic activity steps (actions/efforts) during the processing of crime scenes.

Chapter 4: The SAPS National Instruction Guidelines

This chapter focuses on the current SAPS National Instruction guidelines, including functions of detective services within the SAPS at Provincial and local Station levels. This is followed by the SAPS Policy on Crime Scene Management, National Instruction 1 of 2015. The discussion continues with other relevant National Instructions, such as the National Instruction 1 of 2018 (Crime Investigation Service), the National Instruction 3 of 2011 (Registration of Case Dockets on the Crime Administration System (CAS), National Instruction 13 of 2017 (Case Docket Management) and National Instruction 8 of 2017 in respect of exhibit management.

Chapter 5: Informal Settlements in the context of crime scene processing

This chapter basically explores the phenomenon of informal settlements and the effect of infrastructural and environmental conditions on the provision of, and access to basic policing services in informal settlement areas. The Constitution of the Republic of South Africa 1996 (Act No. 108 of 1996), the National Development Plan (2012), and the White Paper on Policing (2016) are referred to in exploration of policing in the context of informal settlements.

Chapter 6: Presentation and interpretation of empirical evidence from individual interviews

The chapter discusses the need for a policy on crime scene processing in informal settlements within the SAPS, training and development in the processing of trio crime scenes; as well as the involvement of detectives and LCRC members in the processing of crime scenes in suburban and informal settlement areas. The chapter further discusses the impact and practical application and adherence to the current SAPS policy on crime scene management, in informal settlements. The chapter concludes with a discussion on the physical barriers and challenges experienced by SAPS personnel when processing trio crime scenes in informal settlements in their effort to adhere to the current SAPS Policy.

Chapter 7: Findings, recommendations and conclusion

The chapter presents the main findings, the researcher's own recommendations, as well as the thematically categorised conclusions emanating from the research findings. To a large extent, the chapter provides a context against which the achievement of the study's objectives could be concluded.

CHAPTER 2: METHODOLOGICAL FRAMEWORK OF THE STUDY

2.1   INTRODUCTION

Birks and Mills (2015:4) and Silverman (2020:54) inform that the methodological framework of the research study is supported by the philosophical viewpoints, principles or paradigms (perspectives or worldviews) adopted by the researcher in order to conduct and implement the various phases, processes, procedures, and choice of the preferred. In that regard, the current chapter presents the methodological framework of the study in terms of the adopted philosophical worldview (paradigm or perspective); the research approach and design; the study population and sampling; the data collection, analysis and interpretation; the trustworthiness of the study; as well as the applicable ethical considerations.

2.2   PHILOSOPHICAL WORLDVIEW OFFERED IN THE STUDY

The philosophical worldview is representative of the researcher's own belief system, values and theoretical assumptions and individual experiences and views of the world that the researcher brings into the research study (Creswell, 2020:6; Leedy & Ormrod, 2019:11). Through their worldviews, researchers should be able to bring two interrelated issues to the study, namely: how we can know the world, and how theories and experience lead to knowledge of the world, reality and phenomena (Anderson, 2015:135; Sutton & Austin, 2015:2).

There are several commonly used and widely discussed philosophical worldviews, such as: the pragmatic worldview, the transformative worldview, the constructivist worldview, as well as the post-positivist worldview (Aurini, Heath & Howells, 2016:21; Creswell, 2020:6). However, the constructivist worldview is discussed below since it was found most relevant and applicable to the current study.

2.2.1   Constructivist worldview

The constructivist worldview (constructivism) is underpinned by the construction or development of knowledge concerning the core issues of the study from the participants' lived experiences and perspectives (Aurini, Heath & Howells 2016:21; Salvador, 2016:5). Constructivism further upholds the multiple perspectives of the reality of knowledge and understanding regarding the phenomenon being investigated

or studied (Salvador, 2016:5). Accordingly, the multiple perspectives of the reality are most adequately expressed from the actual social conditions and circumstances experienced within the ecological surroundings or environment and according to the words, feelings and perceptions of those expressing their first-hand experiences (Greenfield & Greener, 2016:17).

In the context of the current study, the researcher's professional experiences and background as a detective in the SAPS for more than 36 years were critical in understanding the participants' expression and interpretation of their background, perspectives and work-related experiences. To this end, Kale and Jayanth (2019:31) points out that critical researchers do not make an effort to be impartial, but instead believe that they should use their research skills to effect social change. It is in the latter context that the constructivist worldview was deemed appropriate in this research study insofar as facilitating the utilisation of the semi-structured interviews for listening carefully to the participants in their realistic or naturalistic life settings.

The researcher recognised that the interview mode of knowledge generation fulfilled the purpose of making sense and allocating some logic and coherence to the views the participants have about their life and work situations. In this regard, the constructivist worldview is suitable and appropriate to this study, based on its participant-focused construction of knowledge concerning the reality of the investigated problem or phenomenon (David & Thomas, 2018:12). Therefore, the constructivist paradigm was further deemed relevant in the study for its facilitation of meaning-making from the data collected at the site of the research and also addressing the process of interaction among individuals.

2.3   RESEARCH APPROACH AND DESIGN

The study has adopted the qualitative research approach, largely due its adoption of the constructivist philosophical worldview. The research approach and design refer to the blueprint, master plan or strategy preferred by the researcher for the purpose of guiding, structuring, and integrating the philosophical paradigm, the data collection and analysis processes in relation to the research problem and the research questions (Kivunja & Kuyini, 2017:33).

According to David and Thomas (2018:12-13), research approaches relate to the strategies and actions for research that extend the stage from extensive expectations to detailed approaches for data collection, analysis, and interpretation. For Leedy and Ormrod (2019:14), the research design basically provides the overall structure for the procedures that the researcher has applied in respect of the data collection and data analysis.

2.3.1   Qualitative research approach

According to Leavy (2017:26), qualitative research is a systematic and empirically focused strategy or plan for managing all the processes and procedures that have been designed to resolve the research problem, accomplish the study aim and objectives, as well as answering the research. According to Locharoenrat (2017:48), the research approach is a means for describing and attempting to understand the observed regularities in what people do, or in what they report as their experiences. The latter authors ascribe the following attributes, characteristics, and approaches to qualitative research studies:

- A qualitative research approach is used to explore, describe, understand and answer questions about the complex nature of phenomena from the participants' point of view, and may further build theory from the observations made;
- The research process is more holistic and "emergent", with the specific focus, design, data collection methods an interpretation developing. Researchers enter the setting with open minds, prepared to immerse themselves in the complexity of the situation and interact with their participants;
- Qualitative researchers work on the assumption that reality is not easily categorised into discrete, measurable variables. Qualitative researchers may become the research instrument itself because the bulk of data collection depends on their personal involvement in the research setting, where verbal and non-verbal data can be collected from a relatively small number of participants;
- Qualitative research makes considerable use of inductive reasoning in terms of which many specific observations are made, and from which inferences are drawn about larger and more general phenomena. Qualitative research then progresses to a deductive mode after the identification of themes on order to verify or modify the theme with additional data; and

- Qualitative research often constructs interpretive narratives from the data and then try to capture the complexity of a particular phenomenon.

Therefore, the qualitative research approach was adopted insofar as it allowed for the researcher's personal and direct collection of data and first-hand understanding of the sampled individuals' day-to-day experiences regarding the processing of serious crime scenes in informal settlements. Accordingly, the experiences and explanations of the participants who were physically involved in the processing of serious crime scenes provided the richest data required in this study.

2.3.1.1 Case study research design

A case study research design was adopted in this study. A 'case' relates to units, processes, systems, persons, events, situations, phenomena, or objects that are studied individually or collectively through the application of a single method or more over a particular period or timeframe (Machi & McEvoy, 2018:22). According to Fouché *et al.* (2021:302) and Piekkari and Welch (2018:345), the case study strategy is a widely used choice for qualitative researchers due to the participant-focused understanding of the meaning attributed to their life experiences.

On the other hand, Kivunja and Kuyini (2017:37) and Maxwell (2013:3) advise that in qualitative research studies, it is unlikely for researchers to develop a successful case study design in advance and implement it convincingly without the support of the following five main questions: What strategy will be followed? Within what framework? From whom will the data be collected? How will the data be collected? How will the data be analysed? The processing of crime scenes in informal settlements in this study presents a complex and restricted case framework in which the participants, events, systems, and activities (i.e., investigations) and the related Gauteng Province dynamics interact as distinct but interconnected parts or aspects of the research problem and its associated research questions. The population of this research is discussed next.

2.4 STUDY POPULATION

A study population is defined as the total number of possible units, object, individuals, or elements that are included in the study (Gray, 2014:148). According to Dantzker,

Hunter and Quinn (2018:110), the study population is the complete group or class from which specific information is to be gathered in relation to some specific issue/s or aspect/s of the study. Mertens (2015:3) enlighten further that the study population serves as the most critical stakeholder reference point on the basis that they (identified stakeholders) possess the specific characteristics or qualities that are relevant for the resolution of the research problem and achievement of the stated objectives of the study.

The entire population in this research study consisted of SAPS members in Gauteng Province only, numbering 26,858 at the time of the study in 2020 (SAPS, 2020:1a). These members are assigned various tasks and duties in terms of their education, knowledge and experience, and occupy various organisational positions and ranks, such as Captain, Constable, Brigadier, Lieutenant, and others. During May 2017, the National Commissioner of the SAPS identified the top 20 contributing Clusters in respect of trio crimes in South Africa. From these top 20 contributing Clusters, 12 Clusters were in Gauteng Province. The 12 Clusters have 36 Brigadier Police Stations, which are normally bigger stations in comparison to the average police station.

Furthermore, Brigadier Police Stations are situated in the bigger cities and towns, and serve larger citizen populations in those geographic areas. In addition, these stations are generally allocated more physical and infrastructural resources in terms of their police workforce and vehicles than other smaller police stations. This type of station normally has a staff compliment of about 400 police members, with a Brigadier as the Station Commander.

2.4.1   Target population

According to Walliman (2017:47), researchers usually do not study the entire population of interest when the particular population consists of a large group. In such situations, the researcher then targets a representative sub-group that has similar or homogenous characteristics or qualities that are of interest to the researcher and to whom/ which the study results are applied (Tight, 2017:18). For the empirical data collection purposes in this study, there was specific focus on a particular group of participants (i.e., target population) from the larger study population, as shown in Figure 2.1 overleaf.

The targeted population consisted of four sub-groups derived from the general study population. The researcher decided to focus on the top 5 (five) trio contributing Clusters out of 12 Clusters in Gauteng Province. Within the highest 4 (four) contributing trio crime Clusters there are 15 Brigadier stations, of which only nine (9) Brigadier police station precincts included informal settlements. Therefore, the target population in this study was:

- Detectives working at the nine (9) Brigadier Police stations at the top five (5) contributing trio crime Clusters which included informal settlements in their respective policing precincts in the he Gauteng Province;
- Local Criminal Records Centre members who assist these detectives at the nine (9) Brigadier stations to process trio crime scenes due to the fact that the target population will be limited to the nine (9) Brigadier police stations in the top five (5) contributing trio crime Clusters, which include informal settlements in their respective policing precincts in the Gauteng Province;
- A Senior Police official from the Namibian Police; and
- A Senior Police official from the Zambian Police.

Large informal settlements are prevalent in, and around the bigger cities and towns because of their close location to job opportunities (Statistics South Africa, 2018:2). These informal settlements are policed by the Brigadier Police Stations within their respective policing precincts. The sizes of these informal settlements are enormous, and it is always difficult and challenging to control and process serious crime scenes in such areas. The selection of Brigadier Police Stations in Gauteng Province was due to the province's highest number of serious trio crimes and one of the highest numbers of informal settlements in South Africa as reported by the SAPS (2022:64) and Statistics South Africa (2018:1).

2.5   SAMPLING

Sampling is the systematic process of choosing the representative smaller sub-group from a larger identified population since it is not possible to involve the entire population in the study (Bruce, 2015:15). Meanwhile, Burns and Grove (2017:24) assert that sampling is the process of locating those representative or homogenous characteristics of the total population in the same proportions and relationships that

they would be seen if the researcher were in fact to examine the total population. Therefore, sampling is based on the logic that the chosen sub-group provides a sufficient framework for establishing reliable and credible inference for generalisability purposes in relation to the larger study population (Burns & Grove, 2017:24). Furthermore, Bless, Higson-Smith & Sithole (2015:98-99), summarises and describes the main advantages of sampling as follows:

- Cost effective, since the costs of research are proportional to the number of hours spent on data collection; and
- Sampling is a practical way of collecting data when the population is infinite or extremely large, which could render a study and all its relevant elements impossible.

Chauvet (2020:36) and Majid (2018:2) explain that there are two main categories of sampling, namely: probability sampling and non-probability sampling. The probability sampling approach is widely understood in respect of every individual or object in the population of interest having an equal, probable, or certainty chance of being chosen for involvement in the study, while non-probability sampling is used when the researcher lacks a sampling frame for the population in question, or where a probabilistic approach is not deemed to be necessary (Rahl, 2017:1-2).

Examples of probability sampling are simple random sampling, systematic sampling, stratified sampling, disproportionate stratified sampling, and multi-stage cluster sampling; whereas non-probability sampling examples include convenience sampling, voluntary sampling, quota sampling, purposive or judgement sampling, dimensional sampling, and snowball sampling (Burrel, 2017:26; David & Thomas, 2018:17). According to Kumar (2019:86), non-probability sampling strategies or approaches are used when the number of elements in a population is either unknown or cannot be individually identified.

Therefore, the non-probability sampling approach cannot specify or pre-determine the probable inclusion of any of the units of analysis in the sample. Furthermore, the non-probability sampling approach does not enable a pre-determined sample size, but rather waits to reach a point of data saturation during the data collection phase (Kumar, 2019:87). In some instances, some members may not have a chance at all of being

included due to the researcher's criteria for inclusion (Welman, Kruger & Mitchell, 2015:61). In these situations, Kumar (2020:206) argues that the selection of elements is dependent on other considerations in qualitative research, such as "information-rich" participants are purposely selected to provide the data required.

2.5.1 Non-probability purposive/Judgement sample selection

As depicted in Figure 2.1 overleaf, the purposive or judgement sampling strategy was utilised in the selection of all four categories of participants. Bachman and Schutt (2014:119) and Hagan (2014:117) explain that in purposive or judgement sampling, each element or unit in the research is selected for a specific purpose on the basis of the researcher's own judgement in relation to the required criteria that the selected individuals should fulfil. Additionally, the purposive sampling approach enables the "typical" selection of individuals or diverse groups of individuals, such as the four sample categories in this study whose inclusion is appropriate for resolving the research problem (Hagan, 2014:117).

```
                          ┌─────────────────────────────────┐
                          │            SAMPLING             │
                          └─────────────────────────────────┘
```
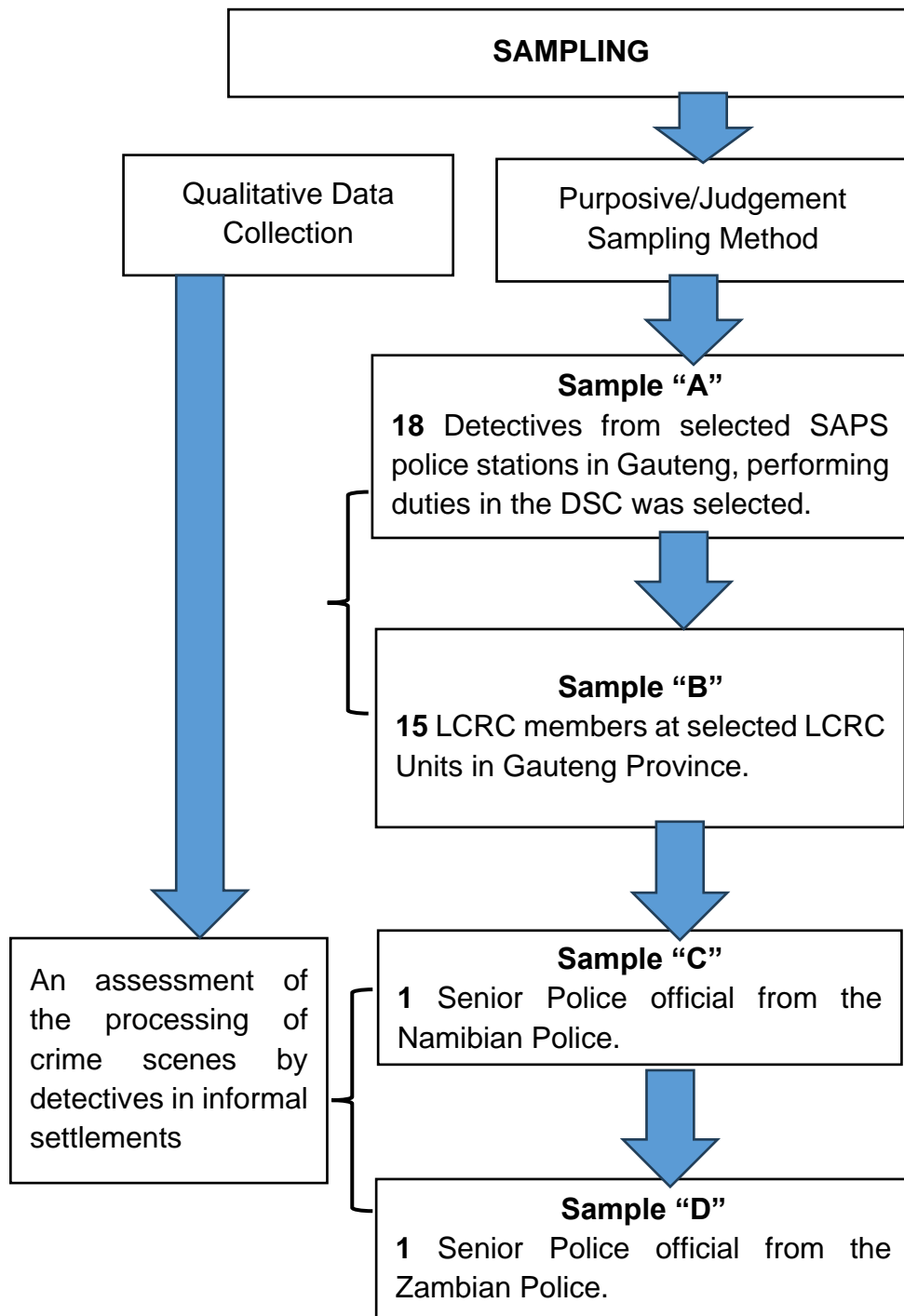
Figure 2.1:   **Schematic representation of types of samples used in this study**

(Source: Compiled by researcher)

The researcher approached and targeted four groups or samples of participants as they were most likely to be in possession of privileged knowledge, experience and information pertinent to the research topic, and which they were willing to share (Kumar, 2020:207). Furthermore, the purposive sampling strategy works on the principle that the researcher already knows something about the specific people or

events, from which he/she selects those that were regarded as the most likely to yield the most valuable data (DePoy & Gitlin, 2016:87).

2.5.1.1 Purposive sampling of detectives

The researcher selected a sample size of 18 detectives from the different DSCs from the 9 (nine) identified Brigadier Police Stations s indicted in Section 2.4.1. The DSC is the new identifying name for the erstwhile "Crime Office". The duties and responsibilities of the DSC members include attending to newly reported crimes, visiting and attending to crime scenes, and appropriating preliminary investigations on the crime scenes. These detectives are normally informed about crime scenes immediately after such a complaint is received by the CSC at the police station. They are mandated to respond immediately to such reported crime scenes.

The researcher sampled these detectives because they participate in the immediate processing of crime scenes in informal settlements. The number of detectives allocated to perform duties at the DSC are prescribed by the SAPS resource allocation guide. Accordingly, each Brigadier Police Station is compelled to deploy a minimum of 12 detectives, which translates into three (3) detectives per four (4) DCS shifts. This further translates into 108 detectives working in the DSC at the nine (9) identified Brigadier police stations. Two (2) detectives were purposively chosen from each Brigadier to form a total sample size of 18 detectives referred to as Sample A.

The selection criteria for the Sample A participants were that they should all have professional and practical experience, expertise and knowledge of two (2) years or more in the investigation of crime generally, and processing of serious crime scenes in informal settlements particularly. In respect of relevant training courses, these detective participants should have completed at least the SAPS basic detective course. The following discussion is based on the selection of the LCRC members.

2.5.1.2 Purposive sampling of LCRC members

The sampled LCRC members in this research (referred to as Sample B) were from the nine (9) Gauteng Province LCRC Units working in different disciplines, such as ballistics, scientific analysis, biology, photography, chemistry, documentation, and fingerprints. These LCRC units normally assist the detectives at police stations in the

processing of serious crime scenes. All other sections that are not relevant to this study were excluded since this study is focused only on serious crime scenes. The number of LCRC Units were limited from nine (9) to only the 4 (four) LCRC Units in Gauteng Province which assist the nine (9) selected Brigadier stations in the processing of serious crime scenes in informal settlements within the top five (5) high contributing Clusters in Gauteng Province.

The researcher then purposively selected 15 LCRC members for this sample group in accordance with the similar selection criteria used for the Sample A participants. Therefore, the Sample B participants ought to have relevant practical experience, knowledge, and expertise as a Crime Scene Technician for two (2) years or more. Their duties involved assisting police stations in the processing of serious crime scenes in informal settlements. In respect of relevant training courses, they should at least have completed the SAPS Basic Crime Scene Management course.

The individual participants were selected from each of the relevant disciplines within the LCRC environment in the processing of serious crime scenes in informal settlements within the LCRC environment in the context of this study. These Sample B participants were requested to identify the specific difficulties they experienced during the processing of serious crime scenes in informal settlements. The individual members were selected from each of the relevant disciplines, namely: ballistics, scientific analysis, biology, photography, and fingerprints. The following section discusses the purposive sample selection of the 2 (two) international detective officers.

2.5.2   Purposive sample selection of International senior detective officers

The researcher used the purposive sampling strategy for the selection of the 2 (two) international participants. One was from the Namibian Police (known as Sample C), and another Zambian Police official (known as Sample D). The researcher sent formal letters of request to each of the selected countries (i.e., Namibia and Zambia) for details of each selected senior officer who executed the same, or similar duties and responsibilities as those of a Detective Commander in their respective countries with the same or similar crime scene processing difficulties or challenges in informal settlements.

2.6   DATA COLLECTION

Data gathering is the systematic process of searching, locating, recognising, and processing appropriate multiple scholarship perspectives from both secondary and primary sources in order to address the research problem, the research aim, objectives and questions, as well as the instruments used for gathering such data (Leedy & Ormrod, 2019:86). Secondary data are the raw information sources that have previously been generated and produced by someone else previously (Babbie, 2017:28). Data collected by other researchers are often used to address new research questions, and have become a gradually valuable tool available for studies in the same research field (Maxfield & Babbie, 2017:28-29).

Numerous criminal justice researchers have reviewed data generated by others in order to reduce the prohibitive cost of collecting original data while secondary sources were readily available (Babbie, 2017:29). Most notably, the secondary data sources are largely theoretical, and obtainable from academic books, original research articles published in peer reviewed and accredited scientific journals, published and unpublished dissertations and theses, conference papers, as well as search engines and databases (Adhabi & Anozie, 2017:88). Other secondary sources included SAPS training manuals, the Unisa Online Library, Unisa Tutorial Letters, as well as statutory legislations and law reports from online sources for more insight into the subject of the processing of crime scenes in informal settlements and other subject related concepts.

Despite their immediate availability, the secondary data sources are viewed as providing information whose validity could become problematic. On that note, the researcher might collect secondary data for a particular study, without the assurance that such data was relevant to another researcher who engaged in a similar study (Varpio, Paradis, Uijtdehaage & Young, 2020:989).

Primary data on the other hand, is largely empirical and provide a practical human-centric perspective of the required evidence in relation to the problem of the study (Marshall & Rossman, 2016:141). As opposed to the review of (literature-based) secondary sources, the researcher himself/herself is responsible for the design of the study, its data acquisition, analysis, interpretation and reporting in the case of primary sources of relevant data and information (Adhabi & Anozie, 2017:89). In the latter

regard, the process of acquiring primary data is consistent with the constructivist philosophical worldview in terms of which human beings are the most reliable sources of their actual, lived social reality and experience in their realistic or practical life and work environments. Such reality is expressed from their subjective perspectives, perceptions, emotions and words as the foundational source of knowledge sought by the study or researcher (Burrel, 2017:34).

As such, the researcher pursued the primary data process (as opposed to the literature-based secondary data trajectory) by being personally in contact with the participants during the in-depth interviews. To that effect, Varpio *et al.* (2020:990), assert that the in-depth interviews are themselves the best practical method of primary data collection, due to the researcher's physical presence at the research site/s during his scheduled interactions with the participants. For the purpose of this study, the researcher opted for a triangulated approach to data collection, according to which both secondary and primary data sources were integrated into a single study (Burrel, 2017:35).

The secondary data was acquired through the review of literature and documentary sources, while the interview mode of enquiry provided the seminal framework for the primary data. The researcher's personal experience was also helpful in collecting information concerning the processing of crime scenes in the Gauteng Province informal settlements. It is worth stating that these different data collection strategies were neither randomly nor haphazardly applied in the study. Rather, the data triangulation approach was influenced and guided by both the research problem and core questions of this research investigation. The following discussion is based on the literature that was reviewed in this study.

2.6.1   Literature review

Literature review is the systematic process of critically evaluating and applying the relevant information from secondary material or sources in order to ensure that the study being undertaken is rooted in the existing body of knowledge and the discipline within which the study is conducted (Fouché et al., 2021:93-94). In the view of Tight (2019:11), the review of literature is also helpful to the researcher with regard to the comparison of the results in the existing body of literature with the current study being

undertaken. Du Plooy-Cilliers, Davis and Bezuidenhout (2014:101), explain that the purpose of a literature review is to place the research study at hand into perspective, to determine what other scholars have written on the topic, as well as to identify the main models and theories that are relevant to the current study being conducted. Du Plooy-Cilliers et al. (2014:101), further inform that the purpose of a literature review could be understood as the discovering what is previously known and not known about the research topic.

In the view of Gray (2019:54), the literature review serves the following purposes:

- To prove the key theories, arguments and controversies in the field;
- To highlight the way in which the research area has been investigated to date; and
- To recognise inconsistencies and gaps in the knowledge that are worthy of further investigation.

Furthermore, the literature review enables the researcher's reassessment of what other scholars have done in areas that are similar, though not necessarily identical to his/her own study (Leedy & Ormrod, 2019:51). The literature review was conducted by the researcher, using the following summarised steps suggested by Creswell (2018:81):

- The research topic was determined, studied and analysed in order to find similar literature on the research problem. The researcher identified the key concepts, namely crime scene processing, crime scene manager, investigating official, crime scene processing team, crime scene technician, crime, crime scene, criminal investigation, detective/investigator, informal settlement in an attempt to find literature on the topic and research questions in the study;
- The separate concepts of the topic, as well as the key words of the research questions were used to search the computerised database of the University of South Africa (Unisa) library for journals, books, research reports, short dissertations, dissertations and theses related to the topic. In addition, the researcher requested a literature search to be conducted by the Unisa Subject Librarian;
- The researcher searched the online computerised databases of the Unisa library website that were most frequently reviewed by social science researchers, such as

Google Scholar, ProQuest, the Social Science Citation Index, and others. The internet was used through "search topics/words" in order to find material relating to this research; and

- The researcher browsed through the relevant literature obtained, which was copied for further study. During this process, the researcher continuously strived to establish whether the obtained literature made a useful contribution to the research study under review.

There were sufficient literature sources available for this study. Mostly, these sources were authored by experienced practitioners and experts in the field of crime scene processing. Throughout the process of identifying, comparing and applying relevant literature, the researcher compiled a literature map in order to provide a visual picture that illustrated how the researcher's study fits into the larger body of the literature concerning the processing of crime scenes generally, and informal settlements in particular. Summaries were subsequently compiled and integrated together into the relevant chapters of the study and referenced accordingly in the list of references by the researcher.

It is worth noting that a detailed literature study was conducted even during the actual study for the purpose of finding more sources, which was also helpful to the researcher insofar as making comparisons of similarities and dissimilarities between the results in the existing literature and those of the current study (Efron & Ravid, 2019:31; Wagner, Kawulich & Garner, 2019:215). In this regard, the researcher helps to support existing knowledge about the processing of serious crime scenes in informal settlements and to highlight innovative ideas and information accordingly. Overall, the reviewed literature highlighted the negative consequences that the improper processing of crime scenes has on the criminal justice process and the reputation of law enforcement to a larger extent. The following discussion relates to documentary sources accessed in the context of this study.

2.6.1.1 Documentary sources

Documentary sources are a type of secondary information of written accounts in copies or documents created by someone else, in addition to the review of more academically and intellectually minded literature (Hawkins, 2018:11). Examples of

documentary sources include: letters, memos, diaries, and public documents such as legislation and official government policy documents (Hawkins, 2018:13). The review of document sources was supplemented by the concurrent review of literature-based scholarship concerning the processing of serious crime scenes by detectives in informal settlements (Adhabi & Anozie, 2017:88; Engelland, 2020:26).

Creswell and Creswell (2017:187) make a distinction between public documents such as government publications, procedural documents such as minutes of meetings, and personal documents such as diaries. Accordingly, official or non-personal documents are those that are compiled and maintained on a continuous basis by large organisations such as government institutions (Creswell & Creswell, 2017:187). Such documents are more formal and structured than personal documents, which include minutes and agendas of meetings, inter-office memos, financial records, government records, statistical reports, annual reports, political speeches and process records. The accessibility of official documents is often problematic due to legislation concerning their confidentiality and privacy dictates, aspects which researchers should always keep in mind (Faulkner & Faulkner, 2019:17).

Additional to the consulted literature-based secondary sources, the researcher consulted a variety of official policy documents and legal prescripts that further clarified on practices regulations concerning the processing of serious crime scenes. As such, the research study relied primarily on documentary sources and evidence from the following key sources, which are essential policies and legislative instruments:

- The SAPS Act (No. 68 of 1995), for the mandate of the police and training;
- The White Paper of 2016 on Policing;
- The SAPS National Crime Statistics for the periods 2011/2012 to 2020/2021;
- The SAPS National Instruction 3 of 2011 on the Registration of Case Dockets and the Crime Administration System (CAS);
- The SAPS National Instruction 1 of 2015 Policy on Crime Scene Management;
- The SAPS National Instruction 8 of 2017 on Property and Exhibit Management;
- The SAPS National Instruction 12 of 2017 the functioning of Detective Service Nationally;
- The SAPS National Instruction 13 of 2017 Case Docket Management; and

- The SAPS National Instruction 1 of 2018 on the Crime Investigation Service Nationally.

All of the relevant SAPS National Instruction policy documents cited above are currently implemented and relevant in the investigation of crime generally, and the processing of serious crime scenes in Gauteng Province informal settlements. Given the nature of the processing of serious crime scenes, certain records and cases were classified, while others were made public. The following section presents a discussion on the interview as a mode of secondary data collection in this study.

2.6.2   The Semi-structure interview and its administration

Generally, interviews are an encapsulation of the interaction (dialogue, conversations or discourses) between the researcher (interviewer) and the participants (interviewee) in which the interviewer poses specific questions to the interviewee in order to obtain recognisable answers to the specific questions (Dantzker et al., 2018:126). According to Geyer (in Fouché et al., 2021:355), the interview mode of enquiry is arguably the most widely used data collection method in qualitative research, through which the interviewer directly obtains first-hand verbal responses or information that is descriptively rich and authentic. It is also worth noting that interviews could be formal (structured), informal (unstructured), or less formal (semi-structured) (Dantzker et al., 2018:126).

Also, interviews could be implemented directly with the researcher or interviewer being physically present, face-to-face or one-on-one with the interviewee/s at the site of research (Doody & Bailey, 2016:19-20). Where circumstances do not permit, interviews could be conducted indirectly without the researcher's or interviewer's personal or physical present at the research site. Such situations would then necessitate, email, online, telephonic and other digital or electronic platforms such as Teams, Zoom or WhatsApp for individual or group engagements. Overall, interviews in qualitative research studies are credited for the following attributes or advantages as mentioned by Ferraro (2015:37) and Geyer (in Fouché et al., 2021:355):

- It allows the researcher to control the line of questioning;
- The participants can provide historical background of the occurrence; and
- It is useful when the participants cannot be observed directly.

2.6.2.1 In-depth semi-structured interviews

The in-depth semi-structured mode of interviews was adopted in this study. The "in-depth" aspect implies that the interviews were comprehensive and addressed the most pertinent issues in respect of the research topic and its critically associated research variables (Ellis, 2016:104). The semi-structured (less structured) aspect of these interviews implies that they were conducted in an unrestricted manner and within a cordial environment in order to allow for the spontaneous elicitation of information and responses from the participants to the point of saturation (Cassell, 2015:47; Ferraro, 2015:37-38).

Marshall and Rossman (2016:150) also attest that in-depth semi-structured interviews cover a wide range of relevant research contexts, with the interviewer posing a series of questions contained in an interview guide but is also able to vary the sequence of questions. Ellis (2016:104) and Marshall and Rossman (2016:150) explain further that in an in-depth semi-structured interview, the researcher may supplement the standard questions by adding one or more individually tailored questions to obtain clarification or probe the interviewee's reasoning regarding the pertinent aspects of the study.

Prior to the actual implementation of the in-depth semi-structured interviews, the researcher conducted a pretesting or piloting of the in-depth semi-structured interview as the preferred research instrument. The fundamental purpose of the pre-test interview instrument was to evaluate the preliminary interview questions prior to their implementation in the actual or final study (Ferraro, 2015:17). As such, the pretesting of the interview questions was conducted with 5 (five) participants who did not form part of the final study in order to determine whether the questions were appropriate for the study's purpose (Hawkins, 2018:498).

The outcomes of the pre-test yielded that the interview questions were appropriate to the study, and were feasible to be understood and answered by the selected participants in the study. Finally, the researcher compiled a semi-structured interview schedule (see Annexure C, D and E) with predetermined questions for three different samples (see Section 2.5) to guide the researcher through the in-depth interviews. Geyer (2021:358) informs that an interview guide and its predetermined questions is helpful in directing the researcher to conduct the interview procedurally and

systematically, although flexibility is maintained in terms of follow-up questions and the sequence in which questions are asked Geyer (2021:358).

The researcher conducted the in-depth interviews with the Sample A and Sample B participants in person, while the interviews with international participants (i.e., Sample C and Sample D) were conducted online. All in-depth interviews were conducted before the period of the 2019 COVID-19 epidemic. Therefore, the University of South Africa's (UNISA) COVID-19 risk-adjusted strategies limiting direct researcher-participant interaction were not applicable. Separate interview schedules were designed for each category of participant samples. This ensured that the questions were focused on only the applicable aspects pertinent to these three groups of participants.

The interview questions were fundamentally focused on exploring the participants' understanding concerning the processing of serious crime scenes in informal settlements. These interviews were also conducted to shed light on the specific complexity and difficulties SAPS members encountered during the processing of serious crime scenes in informal settlements. Furthermore, the international participants were requested to identify the shortcomings and difficulties they experienced in their countries regarding the processing of serious crime scenes in informal settlements. The answers of the participants were recorded in writing. Through a qualitative approach the researcher was able to describe and explain the procedures followed by the various role players involved in processing serious crime scenes in informal settlements.

The participants explained the physical hindrances, difficulties and challenges they encountered when processing serious crime scenes in informal settlements. This information from the participants gave the researcher first-hand information about the situation under investigation. The experiences and explanations of the participants, who were physically involved in the processing of serious crime scenes thus, provided the richest data for this study. The following discussion relates to the researcher's personal experience.

2.6.3   Personal experience

In essence, personal experience relates to the extent of the researcher's own professional and work-related history constitutes an integral part of evidence-based practice and data collection for improving organisational performance and empowering those for whom and with whom the research is conducted (Millard, 2019:1; Wilkinson, 2019:10). As a relevant factor in data gathering, the researcher's personal experience advances the goal of resolving the study topic (Creswell, 2014:116). However, researchers are cautioned against using their professional influence and positions to conduct and direct research for purposes that are unrelated to the scientific endeavour of resolving problematic issues in a methodical, open, and honest way (Mertens, 2015:5; Patton, 2015:27).

The researcher has worked as a Detective Investigator in the SAPS since 1987, as a supervisor and manager since 1992, and as a Senior Manager since 2016 in the Detective Service environment. During this period, the researcher underwent several training and developmental courses in criminal investigation presented by the SAPS in conjunction with other learning institutions. These courses enhanced the researcher's knowledge and skills concerning the investigation of crime. In addition, the researcher enhanced his knowledge and skills through further tertiary studies and subsequently obtained a National Diploma in Police Administration in 1992, a Higher Diploma in Policing in 1997, and the M-Tech degree in Forensic Investigations in 2009.

The researchers' duties and responsibilities as a supervisor and manager included the management of crime investigation activities at station- cluster-, provincial- and national-levels. While working as a Detective in various positions between 2015 and 2021, the researcher noticed a constant increase in crime generally, and serious crime (trio crime) in particular, as well as inconsistent law enforcement measures to combat the problem.

In addition, the researcher realised that the detectives did not process serious crime scenes in informal settlements accurately and in accordance with the prescribed SAPS policy on crime scene management. The researcher further noticed and observed that there was a difference in the processing of serious crime scenes by detectives in suburban policing areas and in informal settlement areas. Therefore, the researcher's

own personal observations and professional experience were relevant factors in the compilation of pertinent information concerning the main issues of the study.

2.7   DATA ANALYSIS

Creswell (2018:178) explains that it is vital that classified data be subjected to conclusions made during data collection and analysed. According to Burns and Grove (2017:27), data analysis in qualitative research consists of organising/arranging and categorising or condensing data according to their various patterns of occurrence. For Denscombe (2014:322) and Flick (2018:370), data analysis refers to the process of organising, separating and classifying data into its composite parts. The process of analysing data is premised on the view of data as depicting empirical facts, which are scores about a number of questions, written comments and records of the actual state of some measurable features of the universe. In that regard, Brynard, Hanekom and Brynard (2014:68) explain that the fundamental idea is that a researcher should not just agree with the opinions of other authors as being accurate and valid, but should interrogate, examine, understand and restate the views of others.

Thematic data analysis was predominantly applied in this study. Accordingly, the data collected through the interviews were analysed in conjunction with all the data gained through the reviewed literature.

2.7.1   Thematic data analysis

Thematic data analysis pertains to the categorisation and conversion of the accumulated data and information according to the frequency or regularity of its emerging patterns (Bengtsson, 2016:314). In the case of this study, the in-depth semi-structured interview statements or responses from the four sampled categories of participants were categorised and classified (coded) into themes or frequently/ regularly emerging patterns of statements/ responses. In this study, thematic analysis involved the coding of participants and their responses in order to anonymise both the data (participant responses) and its source (participant).

Additionally, content analysis was also applied, in terms of which reliable comparisons and inferences are made, particularly from literature and documentary sources (Luo, 2019:1). Creswell (2020:197) explains that the thematic approach essentially involves

the categorisation and translation of the content of what has been read according to the most often occurring patterns of data and information. The researcher reviewed the content of collected literature sources, documentary sources, interviews and personal experience in the context of the proposed study, identifying the most prevalent characteristics in relation to both the research problem and the study's goal. Relevant phrases were underlined, and conclusions were drawn based on the data from the in-depth interviews (Creswell, 2020:197).

In writing-up the report, the researcher applied an integrated approach according to which data from literature, documentary sources, interviews and personal experience was integrated for better understanding of the problems that detectives experienced during the processing of serious crime scenes in informal settlements. The researcher then organised both the secondary and primary data into thematic categories that related to each other, also considering the variations and nuances in meanings (Morgan, 2022:65). The information was integrated and summarised to present an accurate, detailed and appropriate interpretation of the research findings. The researcher further verified all the transcribed data for any possible errors during the transcription, while the codes were cross-checked during the process of verification.

All the 18 Sample "A" participants (detectives based at the DSC at the 9 (nine) selected police stations), were selected according to the criteria discussed in Section 2.5.2. Based on the interviews conducted with these Sample "A" participants, their background information indicated that 3 (three) participants were in their respective positions for less than 3 (three) years but more than 2 (two) years as required by the set criteria. Meanwhile, 4 (four) participants were in their positions for almost 5 (five) years, and 7 (seven) participants held their respective positions for more than 6 (six) years, 4 (four) participants were in the position for more than 7 (seven) years. All of the above participants were in the detective environment and responsible for the investigation of crime under the command of the Detective Service Centre Commander (DSCC) at the police station in that policing precinct.

Additionally, all of the participants in Sample "A" possess a Senior Certificate (Grade 12) as this is a basic recruitment prerequisite for enlistment in the SAPS. Two of these participants in Sample A obtained a Diplomas, and one of the two also obtained a Bachelor's degree in Policing. Sixteen of these participants hold no formal tertiary

qualification. The participants underwent various crime investigation detective related training courses such as detective courses, basic orientation detective courses, crime scene management and first respondent's course. When asked whether they ever received any training in crime scene management, all the participants affirmatively. As a result of their Police experience in the SAPS and current duties in the investigation of crime at the DSC, most of the participants were familiar with their duties and responsibilities. These participants knew and understood their duties and responsibilities.

All participants in Sample "B" were selected according to the set criteria that were discussed under Section 2.5.3. The background information gathered from the 15 Sample "B" participants (from the 4 (four) selected LCRC Units, namely: Diepsloot, Germiston, Johannesburg and Kempton Park), showed that 13 participants responded positively and confidently to all questions. Meanwhile, two participants cautiously answered the questions. Three (3) participants had been in their current positions for a period of 2 (two) years as required by the set criteria, while 5 (five) participants were in their current positions for between 3 (three) and 5 (five) years. Meanwhile, 7 (seven) participants were in their current positions for more than 5 (five) years. The background information of the Sample "B" participants further showed that they responded positively and confidently to all the interview questions.

In addition, 2 (two) participants were in their respective positions for less than 5 (five) years, while 5 (five) participants were in their respective positions for 7 (seven) years and 6 (six) held their positions for more than 10 years. Meanwhile, the other 2 (two) participants had more than 16 years' work experience in their respective positions. All of the participants in Sample "B" possess a Senior Certificate (Grade 12) as this is recruitment prerequisite for enlistment in the SAPS. Three participants are in possession of a Master's Degree, B-Tech Degree and Bachelor's Degree respectively. Moreover, three (3) participants had Diplomas, and the remaining participants have no tertiary qualification.

All the Sample "B" participants attended the relevant SAPS training courses for members attached to LCRC Units, such as advance crime scene courses, crime scene examiner courses, collection of evidence courses, DNA evidence courses, forensic biology courses, fingerprint courses, and trace evidence courses. As result of their

Police experience and current duties in the in the processing of crime scenes, most of the participants are familiar with their duties and responsibilities. These participants know and understand their duties and responsibilities.

The only (1) Sample "C" participant was selected according to the criteria outlined in Section 2.5.4. The background information of this only (1) Sample "C" participant showed that he could answer the questions positively and with certainty. This experienced police official has been in his position for 29 years. The participant is a Deputy Police Commissioner in his country and is currently heading the Division, Scene of Crime for the past 17 years. He was involved in the investigation of crime for the past 23 years. The participant is in possession of a Bachelor's degree, and further attended the relevant training courses for members attached to his country's Police. These courses included criminal investigation, scene of crime, crime scene management, advanced fingerprints, and dactyloscopy and ballistics course. As a result of his experience in his country's Police force and current duties in the in the processing of crime scenes, the participant is conversant with his duties and responsibilities. The participant knows and understands what is expected from subordinates and junior colleagues in respect of holding them accountable on the processing of crime scenes.

The only (one) participant in Sample "D" was selected according to the criteria outlined in Section 2.5.4. The background information gathered from this participant showed he could answer the questions positively and confidently. Furthermore, he has been an informed and experienced police official for 27 years. He is a Deputy Police Commissioner in his country and is currently heading the Division, Head Quarters Command for 2 (two) months at the time of conducting this study. In addition, the participant was operational in the investigation of crime environment for the past 13 years. The participant was in possession of a Master's degree and had attended the relevant training courses for members attached to his country's Police. These courses include the Police senior managers course, middle managements course, investigators commanders' course, basic investigation course, intermediate investigation course, and the advanced investigation course.

The participant's professional experience in his country's police force include his familiarity with the processing of crime scenes. He also knows and understands what

is expected from his junior colleagues in respect of holding them accountable on the processing of crime scenes.

Based on the interviews conducted with Sample "A, B, C and D" participants, the background information collected from the participants indicates that most participants were males, with 45.71% aged 34-45 years. The majority participants were male, aged 34-45, with varying working experience, with 18 out of 35 participants having 10-15 years and 5 having 7-9 years. The minimum experience was 7-9 years for 5 participants. Based on the interviews conducted with 18, Sample "A" detective participants, the background information collected from the participants indicates that 3 (three) participants were in their respective positions for less than 3 (three) years, but more than 2 (two) years as required by the set criteria.

2.7.2   Training and involvement in the processing of serious crime scenes

The information collected during the interviews with participants from Sample "A, B, C and D", indicate that the participants received adequate formal and on-the-job training, for crime scene investigation and processing in informal settlement areas. The participants adhered to SAPS requirements for effective processing of crime scenes. The following discussion relates to the interpretation of the analysed data.

2.8   DATA INTERPRETATION

Morgan (2022:70-71) affirms that data interpretation relates to the post-analysis stage in which the data is allocated relevance, or meaningfulness or significance in relation to both the secondary (literature-based) and primary (empirical/participant-focused) contexts of the study. Kelly (2016:326) defines interpretation of data as the process in which a researcher draws connotations from the examined data as the foundation for drawing appropriate conclusions.

According to Leedy and Ormrod (2019:344), data interpretation drives the decisions regarding data collection. Such decisions emanate from the researcher's allocation of significance to the study based on the techniques and viewpoints used and implemented during the data analysis stage (Walliman, 2017:268). The understanding of data is normally captured in the very last stage of the research process, during

which the researcher is able to verify the significance of the interview questions and the reaction to the prominent issues of concern emphasised in the research problem (Welman et al., 2015:241).

Following the collection and analysis of the primary data in particular, the researcher then allocated relevance and meaningfulness of this specific data set in conjunction with the literature review, the research problem, as well as the aim and objectives of the study (Kelly, 2016:326). Therefore, whereas the data analysis is largely focused on the empirically derived evidence of the participants, the interpretation of the self-same data implies an inclusive or integrated approach encompassing the literature perspectives relating to the problem and major issues of the study (Kelly, 2016:326). It is on the basis of the latter (interpretation-oriented) approach that the worth and value of the study are also established.

The principal themes and their associated variables enabled the researcher's interpretation by comparing and contrasting the interview-based evidence with the scholarship perspectives obtained during the researcher's review of the available literature concerning the research study or research topic (Creswell, 2020:178; Noon, 2018:77-78). Most importantly, it is worth noting that it is on the basis of the interpretation of data that the participants' perspectives could be either proved or disproved, corroborated or refuted. The trustworthiness of the study and its findings is discussed in the following section.

2.9   TRUSTWORTHINESS OF STUDY

Trustworthiness in qualitative research relates to the extent to which the study and its findings could be believed or relied on due to the quality and scientific integrity of such findings (Du Plooy-Cilliers et al., 2014:258; Korstjens & Moser, 2018:121). The aim of qualitative research is to promote knowledge of a specific occurrence within a specific context, and not to generalise; therefore, standard concepts such as validity and reliability in qualitative research cannot be used as trustworthiness measures in qualitative research (Du Plooy-Cilliers et al., 2014:258). This can be ascribed to the fact that participants' answers in this regard are not objectively measurable as they are based on the subjective experiences of the individuals concerned. The

trustworthiness issues in this study were addressed by means of the credibility, dependability, transferability, and confirmability measures.

2.9.1   Credibility

According to Du Plooy-Cilliers et al. (2014:258) and Leedy and Ormrod (2019:104), credibility relates to the accuracy with which the researcher understands the data that was provided by the participants. According to Creswell (2018:201), credibility is one of the strengths of qualitative research and is based on establishing the correctness of the findings from the viewpoint of the participants and the readers of the study. Liamputtong (2013:28-30) and Creswell (2018:201-202) concur that credibility is ensured by means of the researcher's triangulation of multiple data sources and data collection methods; prolonged engagement; as well as clarification of researcher bias with the researcher's constant reflected on his personal subjectivity.

The researcher used multiple data collection methods (i.e., interviews, literature, documentary sources and own experience) to enhance credibility of the study (Wagner et al., 2012:138). The researcher further ensured that the collected data addressed the research problem, the research aim, and the research objectives. During the data analysis, the researcher also compared sets of data for similarities and provided evidence for making judgement about these similarities (Glensne, 2011:49).

Prolonged engagement was applied with the researcher spending extended periods of time with the participants in order to gain better understanding of their life circumstances and environment regarding the problem under investigation. Through his professional background and training, the researcher familiarised himself with the research site and has over the years developed an in-depth understanding of the phenomena under investigation. Against this background, the researcher was able to develop trust with the 33 locally based participants. This made it very possible to engage with them for follow-up after the interviews to verify that their responses were correctly captured in the transcripts. This was undertaken until the finalisation of the research report.

2.9.2 Dependability

In qualitative research, the concept of reliability is interpreted as dependability, and implies that another researcher would expect to obtain the same results if they conducted their own research in a similar manner as the original study (Mertens, 2015:13). This also implies that the initial researcher would expect to obtain same results if they undertook the same study again with the same participants (Mertens, 2015:13). Du Plooy-Cilliers, Davis, & Bezuidenhout (2013:259), reasons that dependability describes the quality of the process of integration that took place between the data collection methods, data analysis and theory created from the data. The dependability of the study was achieved by means of the following steps:

- The researcher used the interview schedule as an instrument to gather data from the field. The interview questions were formulated in a way that they addressed the stated research questions, aim and objectives. The same questions were asked to all participants to ensure constancy and uniformity;
- The researcher formulated a list of questions deriving from the research problem, the research aim, and the research objectives. The interview guide was submitted to the researcher's supervisor for evaluation and remarks as proposed by Creswell (2018:202). The proposed revisions were incorporated and served the purpose of directing the interviews;
- All the responses were recorded and can be accessed for external audit and validation. The target population were drawn from individuals who daily work with the issue under investigation; and
- The researcher ensured that the interview questions did not deviate from what they were supposed to represent.

2.9.3 Transferability

Transferability refers to the extent to which the findings of a study can be applied to other settings (Lichtman, 2014:387). According to Gray (2019:182-183) refer to transferability/generalisability in qualitative research as equivalent to external validity in quantitative research. The main purpose of transferability is to allocate a measure of generalisability or applicability of the findings of the original study to another context with different participants. According to Aurini et al. (2016:24), the audit trail is the most viable approach to the aspect of transferability, given that qualitative studies are not

necessarily intended for generalisability or transferability. The researcher audited all the stages of the research process to ensure that detailed documentation was available for interested researchers (Aurini et al., 2016:24).

2.9.4   Confirmability

Confirmability refers to the degree to which results could be confirmed or corroborated by others who were not directly involved in the original study's undertaking (Babbie, 2017:33; Faulkner & Faulkner, 2019:27). Confirmability is also intended to allocate a measure of objective assessment of the entire research process in order to ensure that there is agreement between the findings and conclusions reached (Noon, 2018:81).

The researcher consulted an experienced research methodology practitioner to check the appropriateness of the current study's methodological processes and their compatibility with the findings and conclusions reached. The researcher also consulted a senior SAPS officer with postgraduate experience to check the subject matter relevance of the entire study.

2.10   ETHICAL CONSIDERATIONS

Ethical considerations are a set of procedures that have become a fundamental part of any research and serve to assist the community of researchers to conduct themselves professionally and ethically in their interactions with their research participants (Varpio et al., 2020:993). In that regard, the complied with the internal ethical review policy of the University of South Africa which emphasises the need for researchers to obtain ethical clearance prior to undertaking their research studies (UNISA, 2016:9-10). Without such clearance or approval, there is no study to be undertaken. The researcher wrote formal request letters to the Ethics Committee requesting ethical clearance. The approval letter from the Unisa Ethics Committee was issued and formally allows the researcher to undertake the research (see Annexure A). Written permission to conduct research was subsequently acquired from the SAPS research department before the research was conducted (see Annexure B). Annexure C depicts the informed consent form, which was sent to the participants following the SAPS' granting of approval for the study to be conducted.

The key ethical considerations in this study were voluntary and informed consent, the right to privacy, confidentiality and anonymity, protection of participants from harm, and honesty with professional colleagues. These are discussed hereafter.

2.10.1 Voluntary and informed consent

Research participants are entitled to the right to volunteer their involvement and fully realise the effect of their rights and obligations (Burrel, 2017:21). The participants were informed in full regarding the nature and aims of the study. The participants were allowed to agree or refuse participation, and were also at liberty to cease their participation at any particular time (Beins, 2013:38). Procedures were taken to ensure understanding of the study and agreeing to be involved by signing of an informed consent form.

2.10.2 Measure to ensure privacy, confidentiality and anonymity

Research ethics obligate researchers to implement methods and measures to protect participants' identities and strictly guarantee their confidentiality against unnecessary exposure (Denzin & Lincoln, 2011:66). The researcher consistently upheld the right of the participants to privacy, and did not disclose their names publicly. The researcher ensured further that the participants' responses were not traceable back to specific individuals who participated in the study.

Babbie (2017:52) explains that confidentiality is a state of affairs according to which participants' privacy and personal information are protected. The researcher ensured the confidentiality of the participants by keeping their consent forms and transcripts safely stored in a combination locked vault only accessed by the researcher. The names of the participants were not revealed in order to safeguard them against exposure to any bodily or emotional harm that may originate from outward situations.

According to Israel (2015:22), anonymity refers to the state of keeping the participants' identity 'unknown'. This was accomplished by allocating numerical values to the participants throughout the study and in the final report as a protection of participants' anonymity.

2.10.3 Protection of participants from harm

The threat of harm for the participants is a course of concern in any research study (Leavy, 2022:17). Accordingly, the researcher was sensitive to the participants' potential course of discomfort by excluding questions that could be 'difficult' to answer by causing emotional and/or psychological unease. The researcher treated all participants fairly and equally, regardless of either age, race, gender, ethnicity, religious beliefs, language, social or economic standing. In addition, the researcher ensured that the face-to-face interviews were held in safe and tranquil premises free from any possible disruptions and interruptions.

2.10.4 Honesty with professional colleagues

Upholding honesty with professional colleagues is an indication of the researcher's respect of, and adherence to the ethical respect of the academic work of others and the integrity with which credit is acknowledged of such works (Israel, 2015:19). Accordingly, the researcher ensured that any reference to both published and unpublished works and ideas were acknowledged appropriately by means of a declaration page and list of references in the thesis document itself.

The participants' verbatim responses and statements were not omitted, but duly acknowledged with the use of anonymised pseudonyms. Additionally, the study was subjected to a confirmability process for the honest views and professional perspectives of knowledgeable individuals in the research field.

2.11 SUMMARY

The methodological framework of the study provided the abstract or theoretical premises for the actual data acquisition, analysis and interpretation processes of the study. The philosophical worldview underpinned the study's methodological framework and also situated or contextualised the research design and approach, as well as the involvement of participants through the non-probability sampling procedures. The trustworthiness measures were important in providing a framework to ensure that the collected data would yield scientifically credible and dependable findings.

This chapter also presented a framework of the ethical considerations applicable to this research study. These considerations emphasise the fact that the study is not only concerned with its academic or intellectual pursuits, but also highlighted the importance of morality in research studies.

The next chapter focuses entirely on the processing of crime scenes. Such focus is fundamentally integral to the core tenet of the research topic itself.

CHAPTER 3: THE PROCESSING OF CRIME SCENES

3.1   INTRODUCTION

SAPS may have unintentionally hampered investigations into the murder of Orlando Pirates and Bafana Bafana soccer captain Senzo Meyiwa. Sergeant Patrick Mthethwa, a state witness in the Meyiwa murder case, revealed that the crime scene was left open for tampering after police failed to secure it. During cross-examination, by defence counsel Zandile Mshololo, it was revealed that the crime scene in Vosloorus, where Meyiwa was killed, was left abandoned (City Press, 11 September, 2022:3).

Both criminal investigation and the processing of crime scenes have proved to be a demanding task for the SAPS, with serious aftermaths on the way in which investigations are conducted generally (Monckton-Smith, Adams, Hart & Webb, 2013:1). In the context of this study, the above-cited headline demonstrates the extent of crime scene processing problems.

The SAPS are mandated in terms of Section 205(3) of the Constitution of the Republic of South Africa (Act No. 108 of 1996) to investigate crime, amongst others. Criminal investigation is described as a process of finding, collecting, organising, identifying and presenting evidence that will help to determine the causal factors of a crime incident and its perpetrator (Orthmann & Hess, 2013:8). The processing of crime scenes forms a fundamental part of crime investigation. Downs and Swienton (2012:266) emphasise that modern-day detectives should be mindful of crime scene processing and ensure the preservation of all objects of potential evidential value on crime scenes.

The problem of the study as articulated in Section 1.2 is situated in the fact that SAPS members attached to the Detective Service do not correctly process serious crime scenes in informal settlements. The researcher noticed and observed during physical visits to serious crime scenes as part of his duties as a duty officer, that the environmental and infrastructural conditions in suburban areas are more accessible in terms of well-established road infrastructure and properly planned layouts of their neighbourhoods. These suburban conditions are more favourable for the effective processing of crime scenes. However, the situation is different in informal settlements,

whose environmental and infrastructural conditions render them inaccessible, underdeveloped, and unstructured, all of which impact negatively on the effective processing of serious crime scenes in informal settlements.

The main aim of this research was to assess the processing of serious crime scenes by detectives in informal settlements and to develop practical guidelines, procedures, and recommendations for the SAPS concerning the processing of serious crime scenes in informal settlements. The recommended guidelines to the SAPS management encompass the difficult environmental and infrastructural conditions and any other obstacles experienced in informal settlements by detectives when processing serious crime scenes in South Africa.

In the context of this study, the collection and processing of serious crimes scenes in informal settlements is obstructed largely by the untenable infrastructural and environmental conditions that exist in these areas. The conditions as noticed and observed by the researcher, themselves relate to factors such as poorly erected and unplanned dwelling structures; the absence or lack of road access leading to, and within informal settlements; the absence or lack of street lighting; as well as no street numbering of dwelling structures for SAPS personnel to locate crime scenes. Other factors include the densely overcrowded population living spaces in dwelling structures that create challenges for crowd control and the potential risk of contamination of evidence on the crime scene. Furthermore, the absence or lack of electricity, unplanned narrow passageways between dwelling structures are causing challenges in informal settlement areas during crime scene processing.

Environmental obstacles to crime scene processing include, but not limited to the absence or lack of spatial planning for social amenities in the community, air pollution created by smoke from stoves used for cooking and preparing food. The absence of, or lack of sanitation, waste water management, safe water and storm drainage, are a threat and health risk to the inhabitants as well as the environment. Detectives and LCRC members processing serious crime scene in these informal settlements try to do their best, but cannot be effective under these challenging conditions.

Given the above, this chapter then responds to the following research objective as articulated in Section 1.5: "To describe and explore the best practices used during the

processing of crime scenes." To put the discussion into perspective, the researcher firstly discusses the goals or objectives and purpose of crime scene processing. This is followed by discussions on the classification of crime scenes, as well as the broad framework of evidence and its typologies. The chapter then concludes with discussions on the fundamentals of crime scene processing, the basic activity steps, as well as the categorisation and manifestation of the serious trio crimes.

3.2   THE PURPOSE OF CRIME SCENE PROCESSING

Zinn and Dintwe (2016:11) clarify that the terms, "purpose", "goals", "aims" and "objectives" apply interchangeably in crime investigation. Accordingly, "purpose" is viewed as the intention of any investigation to establish the causes and nature of a crime incident by means of evidence, without relying on presumptions (Zinn & Dintwe, 2016:11). The processing of crime scenes is part of an investigation, which could be associated with the views of Zinn and Dintwe (2016:11) regarding "purpose". For Shaler (2012:4), "purpose" also seeks answers to the questions: What happened? How, when, and where did it happen? In the context of this study, the purpose for the processing of crime scenes relates to the intention of any investigation to establish what actually happened.

Gardner and Krouskup (2018:1) explain that crime scene processing consists of an examination and evaluation of the scene for the express purpose of recovering physical evidence and documenting the scene's condition *in situ*, or as found. The primary reason for crime scene investigation is to find evidence, while the main purpose is to solve the crime itself (Gardner, 2012:1; Osterburg & Ward, 2014:90).

The current SAPS Policy on Crime Scene Management ensures the proper control, management, documentation and investigation of crime scenes, as well as maintenance of the integrity of items with potential evidential value. According to this policy, the principles of crime scene management and various phases of handling crime scenes should be applied to any type of crime scene. The roles and responsibilities described in the handling of each phase may be assumed by the same person (SAPS, 2015:2). The approach to processing crime scenes is vital to the proper examination and interpretation of any crime scene, which is the point at which the collection of evidence begins. The following discussion relates to the goals/ objectives

of crime scene processing, which contextualises the beginning and reasonable conclusion of evidence collection.

3.3 GOALS/OBJECTIVES OF CRIME SCENE PROCESSING

Benson, Jones and Horne (in Zinn and Dintwe, 2016:12) explain that from a project management perspective, a "goal" is a declaration of intent, while "objectives" are the measurable milestones in the process of investigation. These milestones depend on the predetermined mandate for which the private investigator was contracted, which sets clear outcomes within the agreed parameters. This is a crucial process because the milestone serves as a yardstick to determine whether the investigator has successfully investigated the case or not (Benson et al. in Zinn and Dintwe, 2016:12). Benson et al. (in Zinn and Dintwe, 2016:12), further mentioned that the term, "objectives" may be likened to steps that are climbed to reach the top of the ladder; if steps are skipped or missing then the outcome may be less desirable. According to Baxter (2015:7), every crime scene should be conducted with the following goals in mind:

- Not rushing the investigation;
- Eliminating mistakes and minimising omissions; and
- Remaining neutral and open-minded.

Gardner and Krouskup (2018:1) explains that the end-goal of crime scene processing is the collection of the evidence and keeping it in a pristine condition as much as possible. To accomplish this, the designated crime scene technician should engage in six basic steps: assessing, observing, documenting, searching, collecting, and analysing the crime scene evidence. These steps and the order in which they are accomplished, are neither arbitrary nor random, and each of which serves an underlying purpose in capturing the crime scene and recovering evidence without degrading its value (Gardner & Krouskup, 2018:1).

The objective of crime scene investigation could be summarised as an action to optimally collect evidence from the crime scene, as well as developing conclusions on *how* and *why* the crime was committed and *who* committed the particular crime (Lushbaugh & Weston, 2012:39). The objective of a crime scene investigation is to identify, recover and document physical evidence, and the systematic and careful

collection of facts, clues and physical evidence (Lochner & Zinn, 2015:33-34). The latter authors also explain that evidence may be obvious or not, and relates to any article or material which a suspect leaves behind at a crime scene or takes from the self-same crime scene. Such evidence should be linked to the crime scene with certainty. Lochner and Zinn (2015:33-34) further emphasise the essence of the following additional aspects of crime scene investigation:

- Reconstructing the crime scene;
- Ascertaining the sequence of events;
- Determining the mode of operation of the perpetrator;
- Uncovering a motive;
- Discovering what property was stolen, if any;
- Collecting physical evidence; and
- Determining actions of the perpetrator.

The goals/objectives of crime scene processing were discussed in this section. The following section discusses elements of the crime scene, which is the real location where the actual incident happened.

3.4   THE CRIME SCENE AND ITS CLASSIFICATION/CATEGORISATION

A crime scene is the physical spot, area or surrounding where a criminal act has taken place (Wamukoya, 2019:2). Dutelle (2011:13) states that a crime scene is any place at which evidence may be located that will help explain the occurrence of events. A single crime scene may have several locations. Osterburg and Ward (2010:91) and Van der Watt (2015:162) are of the view that the crime scene goes beyond the real location where the incident happened. Palmiotto (2013:97) believes that the crime scene is a confirmation that a crime has been committed, that it is the original point where criminal investigation begins, and contains evidence that would link the suspect with the crime scene. Palmiotto (2014:97) and White (2014:26) concur with Fisher and Fisher (2013:29) and Gilbert (2010:80), that a crime scene is proof of a crime that has been committed, and serves as the original point of a criminal investigation by linking suspects with the committed crime.

Crime scenes are classified according to the location of the original or first criminal activity (James, Norby and Bell, 2014:42). It is worth noting that this classification does

not assign any priority or importance to the crime scene, but simply a designation of sequence of location. For example, if a person is killed in a house and the body is then moved in the truck/boot of a vehicle and dumped in an open field, the house is the primary crime scene, the vehicle and the dumping site are the secondary crime scenes. James, et al., (2014:42) further states that there is a second classification of crime scenes in respect of the size of the crime scene. Using this classification, single macroscopic crime scene such as a house may actually be composed of smaller or microscopic crime scenes. For example, a gunshot on a victim's body who was dumped in an open field.

The following section specifically focuses on the crime scene and its classification/ categorisation. In that regard, the primary crime scene, secondary crime scene, indoor crime scene, outdoor crime scene and mobile/ conveyance crime scene are highlighted as crime scene typologies. For the purpose of this study, all five types of crime scenes are discussed since the focus is on serious crime scenes in informal settlements, which includes residential robberies (house robberies), non-residential robberies (business robberies) and vehicle robberies (carjackings).

3.4.1   Primary crime scenes

The primary crime scene is the actual place or physical location at which the original crime, or a key part of it, happened (Malony & Housman, 2014:131). Palmiotto (2013:164) also mentions that a primary crime scene is the place or area where an event has happened and where the bulk or high concentration of physical evidence (i.e., most of the fundamentals of the crime under investigation) would be found. For example, if a deceased had been murdered in the suspect's house, that house would constitute the primary crime scene. Lochner and Zinn (2015:34) and Palmiotto (2013:164) further explain that the primary crime scene is the place or area in the immediate locality of the occurrence or incident, and where most of the physical evidence would be found. Bertino and Bertino (2012:25), explains that a murder may have taken place at one place (the primary crime scene) and the body recovered at another place (the secondary scene).

In the view of Lyle (2012:28), the primary crime scene refers to the place where the original crime actually occurred, and where the majority of the acts also took place.

Palmiotto (2013:164) broadens the definition of a primary crime scene as the place where the physical transgression took place, at the same time as a secondary crime scene that is in one way or the other, shape or form that linked to the crime but not the place where the crime happened. For instance, the place where the body of a deceased is found, or the point of entrance, or where the perpetrator lives is called a primary crime scene. Becker and Dutelle (2013:28) states that the crime scene comprises all segments through which the accomplices moved whilst entering to conduct the crime, while committing the crime, and while departing the crime scene. Becker and Dutelle (2013:28) further states that normally, the crime scene is a particular, well-defined area, but it may involve various non-connecting areas since most human action takes place in protected areas. Investigating officers should ensure that there is no secondary crime scene when applying criminal investigation, unless the perpetrator has moved a body from one place to another, as this evidence is vital for the investigation officer.

In the context of this study, SAPS personnel find it difficult to access crime scenes in informal settlements as there are no access roads leading to, and within informal settlements. As a result, they are compelled to park state vehicles far away from the primary crime scenes and carry the crime scene processing equipment to the actual primary crime scene. These SAPS personnel must further risk walking through the small alleyways between the dwelling structures and the crime scene. In this regard, the SAPS personnel face the risk of being robbed of their crime scene processing equipment on the way to the primary crime scene. This means that crime scene processing equipment reaches the crime scenes after a while, and this time delay could exacerbate the risk of the contamination of evidence on crime scenes. Furthermore, the limited space in these structures create difficulties for SAPS personnel in respect of evidence identification, preservation and collection especially during night-time in the absence of electricity. Therefore, these conditions impact negatively on the effective processing of primary crime scene in informal settlements.

3.4.2   Secondary crime scenes

Secondary crime scenes contend that any other associated crime scene where the crime was not committed is considered a secondary crime scene. In terms of the latter view, the secondary crime scene would include, but are not limited to any location

where the perpetrator may have conducted surveillance to choose a victim in the initial ambush or contact if the victim was moved prior to the criminal activity (Malony & Housman, 2014:131). Lochner and Zinn (2015:34) mention that a secondary crime scene is any other location(s) related to the crime, or place which is different from the primary scene; that is, a location which not where the actual crime happened.

A secondary crime scene is a place or location where some of the victim-offender interaction occurred, but is not the actual place where the crime happened (Turvey, 2012:291). The latter view of a secondary crime scene can be described by means of the following example: when a perpetrator used a vehicle to transport the rape victim from his bedroom where the rape took place, to another place or to a roadside. The vehicle and the roadside are both regarded as secondary crime scenes. These secondary crime scenes should consequently also be treated as the primary crime scene (Lochner & Zinn, 2015:12).

3.4.3 Indoor crime scenes

Both Biswas (2022:401) and Turvey (2012:203) attest that indoor crime scenes are the locations inside of which a crime has been committed or physical evidence of such crime is found, such as a warehouse, car, house, shed, apartment, office, garage, cave, tent or cabin. Biswas (2022:401) and Turvey (2012:203) both further states that indoor crime scenes have a lesser chance of contamination, which usually occurs due to people factor. Indoor crime scene refers to crime scenes inside of a structure with some form of cover from the elements of nature. In the view of Wamukoya (2019:3), the physical and everyday appearance and form of indoor crime scenes is characterised by the fact that they are easy to demarcate, secure, and less exposed to contamination.

3.4.4 Outdoor crime scenes

Biswas (2022:401) explains that outdoor crime scenes are the external locations and factors to the committed crime, or physical evidence of such crime is found, such as a road, field or playground, rain, wind, heat or animal activity. These factors may contaminate the crime scene and result in the destruction of evidence. Biswas (2022:401) further states that outdoor crime scenes are the most difficult to investigate. Therefore, outdoor crime scenes ought to be addressed as soon as possible as any

delay generates crime scene protection challenges (Fisher & Fisher, 2012:397). For example, the weather could alter, contaminate and destroy any possible evidence. For instance, blood could be washed away by rain spatters, grass could bleach blood patterns fast, or may even be more problematic to detect. Wamukoya (2019:3) ascribes the following characteristics to the physical and everyday appearance and form of outdoor crime scenes:

- These crime scenes are difficult to demarcate and secure; and vulnerable to contamination and changes in weather conditions.

3.4.5   Mobile/Conveyance crime scenes

Biswas (2022:401) explains that conveyance crime scenes refer to crime committed by means of transportation, such as robbery, vehicle burglary, and carjacking. Physical evidence recovered from these scenes may extend beyond the conveyance itself. The path of the perpetrator may reveal important evidence that is essential for the investigation. For example, impression evidence such as shoe-prints in soil may be found away from the scene, and any item removed from the conveyance may be deposited or dropped as the perpetrator flees the scene. According to Malony and Housman (2014:277), soil samples may be critical evidence for linking a suspect to the victim. In some cases, it is helpful to determine whether the soil on clothes, tools, or automobiles could have come from the crime scene. Wamukoya (2019:3) asserts that the physical and everyday appearance and form of mobile/conveyance crime scenes is characterised by the fact that these scenes are easy to demarcate, secure, difficult to search; and less exposed to contamination.

Fish, Miller, Michael, Wallace, & Anderson (2014:50-51), inform that before the start of a crime scene search, the lead investigator should appropriately determine the procedures or basic activity steps (actions) that should be followed during crime scene processing in the detailed search for physical evidence. In practice, the basic activity(action) steps involve the preparation for, and approach to the crime scene for initiating the preliminary investigation, evaluate physical evidence possibilities, prepare narrative descriptions, depict crime scene photography, prepare crime scene diagrams and sketches, record and collect physical evidence, conduct a final crime scene inspection and release of the crime scene.

Wamukoya (2019:3) further explains that crime scene searches must be conducted in an objective, systematic and methodical approach by following basic guidelines to ensure the integrity of evidence found on the crime scene. However, trained SAPS crime scene investigators are unable to apply these guidelines on serious crime scenes in informal settlements as a result of the non-existence or lack of infrastructural and environmental conditions already mentioned previously. Crime scenes of serious crimes are normally committed and located in dwelling structures or business structures in informal settlements. These informal structures normally consist of a single room which is used for multiple purposes such as a kitchen, a living room, a dining room and a bedroom.

These structures are also used as merchandise outlets and sell daily necessities and wares to communities in these informal settlements. These outlets or informal business structures are sometimes robbed and subsequently becoming crime scenes in informal settlements. Therefore, these infrastructural and environmental conditions make it difficult for SAPS investigators to process crime scenes effectively with evidence to connect suspects to the crime scene.

The following section discusses the centrality of evidence in crime scene processing. As such, various typologies of evidence are also discussed.

3.5   CENTRALITY OF EVIDENCE IN CRIME SCENE PROCESSING

Crime scene processing is an integral task and duty related in most criminal investigations (Gardner & Krouskup, 2018:1). Therefore, there is no crime without some kind of crime scene, whose processing consists of an examination and evaluation of the scene for the express purpose of recovering physical evidence and documenting the scene's condition *in situ*, or as found (Gardner & Krouskup, 2018:1).

Gardner and Krouskup (2018:5), Jordaan (2015:371) and Schwikkard and Van der Merwe (2002:21), assert that evidence is anything that directly proves or disproves a fact in contention in a judicial case. According to Joubert (2018:403) evidence comprises all the information and material submitted to the court by parties to enable the presiding officer to judge and settle a dispute. In the view of Brandl (2014:39), evidence is the product of investigative activities performed to discover and collect proof that a crime was committed by a particular person. Meanwhile, Zinn and Dintwe

(2016:442) mention that evidence encompasses all information in a legal investigation that establishes the facts in question and placed before a court to assist the presiding officer's findings. In the latter regard, evidence is viewed as the admissible information used by a court of law (tribunal of fact, judge or jury) to reach a decision on any matter brought before it for adjudication (Birzer & Roberson, 2012:81; Gilbert, 2010:52).

Hoctor (2017:169) and Schwikkard and Van der Merwe (2002:18-19) differentiates between "evidence" and "probative material". The term "probative material" includes oral, documentary and real evidence, as well as other means of providing proof such as formal admissions, judicial notice and presumptions and statements made in terms of Section 115 of the Criminal Procedure Act (No. 51 of 1977), and which do not amount to formal admissions (Hoctor, 2017:169; Schwikkard & Van der Merwe, 2002:18-19). Therefore, evidence consists of a range of tangible and intangible proof mechanisms, such as oral and written statements, documents, circumstantial evidence, testimonial evidence, and objects, which are produced and received in court to prove or disprove allegations. It is irrefutable that evidence encompasses all the information provided in a legal investigation to establish the probable facts of a matter in question.

It is the view of Schwikkard and Van der Merwe (2002:18-19) that South African Courts are not entirely consistent in distinguishing between evidence and probative material. Accordingly, unquestionable evidence can also be provided in terms of the inspection *in loco*, which takes place when the Court adjourns in order to physically inspect the actual crime scene in the presence of the parties involved (Hoctor, 2017:169). In terms of Section 210 of the Criminal Procedure Act (No. 51 of 1977), no evidence as to any fact, matter or thing shall be admissible if it is irrelevant or immaterial in the sense that it cannot conduce to prove or disprove any point or fact at issue in criminal proceedings. The basic evidential rule is that all irrelevant evidence must be excluded, and this does not mean that all relevant evidence is admissible (Hoctor, 2017:169).

The South African authors, Jordaan (2016:371, 380), Lochner and Zinn (2015:39), Schmidt and Zeffertt (1997:1), Schwikkard and Van der Merwe (2002:21) and the international authors, Birzer and Roberson (2012:81), Brandl (2014:39), Gardner, (2012:7), Gardner and Krouskup (2018:5), Gilbert (2010:52), Ogle, Jr. and Plotki (2018:2) and Shaler (2012:26) share similar opinions in respect of the diverse types

of evidence on crime scenes. In this regard, Baxter, (2015:221), Lochner and Zinn (2015:39), Dutelle, (2014:14) and Birzer and Roberson (2012:82) refer to testimonial evidence, demonstrative evidence, circumstantial evidence, physical evidence and documentary evidence. Meanwhile, Baxter (2015:221) and Lochner and Zinn (2015:39) also include demonstrative evidence as an identifiable type of evidence.

3.5.1 Admissibility of evidence

Prosecuting cases successfully is dependent on factors such as the quality, admissibility, and accuracy of the crime investigation process to uncover all the available evidence (Van der Watt, 2015:165). According to Jordaan (2015:380), evidence is usable in court proceedings if it is both relevant and admissible for the court to lawfully receive it and determine an appropriate outcome or verdict in respect of the issues in contention. Jordaan (2016:380) explains that relevant evidence is evidence that can prove or disprove any of the facts in issue in the case.

Admissible evidence is evidence that meets all regulatory and statutory requirements, and that has been correctly and legally obtained and handled (Jordaan, 2016:380). Evidence that is deemed inadmissible in legal proceedings cannot be considered by the court. Admissibility includes the legal requirements and compliance in respect of search and seizure, maintaining a proper chain of custody, and ensuring that the evidence is not altered in any way (Jordaan, 2016:380). In terms of Sub-section 35 (5) of the Constitution (Act No. 108 of 1996), evidence obtained in a manner that violates the Bill of Rights may be excluded at a trial in court (Joubert, 2018:38). As such, the use of wrongful tactics by police officials creates the risk of causing criminals to be free because of evidence obtained in a manner that might not be admissible in court.

According to Hoctor (2017:169), there are no degrees or grades of admissibility, and evidence cannot therefore be more or less admissible and weight varies according to the circumstances of the case. Hoctor (2017:169) explains further that there is a difference between the admissibility and the weight of the evidence. In the latter regard, admissibility is largely a question of law, whereas weight is largely a question of fact. For that reason, even the crime scene evidence that has been declared inadmissible by a court of law, should be contained in the docket for the prosecutor to formulate a comprehensive picture of the case (Van der Watt, 2015:165). The latter

proposition is premised on the view that there are several other rules which govern the admissibility of relevant evidence, such as rules pertaining to hearsay, privilege and confessions (Hoctor, 2017:169).

Irrelevant or inadmissible evidence may not be considered before court because it may unfairly prejudice or give an unfair advantage to one of the parties in the court case; where "court" includes a formal court, such as a criminal court or civil court, as well as any form of tribunal, such as a disciplinary hearing that will be passing on judicially a matter requiring evidence where a legal decision will be made (Jordaan, 2016:380).

3.5.1.1　Policing roles and responsibilities in crime scene processing

Joubert (2018:25) explains that the existential purpose, powers and responsibilities of the police are rooted in the law; that is regulated by legal provision. In that regard, Section 199 of the Constitution (Act No. 108 of 1996) provides for the establishment of a security services of the Republic, including a single police service. The SAPS Act (No. 68 of 1995) also provides for the establishment of a Directorate for Priority Crime Investigation (commonly known as the Hawks) as well Municipal Police Services (including the Metro Police). Joubert (2018:26) explains further that Section 205(3) of the Constitution of the Republic of South Africa (Act No. 108 of 1996) enjoins the SAPS to prevent, combat and investigate crime; maintain public order; protect and secure the inhabitants of the Republic and their property; and uphold and enforce the law.

Despite that the broad authorisation to police is contained in the Constitution, the specific policing powers, functions and duties are found in normal legislation, which is also recognised in the Criminal Procedure Act (No. 51 of 1977) to give effect to this requirement (Joubert, 2018:29). There are three aspects that are addressed in the Police Service Act (No. 68 of 1995) which need to be emphasised, namely: the powers, duties and functions of SAPS members; SAPS regulations and code of conduct applicable to all SAPS members; and SAPS national orders and instructions which must be adhered to by all SAPS members (Joubert, 2018:29).

Police officials play a key role in the pre-trial process because of the nature of their powers and functions. In that regard, the Criminal Procedure Act (No. 51 of 1977) prescribes procedure relating to matters such as obtaining evidence, securing

attendance of an accused in court, and the granting of bail (Joubert, 2018:32). Accordingly, Police officials are authorised to search a person or premises, seizing certain articles, arresting a person, and even using permissible force in order to exercise their powers to acquire the necessary evidence for prosecution and possible conviction.

In S v Van der Merwe 1999(2) SA 79 (WLD) at 80 I-J and 81, A-C Nugent J. (as he then was) stated the following:

> "In order to convict, the evidence must establish the guilt of the accused beyond reasonable doubt, which will be so only if there is at the same time no reasonable possibility that an innocent explanation which has been put forward might be true. In whichever form the test is expressed, it must be satisfied upon consideration of all the evidence. A court does not view the evidence implicating the accused in isolation in order to determine whether there is proof beyond reasonable doubt. The court does not also view the exculpatory evidence in isolation, in order to determine whether it is reasonably possible that it might be true" (Schwikkard & Van der Merwe, 2009:528).

This study is based on the processing of serious trio crime scenes in informal settlements. Crime scene processing consists of an examination and evaluation of the crime scene for the express purpose of recovering physical evidence and documenting the crime scene's condition as found (Ogle, Jr. & Plotki, 2018:4). Accordingly, the following discussion relates to physical evidence on crime scenes.

3.5.2 Physical evidence

Virtually any type of physical object might become physical evidence in a criminal investigation (Ogle, Jr. & Plotki, 2018:4). Therefore, physical evidence relates to visible objects anything that is oftentimes not always visible to the investigator, but can be linked to the commission of a crime (Miller & Massey, 2018:3). Gehl and Plecas (2016:121) intimate that physical evidence is something tangible that the court can examine and consider in making connections and determining proof beyond a reasonable doubt. In contrast, witness evidence does not have a physical quality that the court can observe. It requires the court to accept the perception and interpretation of events being provided by a person and, as such, the court cannot evaluate witness evidence with the same confidence of verification that it uses when considering physical evidence. Ware (2021:16) states further that physical evidence is any tangible object that helps to ascertain the truth of a matter under investigation.

On that note, Ware (2021:16) elaborate further that physical evidence is generally perceptible to the senses, even though it may require analysis and interpretation in order understand its significance. The legal value of the evidence is established on the relevance of such evidence to the question at hand. In addition, such evidence must be probative and help to answer an unknown with its original context preserved. When this is achieved, physical evidence can be immensely powerful and versatile and help to include or exclude suspects and exonerate the innocent. It can also prove or disprove elements of the offence by helping to identify and locate suspects, witnesses, and victims of crime.

Gardner and Krouskup (2018:6) point out that physical evidence takes the form of specific items found at the scene that are often collected for subsequent analysis and presentation. Gardner and Krouskup (2018:6) further point out that physical evidence never lies, and it is what it is, although we can certainly misinterpret its meaning. Furthermore, physical evidence creates a scaffold of objective knowledge that will guide and support the investigator's overall understanding of the crime being investigated (Gardner & Krouskup, 2018:6).

3.5.2.1 Value of physical evidence

Physical evidence plays a critical role in a criminal trial as it provides the court with concrete and tangible facts that do not easily irrefutable (Lochner & Zinn, 2015:39). Physical evidence 'speaks for itself' and presents opportunities for *in loco* inspections if the need for evidential credence causes the court to do so (Lochner & Zinn, 2015:39). Furthermore, if physical evidence is appropriately managed according to investigative principles and doctrine, it can offer information about the facts of the crime (Lochner & Zinn, 2015:39). According to Dutelle (2014:16-17), the following factors exemplify the value of physical evidence:

- It demonstrates that the crime has been committed, or establish key elements of crime;
- It establishes the connection of an individual to the committed crime;
- It places the suspect in contact with the victim or with the crime scene;
- It vindicates the innocent;
- It supports the victim's testimony; and
- It induces a suspect's confession on the basis of irrefutable physical evidence.

According to Baxter (2015:225), physical evidence serves the primary purpose of answer the following investigative questions:

- Who was responsible for the crime?
- What was the reason or motive?
- When did the incident happen?
- Where did the incident happen?
- Why did the incident happen?
- How did the incident happen?

In view of the above-stated questions, it is clear that physical evidence is helpful in proving a crime has in fact been committed and also provides key elements of the source of the crime incident, which may be useful in placing the suspect at the scene or associating him or her with the victim (Baxter, 2015:222). In addition to enhancing the identification of the individuals associated with the crime, physical evidence may be useful in exonerating the innocent or used to corroborate a victim's or witness 'statement. Baxter (2015:222) further states that physical evidence is deemed more dependable than eyewitnesses to crimes, and Court decisions place more weight on physical evidence than on witness statements. Brandl (2014:94 & 97) augments that physical evidence can serve several important roles in the criminal investigation process by making associations between crime scenes, offenders, victims and instruments. Brandl (2014:94 & 97) further explain that physical evidence often begins its role in the criminal investigation process with its discovery and collection at the crime scene.

Gehl and Plecas (2016:116) and Manamela, Smith and Mokwena (2016:109) emphasise the importance of investigators to ensure that physical evidence is collected from both the victim and the perpetrator because pieces of physical evidence (often referred to as exhibits), have investigative values at two distinct levels for investigators. At the first level each physical exhibit has a face value represented by its nature, value and location within the context of the crime scene (Gehl & Plecas, 2016:116). For example, a bloody shoeprint found on the floor of a crime scene depicts that someone transferred the blood evidence onto their shoe from a source and walked towards a particular direction within, or away from the crime scene. These are first-

level interpretations of evidence that could be reconstructed through observations. At the second level, this same bloody shoeprint may be subjected to forensic examinations that could provide additional information (Gehl & Plecas, 2016:116). For example, analysis of the shoeprint pattern, size, and accidental characteristics may allow a positive match to the shoe of a suspect, or the blood may be examined to match the DNA of a victim or other originating source. Both these first-level and second-level values can greatly assist in creating a reconstruction and interpretation of occurrences at the crime scene (Gehl & Plecas, 2016:116).

In addition to emphasising the crime scene significance of physical evidence, Ogle, Jr. Plotki (2018:2-3) further explain that the value of physical evidence emanates from the data it provides for crime scene reconstruction and investigative leads by linking an individual with the particular crime scene such as serial rapes, homicides, or burglaries. The advantages of physical evidence over other types of evidence include the factor that it is tangible, which means that a jury can view and touch the physical objects and take these into the jury room, especially that some cases cannot be solved without the presence of physical evidence (Ogle, Jr. Plotki, 2018:3). Furthermore, physical evidence cannot be distorted by the defendant, it is not subject to memory loss, and the defendant can have the evidence examined by an expert of his/her choosing. Taken together, these advantages demonstrate that physical evidence is a vital component of modern criminal and civil investigations.

In the context of the current study, various factors militate against the effective collection of physical evidence in informal settlements and obstruct SAPS personnel when processing serious crime scenes in these areas. These factors include absence or lack of electricity resulting in poorly lit streetlights and poor evidence collection, especially during night-time. Overcrowding and the dense population in informal settlement areas increase the risk of contamination and the control of bystanders crowding on the crime scenes as it is difficult and challenging during day and night-time.

The residential dwelling structures and business premises are housed in unplanned and unstructured one-room dwelling structures that limit and restrict the sufficient space required for comprehensive evidence gathering. Moreover, the proliferation of illegal dumping sites and the absence or lack of solid waste management systems

cause difficulties in identifying physical evidence on crime scenes as this solid waste sometimes spills over to the crime scene. Wastewater that are not effectively managed and runs uncontrolled in the alleyways between the structures and through crime scenes increase the risk of contaminating physical evidence on crime scenes as well.

The Locard Exchange Principle is discussed in the following section. This principle is relevant insofar as it endorses the principle of the link between the perpetrator and the crime scene.

3.5.3   The Locard Exchange Principle

The Locard Exchange Principle famously derives from Edmond Locard's early 20th century theory that there is always a partial transfer of material from one to the other whenever two surfaces come into contact with one another (Ware, 2021:17). This seminal theory or principle of "every contact leaves a trace", provides the foundation for the analysis of physical evidence and the need to preserve the context of that evidence; namely, the crime scene processing procedures followed these days (Ware, 2021:17). The fact that every contact leaves a trace, implies that crime scene investigators could confidently state that there is physical evidence at every crime scene, and that only human mistakes or errors, or the lack of appropriate tools, would explain leaving a scene empty-handed. Therefore, the utilisation of appropriate tools would render the work of crime scene investigators tenable in recovering evidence.

Lochner and Zinn (2015:13) and Lyman (2013:16) are persistent that the Locard Exchange Principle could be viewed as one of the pillars of crime investigation, based on the fact that it is impossible for a criminal to act without leaving traces of his or her presence at the scene of the crime. By implication, the perpetrator will bring, leave, and depart with something or evidence from the scene of the crime. This actual evidence will eventually link the individual with the crime, crime scene or victim, and functions as 'an inaudible eye-witness' against the alleged perpetrator (Baxter, 2015:222).

In the context of this study, when an attacker enters the victim's house, business place or vehicle for example, soil may be deposited that has been clinging to the shoe treads. The soil deposits in the shoe treads could have been from the suspect when he/ she stepped outside the home, business place or vehicle. In reality, as the attacker

deposits soil on the victim's home or business floors and carpets, carpet fibres, pet hairs, or any number of trace items from the floor will also be in those treads and taken out with the suspect when leaving. In this instance, a dual opportunity has been created for investigators to recover physical evidence to establish the suspect's presence in the victim's house, business place or vehicle on crime scenes in informal settlements.

Consequently, investigators may recover the soil from the suspect's shoe tread and match it back to a location frequented by the suspect. The investigators may also recover the suspect's shoes and find fibres or hairs that might be traced back to the victim's house, business place or vehicle on crime scenes in informal settlements. The physical infrastructural and environmental conditions in informal settlements necessitate a prompt response to serious crime scenes reported to the SAPS to secure the integrity of these crime scenes. These conditions necessitate the investigators' implementation of the Locard Exchange Principle as a mechanism to promptly track the traces left on these serious crime scenes.

The prompt utilisation of the Locard Exchange Principle on informal settlement crime scenes could expedite the apprehension of suspects and criminals, while also ameliorating the possible contamination of evidence. Securing the integrity of crime scenes is important in preventing the contamination of evidence on crime scenes, which is the subject of discussion in the following section.

3.5.4   The contamination of evidence

Contamination is the undesirable alteration of evidence that could affect the integrity of the original exhibit or the crime scene (Gehl & Plecas, 2016:113). This undesirable alteration of evidence can wipe away original evidence transfer, dilute a sample, or deposit misleading new materials onto an exhibit. In that regard, Gehl and Plecas (2016:113) outline the following possible contamination causes:

- Police or other first responders interfering with evidence during a tactical investigative response;
- Suspects interfering with the crime scene to cover up or remove evidence;
- Victims or witnesses overseeing evidence;

- Animals, including pets, causing unwanted transfer of evidence or even removal of evidence through contact or consumption;

- Weather-related contamination due to rain, wind, or snow diluting or washing away evidence; and

- Crime scene investigators failing to follow proper crime scene management procedures and causing contamination of exhibits or cross-contamination between exhibits during their investigation.

Contamination could also happen between two or more items of physical evidence from the time such evidence is seized until its actual analysis or presentation in court (Lochner & Zinn, 2015:20). In addition to the weather conditions, uncontrolled activities at the scene of evidence and improper handling of physical evidence could become major causes of contamination (Lochner & Zinn, 2015:20).

Crime scenes will sometimes have some level of contamination before the crime scenes becomes inactive, until the police lock down the crime scene itself (Gehl & Plecas, 2016:113). Although issues of life and safety are at risk, the court will accept that some contamination is outside the control of the investigator (Gehl & Plecas, 2016:113). Tolerance for controlling contamination changes significantly once the crime scene is locked down and is under control. Crime scene management procedures must be put in place as soon as the crime scene has been locked down (Gehl & Plecas, 2016:113). However, it should be note that investigators are usually confronted with the following challenges: preventing and controlling ongoing contamination, when possible; as well as recording the known contamination that has taken place.

Regarding the ongoing control of contamination implies that investigators cannot eliminate ongoing contamination, but can only seek to control it by identifying and recording the known contamination (Gehl & Plecas, 2016:111). The very act of entering the crime scene and processing it, depicts forms of ongoing contamination that has to be avoided and controlled to prevent damage to the forensic integrity of the crime scene and associated exhibits (Gehl & Plecas, 2016:111).

Dutelle (2014:248) and Lochner and Zinn (2015:20) state that it is vitally important to ensure that evidence that is to be handed to the crime laboratory is packaged in such

a way as to prevent breakage, spoilage or contamination that will destroy the evidence. Furthermore, evidence that is managed and processed without protective clothing will pose significant threats to its integrity and the chain of custody (Fisher, 2013:86; Manamela, Smith & Mokwena, 2015:103). According to Gardner and Krouskup (2018:64), crime scene technicians are not exempt from Locard's Principle of Exchange because every action the technician takes in the crime scene adds the possibility of preventing, adding, moving, or damaging evidence in the crime scene as it is processed. As such, the technicians can only limit the nature of this alteration by beginning with the least-intrusive methods of processing, leaving the most-intrusive methods for later stages (Gardner & Krouskup, 2018:64).

The physical appearance and conditions of crime scenes in informal settlements creates challenges and difficulties in respect of controlling contamination, as well as establishing and maintaining continuity of evidence procedures. These appearances and conditions include aspects such as overcrowding, safety hazards, dense occupation, difficult access and circulation, lack of ventilation, absence or inadequate basic services in these areas. In such situations, it is exceedingly difficult and challenging to control bystanders on crime scenes in overcrowded space at any given time of the day or night. Evidence on crime scenes must be managed with care to prevent breakage, spoilage or contamination that could possibly destroy the integrity of such evidence. It is important that evidence collected should be stored and transported in a manner that prevents its contamination and preserves the chain of custody, which is discussed hereafter.

3.5.5   Chain of custody of evidence

Maintaining the chain of custody is a pre-requisite for evidence to be admissible in court by means such as documenting the person who found the evidence, where and how it was found, and how it was preserved and secured, after it was recovered from the scene Ware (2021:56). In this regard, the investigator must be able to testify, for example, that the stained shirt presented at trial is in fact the same shirt he or she recovered from the suspect's home, perhaps a year or more earlier. Woods (2013:130) explains that the chain of evidence is a record of the maintenance and custody of evidence from the time it is found until its eventual disposal. All the individuals who

dealt with the evidence and its various destination points should be known and identifiable by means of their signature.

Van der Watt (2015:199) asserts that the chain of custody of the evidence is intertwined with virtually every single step of the investigation process for the purpose of ensuring the evidence stays undamaged and shown in court in its original form. According to Van der Watt (2015:163) a methodical, planned and organised approach to investigation is the most valuable reason against evidence contamination and the soundest way to maintain the chain of evidence. Dutelle (2014:27), Girard (2018:18), James et al. (2014:54) and Van der Watt (2015:163), explain that, after presentation of the case in court, all evidence will be subject to interrogations about the maintenance of the chain of custody, which is a written sequential record of each individual who dealt with an item of evidence in his or her control.

Chissum and Turvey (2014:652) and Van der Watt (2014:117) also assert that the chronological sequence of evidence is vital of keeping a trail of every individual or activity that has maintained custody of confirmed evidence, or had any form of interaction with the evidence from the time it was found until its court presentation. Therefore, as soon as evidence is obtained, it is crucial for a full chronological record of the investigation process to be retained without any interference to ensure its pristine presentation in court (Sweeney, 2017:107-108). In the context of the present study, and in respect of maintaining the chain of evidence, the difficulties posed by both the environmental and infrastructural factors in informal settlements necessitate that investigators should at all times ensure that evidence stays pristine in their original condition in spite of the appearance and conditions of crime scenes in these areas.

The discussion itself is interstitial to the chain of custody of the evidence, considering that investigators' adherence to the fundamentals of crime scene processing is ultimately dependent on the adequate maintenance of the chain of custody itself (Chissum & Turvey, 2014:652; Sweeney, 2017:108; Van der Watt, 2014:117).

3.6   THE FUNDAMENTALS OF CRIME SCENE PROCESSING

Crime scene processing is basically a systematic, thorough, and scientific process that law enforcement investigators employ in every key criminal investigation (Ware, 2021:9). This process is used to document and preserve the location of the known or

suspected criminal activity in order to facilitate the location and recovery of physical evidence to help prove the elements of an offence; generating information that helps outline individual investigative steps and an overall investigative plan; as well as facilitating the identification of participants, such as witnesses and suspects (Ware, 2021:9).

Various scholars and professionals have allocated different terminological references or nomenclature to the fundamentals or basic requirements pertaining to crime scene processing (Malony & Housman, 2014:11). Despite these conceptual and terminological variations, they all allude to the elementary wherewithal for both successful and effective crime scene processing and the various roles of the duly designated personnel (Malony & Housman, 2014:11). For instance, Dutelle (2014:112) emphasises the establishment of a plan as the first step in crime scene processing. However, it is also acknowledged that crime scenes are complex and sometimes confusing. Therefore, it is not always that simple to establish a plan concerning the appropriateness of a crime scene processing approach (Malony & Housman, 2014:11). A systematic plan ensures that nothing is overlooked, and no pertinent evidence is lost in the course of the subsequent investigation. All crime scenes are different, but there are guidelines that exist in all cases that serve as a framework for the processing efforts (Chissum & Turvey, 2014:652; Dutelle, 2014:112).

For Gardner and Krouskup (2018:64), the fundamental actions and approaches by the crime scene technician at any crime scene involves assessing, observing, documenting, searching, collecting, and processing/analysing any evidence found at the particular crime scene. Collectively, Baxter (2015:8), Dutelle (2014:112), Gardner (2012:80), Gardner and Krouskup (2018:64), and Maloney and Housman (2014:12) ascertain that the approaches and basic activity steps (actions/efforts) for crime scene processing that should be applied during the processing of crime scenes are: initial scene assessment; search for and recognition of physical evidence; documentation of physical evidence; collection of physical evidence; packaging and preservation of physical evidence; as well as crime scene reconstruction.

Fish et al. (2014:34), on the other hand, inform that many law enforcement agencies have adopted the Federal Bureau of Investigation's (FBI's) 12-step process to gather

and protect evidence at the crime scene as follows: prepare; approach, secure and protect scene; initiate preliminary survey; evaluate physical evidence possibilities; prepare narrative descriptions; depict scene photography; prepare diagram and sketches of scene; conduct a detailed search; record and collect physical evidence; conduct a final survey; and release the scene. Fish et al. (2014:34), further state that these steps are all common-sense actions that document the crime scene and the procedures followed by the crime scene investigator to identify, collect, and preserve the physical evidence at the crime scene. The steps are also viewed as being intuitive, logical, and appropriate to every type of crime investigation.

Meanwhile, Malony and Housman (2014:12) assert that the fundamentals of processing crime scenes require the identified roles to be filled and tasks to be accomplished irrespective of the size and complexity of the crime scene or response. The latter authors mention further that crime scene investigators should ensure that the order of the crime scene handling or processing tasks is sequentially maintained as follows:

- Observe without disturbing anything;
- Record/Document by means of notes, photography and sketches;
- Process and preserve physical evidence, ensuring that all known evidence is sampled and collected as appropriately pristine as possible; and
- Collect and properly package the evidence and enter it into the evidence custody system.

The environmental and infrastructural conditions in informal settlements are not similar to those in suburban areas, which causes enormous challenges in respect of the effective processing of serious crime scenes. These conditions render any compliance with the provisions of the SAPS crime scene management policy somewhat impractical. In that regard, the fundamental or basic activity steps (actions/efforts) for crime scene processing becomes a difficult proposition from a practical imple-mentation viewpoint.

The following discussion relates to the basic activity steps (actions/efforts) that should be followed during crime scene processing. These steps (actions/efforts) pertain to the actual proceedings following the arrival of the SAPS investigators at the crime scene.

On arrival at the crime scene, certain methods in approaching the crime should be followed to ensure that the integrity of the crime scene and that the evidence is protected.

3.6.1   Basic activity steps of crime scene processing

In the context of this study, crime scenes are usually located in the informal settlement dwelling structures (houses) or business structures. The crime scene technician must first assess the circumstances in order to decide on a proper sequence of action before any steps action (actions/efforts) can be taken at the particular crime scene (Gardner & Krouskup, 2018:63). The basic activity steps of crime scene processing are standard but may not be sequentially applicable due to the variability and contextual factors of crime scenes. The sequence may be altered at times, but the basic activities of crime scene processing must be generally approached and applied in order to prevent destruction of evidence or loss of evidence and its context (Gardner & Krouskup, 2018:63). The availability of resources to the technician usually determines the methodology of applying the crime scene processing basic activity steps. The accumulated evidence will then serve to develop conclusions regarding *how* the crime transpired, *who* was involved, and perhaps *why* the crime was committed (Gardner & Krouskup, 2018:63).

Gehl and Plecas (2016:108) explain that protecting the integrity of the crime scene involves several specific processes that need to be performed as part of crime scene management. Gehl and Plecas (2016:108) also point out that the investigator must perform certain tasks to identify, collect, preserve, protect evidence as follows: locking down the crime scene; setting up crime scene perimeters; establishing a path of contamination; and establishing crime scene security.

When an investigator arrives at a crime scene, the need to protect that crime scene becomes a requirement as soon as it has been determined that the crime incident has become inactive, and the investigator has switched to a strategic investigative response (Gehl & Plecas, 2016:108). Processing of the crime scene can start after the approach or procedures has been defined. The application of this approach is an important part of the identification, preservation, collection, and handling of evidence on the crime scene in informal settlements. In that context, it is then appropriate for

the following discussion related to the basic activity steps of crime scene processing, namely: assessing, observing, documenting, searching, collecting and processing/ analysing (Gehl & Plecas, 2016:108).

3.6.1.1   Assessing

Gardner and Krouskup (2018:64) emphasise that assessment is an ongoing process that begins with the processing task and defines the procedures to be employed. Gardner and Krouskup (2018:64) further state that the technician continuously assesses the situation and adjusts the processing plan when necessary and remaining flexible is a critical aspect of responding and dealing with the crime scene. Meanwhile, Fish et al. (2014:46), explain that the general rule of the initial walkthrough or preliminary assessment is inspect, but not touching objects at the crime scene since it may result in contamination. In that regard, the initial walkthrough is the opportunity to determine the nature and extent of the crime scene.

Houck et al., (2012:59) explain that once the scene has been stabilised, it should be secured to prevent unauthorised people from entering the area and contaminating or alternating it. This typically involves using some type of indicator, such as caution or crime scene tape, to indicate the limits of public access. The extent to which the scene is taped off will depend on the scene or scenes, their size and connectedness, and environmental conditions. During assessment of the crime scene certain observations are often made and recorded and therefore the following discussion will relate to observing (Houck et al., 2012:59).

3.6.1.2   Observing

According to the Justice Department, Washington. (2013:6), all activities conducted, and observations made at the crime scene must be documented as soon as possible after the information has been preserved. Overall, Gardner (2012:80), Gardner and Krouskup (2018:64), Houck et al. (2012:63) and the Justice Department, Washington. (2013:6) , inform that observation of the crime scene entails registering the condition of the crime scene and artifacts found in the crime scene as follows:

- Observing the crime scene and location of persons and items within the crime scene and the appearance and condition of the crime scene upon arrival;

- Conditions upon arrival (e.g., lights on/off; shades up/down, open/closed; doors and windows open/closed; smells; ice, liquids; movable furniture; weather; temperature) and personal items; and

- Personal information from witnesses, victims, suspects and any statements or comments made.

3.6.1.3 Documenting

Girard (2018:66) and Lochner and Zinn (2015:45) explicate that the physical appearance of the crime scene must be systematically documented to always record the condition of that crime and its physical evidence. The importance of crime scene documentation is underpinned by the fact that the documents "fix or memorise" the crime scene at specific moments in time, that is, the time of processing the crime scene (Baxter, 2015:3-4). Documentation entails a variety of efforts, which include written documentation of the technician's observations, photographing and videotaping of the crime scene, and the creation of sketches (Gardner & Krouskup, 2018:64). Similar to observation, documentation can be a relatively non-intrusive act, such as carefully walking through the scene to photograph the scene condition as it was found (Gardner & Krouskup, 2018:64). Therefore, the technician must enter and make precise measurements in and around objects and evidence, and every measurement could either change or damage the condition of the crime scene. (Gardner & Krouskup, 2018:64).

Ware (2021:27) points out that crime scene investigation is rooted in the forensic sciences and, as a science, it must follow a methodical process and provide sufficient documentation to allow others to replicate the process and results. In other words, crime scene documentation should be completed in essentially the same way, every time. According to Baxter (2015:8) and Dutelle (2014:112) written notes taken at a crime scene are used to create a concurrent record of all actions taken and these notes are used to write the crime scene narrative for the crime report or the follow-up investigation. Each of these methods is an integral part of crime scene documentation and therefore every action must be documented extensively in notes, photographs, sketches and reports (Baxter 2015:8; Dutelle 2014:112).

The purpose of documentation is to create a permanent record of the condition of the crime scene and the forensic evidence, which is critical for demonstrating a logical and systematic plan for processing the crime scene (Fish et al., 2014:23). Documentation must capture the content and context of the crime scene *in situ* before any significant scene alteration (Gardner, 2012:81). It is not possible to go back to a crime at a later stage to collect supplementary evidence, therefore, it is advised that crime scene investigators should ensure a thorough and methodical processing of the crime scene to ensure that all required evidence has been accurately collected (Dutelle, 2014:26).

The purpose of documenting the crime scene is to record and protect the crime scene and its connection to the evidence that has been found on it, as well as the situation of the crime scene as it was at the time the documenter was examining it (Dutelle, 2014:112). In the view of Layman (2013:45), a crime scene has to be recorded before the start of the actual search because it supports the investigator's establishment of the circumstances of the crime. In addition, documenting is helpful in the detection and apprehension of the offender. Monckton-Smith et al. (2013:62), affirm that the crime scene can be documented by means of photographs, written loggings of entry and exit, sketches and video or computer-generated virtual reconstruction. Dutelle (2014:248) adds that every action that officers take at a crime scene must be fully documented.

In terms of Section 60(14) of the Criminal Procedure Act (No. 51 of 1977) an accused person shall not have access to any information, record or document in the police docket for bail proceedings, but the prosecutor may still allow such access (Joubert, 2013:395). Additionally, an accused is not entitled to have access to the Section B and Section C information contained in the police case docket. The next section focuses on discussion relating to field notes as a mechanism to particularly document what happened on the crime scene (Joubert, 2013:395).

- **Field notes**

One of the critical aspects in crime scene investigation relates to ensuring that field notes are taken in order to illustrate and demonstrate *what* had happened on the crime scene. According to Dutelle and Becker (2019:71), field notes are the building blocks that the investigator uses to develop a hypothesis and subsequent theory concerning the crime and its causal factors. Field notes can also strengthen the investigator's

memory when the case is presented in court. Woods (2013:23) suggest that adequate field notes should be complete, accurate, specific, legible, clear, chronologically arranged, and well organised.

In the view of Saferstein (2013:51), note taking commences with the call to the crime scene investigator for him/her to report to a crime scene. The first notes should also identify the person who contacted the investigator, record the time of the interaction as well as any preliminary information revealed, such as the case number. It is the vies of Girard (2018:7) and Lochner and Zinn (2015:114) that note taking must occur on the crime scene itself without any delay. Such promptness is necessitated by the salience and criticality of field notes in the crime investigation process, their provision of the crime investigator with recollection bank, and value in providing the courts with the required information for successful prosecution. The next section focuses on discussion relating to photography and videography as a mechanism to document what happened on the crime scene.

- **Photography and videography**

Hess, Orthman & Chow (2017:47), inform that a picture is crucial for accurate crime scene documentation, based on the view that a picture is indeed worth a thousand words. Dutelle (2014:120) and Fish et al. (2014:171), inform that there are three types of photographs, namely: overall or establishment, mid-range and close-up photographs. Orthman et al. (2017:47), also state that investigative photographs and video recording is presently well-recognised as an investigative instrument. Dutelle and Becker (2019:77) explain that the crime scene is first recorded through photography or videography or both, and for the purpose of capturing suitable images for the best possible documentation and reproduction of the reality present at the moment in time when the scene was photographed. Birzer and Roberson (2012:39) agree with Dutelle and Becker (2019:77) that the purpose of photographing the crime scene is to secure the most valuable quality detail possible. For Saferstein (2013:53), the goal of crime scene photography is to generate examination quality photographs.

Baxter (2015:53), Hess and Orthman (2017:47) and Miller and Massey (2016:49) assert that laws of evidence require that photographs must be material, relevant, competent, accurate, and free from distortion. On the other hand, Lochner and Zinn (2015:114) mention that photographs are the best way of instantly and accurately

documenting evidence at the scene. In that regard, a photograph could be viewed as a permanent and provable record of the facts, including the possession of evidence of the scene. Girard (2018:7) urge that crime scene photographs must be taken without the photographer or anyone else disturbing the evidence on the crime scene, and that all items should be in their original, undisturbed position. Furthermore, any changes to the items must be documented in the notes, since photographs can be used in future in the case to refresh the memory of the investigator or as demonstrative evidence to show the judge the relation between the victim and the evidence (Ericsson, 2014:31). In general, crime scene photography requires that the investigator should generate photographs and sketches of the entire pattern in order to show the angle of the pattern in relation to the crime scene (Saferstein, 2013:245).

Video recording, on the other hand, may be used to complement photography since the video is regarded the best way to document the whole view of the scene by illustrating the connection of numerous evidence fragments, both to one another and to the crime scene (Girard, 2018:10). On the other hand, Fish et al. (2014:169), mention that a video can give a complete spatial link for documentation purposes and allow the viewer to observe the crime scene in a more dimensional perspective.

It is evident from the above discussion that photography and videography are a vital part of crime investigation by primarily involving the documenting of evidence which would not usually be clearly captured manually. Both photography and videography images are generally acknowledged and accepted by the courts. The next section discusses sketching as a mechanism to document what happened on the crime scene.

- **Sketching**

Crime scene sketching is a lasting record of the size and distance relationship of the crime scene and the physical evidence within it (Birzer & Roberson, 2012:39; Dutelle & Becker, 2019:70). Meanwhile, Girard (2018:8) propounds that the purpose of the sketch is to record distances between objects at the crime scene precisely, which allows investigators to highlight the most relevant objects and features. For Baxter (2015:77) and Woods (2013:22), sketching should both support and complement the photographs and notes, since a sketch makes clearly shows the relationship of an item of evidence within a scene. Baxter (2015:80) further explains that sketching is admitted in court generally through the individual who produced the sketch.

There are two types of sketches, namely: rough and final sketches (Dutelle & Becker, 2019:86). Rough sketches are developed at the crime scene during the preliminary crime scene evaluation or assessment phase in order to assist with the development of a strategic plan for processing (Dutelle & Becker, 2019:86). A rough sketch is the first pencil-drawn outline of a crime scene and the position of objects and evidence within the outline (Hess & Orthman, 2017:59). On the other hand, final sketches are a finished product of the rough sketches, and are normally prepared for courtroom presentation (Dutelle & Becker, 2019:86). However, sketches will not show all measurements and distances recorded on the rough sketch. The next section focuses on discussion relating to searching as a basic activity step to document what happened on the crime scene.

3.6.1.4 Searching

Searching the crime scene is the most important and foundational aspect of the investigation process (Shaler, 2012:89). Moreover, crime scene searches can be done in numerous ways and irrespective of the approach taken, the search must be methodical, and recovery of evidence should be systematic, in ensuring that the whole is searched effectively. Crime scene investigators should survey the crime scene carefully before embarking on the search process, which assists investigators to observe and document the scene by also considering information from the first member and nature of evidence as the basis on which to make a decision regarding the search pattern to be used (Lyman, 2013:46). According to Orthmann and Hess (2013:107-108), the goal of any crime scene search during an investigation is to ensure thoroughness in the process of discovering evidence and search patterns. Monckton-Smith et al. (2013:66), advice that the search for, and recovery of evidence should be systematic, using identified search patterns to ensure that the whole crime scene area is searched effectively.

The nature of any search and associated activity is always intrusive, but the search must be methodical and systematic regardless of the approach taken (Gardner & Krouskup, 2018:65; Monckton-Smith et al., 2013:66; Ware, 2021:49). During a proper crime scene search, items must be moved for their surface examination without changing the crime scene. Gardner and Krouskup (2018:65) further state that the search of the crime scene is not accomplished in one single search effort, and that

multiple searches occur throughout any processing effort. As such, initial searches tend to be more visual than physical, while later searches require significant movement, including dismantling and even removal of items from the scene (Gardner & Krouskup, 2018:65).

Ware (2021:49) affirms that it is most beneficial for searches to be conducted by more than one individual where possible, because evidence is less likely to be missed when there are two sets of eyes, and the search methodology will depend on the type of environment where the scene is located. For example, a bedroom is searched differently from a vehicle, and both are searched differently from an open field. There are typically at least two search types at each scene (Ware, 2021:49). The first type is the initial, non-invasive search that takes place during the team leader's walk-through to assess the scene. The lead investigator will first note any areas of interest and obvious evidence during this initial walk-through.

The second, more invasive search type involves manipulation of the scene, during which drawers are opened, papers overturned, and bedding moved for instance. Thus, this search must take place after the initial scene documentation has occurred. Furthermore, items should only be moved after photographs have been taken and measurements obtained in order to preserve the crime scene's original context. On the other hand, Dutelle (2014:137) alludes that the lane/strip search, line search, grid search, zone search, and circle/spiral search constitute the widely used diverse types of crime scene search patterns. Deciding on a search type depends on factors such as the environment, the object being searched for, the number of available personnel, the terrain, requirements, and the searchable area that can be covered by each searcher (Dutelle, 2014:137). In the view of Ware (2021:49), overlapping zone searches and line searches constitute the foremost two main search methods used at the crime scene, depending on the characteristics of the particular scene.

Orthmann and Hess (2013:108) agree with Dutelle (2014:137) about crime scene search patterns, stating that deciding on relevant search pattern depends on the personnel available, the time limits enforced by weather and light conditions, and the circumstances of the distinct crime scene. The next section discusses collecting evidence as a basic activity step to document what happened on the crime scene.

3.6.1.5 Collecting

Every item of evidence collected at the scene should be properly processed prior to its submission for storage (Baxter, 2015:8). However, it is worth noting that locating and identifying physical evidence and potentially missing evidence at crime scenes is a demanding proposition Typically, the recognition of physical evidence starts by observing the scene when evidence is identified on crime scenes for collection (Baxter, 2015:8; Gardner, 2012:81).

The physical collection of items in the scene is always an intrusive process (Gardner & Krouskup, 2018:65). Therefore, the context of the crime scene is changed forever once an item is removed from the crime scene. It is in that regard that some mechanisms of collection become more intrusive than others (Gardner & Krouskup, 2018:65). For example, simply picking up a revolver from the crime scene has minimal effect on the whole crime scene. On the other hand, recovering a bullet from a wall or door creates significant disruption of the remaining crime scene. Furthermore, the investigator always collects evidence after the observation and documentation phases, unless dealing with fragile evidence (Gardner & Krouskup, 2018:65). Once collected, an item cannot be placed back into the crime scene for the purpose of creating crime scene documentation (Gardner & Krouskup, 2018:65).

3.6.1.6 Processing/Analysing

The actual processing of crime scene items is a significantly intrusive action (Gardner & Krouskup, 2018:66). Powder deposits, superglue fuming, or other chemical enhancement techniques for latent prints clearly change an item's original condition, which could potentially also alter the crime scene dynamics. Furthermore, substances such as luminol, fluorescein, or leuco-crystal violet enhancements of bloody prints and pattern transfers can alter the scene as well. Often, this alteration does not change the outward appearance of an item, but introduces chemicals that can damage or alter the original condition of other evidence (Gardner & Krouskup, 2018:66). Whatever the mechanism, processing will alter the evidence being processed and the scene (Gardner & Krouskup, 2018:66).

Crime scene processing techniques are almost always the last actions taken by the technician in the overall scene-processing methodology. Ultimately, items of evidence

from the scene must be analysed at the laboratory to establish what each one defines in and of itself, and what the various interrelated pieces may define about events that occurred during the crime (Gardner & Krouskup, 2018:66). Beyond these exigent situations, scene processing falls into an orderly and relatively simple sequence of events. In this simplest form, the order is to observe, document, search, collect, and process, while also assessing the situation and remaining flexible. Interestingly, technology advances have not changed the above order. Adherence to this basic order provides the greatest probability of achieving the purpose of crime scene processing (Gardner & Krouskup, 2018:66).

The focus in this study was on the processing of trio serious crime scenes. In that regard, the following section presents discussions on these crimes, namely: carjacking (hi-jacking), robbery at residential premises (house robbery) and robbery at non-residential premises (business robbery).

3.6.2   Serious trio crime scenes in this study

Burger, Gould and Newham (2009:10) caution that the trio crimes are dangerously approaching uncontrollable levels. The identified trio serious crimes are categorised as robbery with aggravating circumstances, which is the unlawful and intentional forceful removal and appropriation in aggravating circumstances of movable tangible property belonging to another person (SAPS, 2022:79). Robbery with aggravating circumstances is further sub- categorised into different crime categories, such as robbery of a motor vehicle, robbery at a residential premise, and robbery at non-residential premises (SAPS, 2022:79).

3.6.2.1   Robbery of motor vehicle (Carjacking)

Robbery of a motor vehicle (carjacking) is the unlawful and intentional forceful removal and appropriation of a motor vehicle belonging to another (SAPS, 2022:79). Minnaar (1998:1) and Zinn (2002:15) inform that the hijacking of motor vehicles is endemic in South Africa, and is increasingly causing high levels of anxiety and psycho-social harm among South Africans. According to Zinn (2002:15), a crime such as motor vehicle hijacking denies people of their freedom of movement, and in turn inhibits their economic growth. Furthermore, Zinn's (2002:171) research on vehicle hijackings

offenders reported that they preferred vehicle hijackings as their crime of choice because it is a lucrative crime from which they are able to make quick cash.

The above-cited research study by Zinn's research found that offenders preferred vehicle hijackings to motor vehicle theft, because in the latter case, they still need to deal with time-consuming issues such as immobilisers, alarms, and opening the door/s of the car to be stolen; as well as starting the engine without the key. As a result, offenders believe that vehicle theft increases their chances of being apprehended (Zinn, 2002:171). The respondents in Zinn's research also reported that speed was crucial in the crime of vehicle hijacking because it enabled them to hijack more vehicles in a single day, as opposed to stealing a parked vehicle as it extends the time for the theft of mostly luxury motor vehicles for which there is a high demand in the informal 'underground economy' (Zinn, 2002:186)

3.6.2.2   Residential (house) robbery

Residential (house) robbery refers to the unlawful and intentional forceful removal and appropriation of property from the residential premises of another person (SAPS, 2022:80). Although people have more control over their lives in their own houses than anywhere else, people do not feel safe in their own homes in South Africa. This is attributed to the fact that, unlike burglaries (where goods are removed without inhabitants in the house) house robberies take place in the presence of homeowners. As explained by Zinn (2010:1), this form of invasion causes more trauma than other types of criminal activity due to the invasive aspect on the homeowners' sense of control, privacy, and security.

The invasion is exacerbated by the fact that in most of the cases victims are accosted and exposed to violence in some robberies, with household members tortured, beaten, physically intimidated and verbally abused (Zinn, 2010:1-2). On a daily basis South African media carry reports and graphic descriptions of violent crime, including house robberies, the prevalence and unpredictability of which contributes to extreme levels of insecurity (Zinn, 2010:2). Similar to the previous crime of vehicle hijacking, it is concluded that associated robberies contribute to the number of house robberies reported by the police.

3.6.2.3   Non-residential (Business) robbery

Although it is not a new phenomenon, business robberies have extremely increased and cause serious economic and social consequences (Burger et al., 2009:10). Burger *et al.*, (2009:10) further adds that, the fact that criminals are extending their crimes from hijacking victims on their driveways, to violently attacking them in their homes and businesses, is a terrifying and growing *modus operandi*. Business (non-residential) robbery relates to the unlawful and intentional forceful removal and appropriation of property from the business of another person (SAPS, 2022:80). According to Burger et.al., (2009:10), business robberies are increasing faster than house robberies. In the previously mentioned research study by Zinn (2002:1-3), one of the participants reported that the lucrative nature of business robbery advanced him from hijacking vehicles to committing business robberies. The wrongdoer in question revealed that the average cash he made from hijacking vehicles was R2, 000.00, while he amassed an average of R60, 000.00 from business robberies (Zinn, 2002:173).

In the context of this study, there are a range of factors and conditions in informal settlements that impact negatively on the processing of the above-stated serious trio crime scenes. The difficulties and challenges that SAPS members experience are enormous as they are expected to process serious crime scenes in conditions that are impractical for their adherence and compliance with the provisions of the SAPS Policy on crime scene management. Infrastructural conditions such as inadequate poorly constructed dwelling structures, absence or lack of street lighting, absence or lack of house numbers, overcrowding, absence or lack of electricity, absence or lack of access roads, as well as narrow alleys and passageways between dwelling structures, are aspects that generate challenges on serious crimes in informal settlements. All these factors are present obstacles to the basic crime scene processing elements in informal settlements, such as the location of the crime scene address, control of bystanders and crowds, the absence of waste management, absence of wastewater management, unhealthy and hazardous conditions.

The commission of the identified serious trio crimes in informal settlements is an indication of their proliferation in these areas, where the inhabitants live and/ or operate businesses in congested and sometimes unhygienic multipurpose single-room structures or outlets. These outlets could serve as a tuckshop during the day

and a dwelling place during night-time. These structures are robbed as dwellings, which becomes a residential robbery. Furthermore, motor vehicles are high jacked at gunpoint on main routes around and within informal settlements during daytime and night-time. Overall, both the infrastructure and environmental deficiencies in informal settlements pose a major challenge for the SAPS investigators to implement the crime scene processing and management policy.

3.7   SUMMARY

The processing of crime scenes is seminal to the administration of justice. Various crime scene types, methods and classification were discussed in order to demonstrate the association between the crime scene itself and the approaches that investigators would apply in relation to the serious trio crimes mentioned throughout this research study. The importance of accurate crime scene processing strategies and approaches were highlighted as valuable tools, considering the indispensability of evidence in the criminal justice system.

The researcher determines the objective of this chapter which was determined to describe and explore the best practices used during the processing of crime scenes by examining, explaining and discussing the fundamental procedure of crime scene processing as recommended by international and national literature. The basic activity/action steps involved in crime scene processing such as assessing, observing, documenting, searching, collecting and processing/analysis were discussed in the context of this study. The research referred to terms such as "purpose", "goals", "aims" and "objectives" with reference to their interchangeability in the investigation of crime. This research also noted that there is agreement amongst international- and national authors of a crime scene as well as the classification of the distinct types of crime scenes namely, primary crime scenes, secondary crime scenes, indoor crime scenes, outdoor crime scenes and mobile/ conveyance crime scenes.

Throughout this chapter, the criticality of crime scene processing and management was presented in the context of the serious trio crimes, namely: robbery of a motor vehicle, residential robbery and business robbery. In the light of the infrastructural and environmental physical conditions in informal settlements, the fundamentals of crime scene processing are not adequately implemented as envisioned by the applicable

SAPS National Instruction policy guidelines concerning crime scene processing and management. In the next chapter (Chapter 4), the SAPS National Instruction Guidelines policy document is presented and discussed in more details.

CHAPTER 4: THE SOUTH AFRICAN POLICE NATIONAL INTSRUCTION GUIDELINES REGARDING CRIME SCENE MANAGEMENT

4.1   INTRODUCTION

Sergeant Thabo Mosia testified in the Senzo Meyiwa murder trial, explaining his role in the investigation. He stated, "*I was tasked with the responsibility of gathering, packaging, and processing all the crime scene exhibits, which were subsequently transported to the forensic science laboratory for further examination.*" In relation to the collection process, he mentioned, *"We specifically obtained swabs from various locations within the house to acquire DNA evidence."* Elaborating on the purpose of swabs, Sergeant Thabo Mosia clarified, *"A swab serves as a specialised tool for collecting DNA from different surfaces"* (City Press, 5 June:3).

Sergeant Thabo Mosia who has been working in the police's forensic science wing for 14 years, described that he found the scene infested with bullets and blood (City Press, 5 June:3). The crime scene in question was situated in Vosloorus, a semi-suburban area of Germiston, Ekurhuleni in Gauteng Province. The area is well-known for its planned infrastructure and environmentally advanced state, which stands in stark contrast to the underdeveloped and inaccessible conditions typically found in informal settlements. The above headline is an indication of a possible challenge that occurs when crime scene is processed by the SAPS. In the context of this study the processing of crime scenes is more complexed and problematic in informal settlements because of the infrastructural- and environmental physical conditions in informal settlement areas.

The current SAPS policy on crime scene management, National Instruction 1 of 2015 do not consider the infrastructural-and environmental physical conditions and any other impractical obstruction experienced by SAPS personnel in informal settlements during the processing of serious crime scenes in South Africa. This SAPS policy could only be applied and complied with during the processing of serious crime scenes in suburban areas, which are well - developed and appropriately planned regarding infrastructural- and environmental physical conditions.

However, SAPS policy does not make provision or consider the inaccessible, underdeveloped, unstructured, and other infrastructural- and environmental physical conditions which causes problems that impacts negatively on the processing of serious crime scenes in informal settlements. The difference in compliance and adherence to the same policy in suburban areas and in informal settlement areas can possibly be attributed to the fact that this policy can be applied more practical and constructively on serious crime scenes in suburban areas then in informal settlements because of the different and total opposite physical conditions in informal settlement areas.

In this chapter the researcher provides an evaluation on the existing policy of the SAPS on crime scene management, National Instruction 1 of 2015, which includes the processing of serious crime scenes. Furthermore, the researcher would respond to the following objective: "*To determine what the existing policy of the SAPS on crime scene management, National Instruction 1 of 2015, entails*". The researcher also wants to understand and keep in mind how this policy impacts on the processing of serious crime scenes in informal settlements, as indicated Section 1.5 of Chapter 1. To put the discussion into perspective, the researcher firstly discusses an overview on functions of detective service within in the SAPS, the functioning of the Detective Service at National Level and the functioning of the Component Head, Crime Investigation Service at National Level.

This is followed by the discussion on the functioning of the Detective Service at Provincial Level, the functioning of the Detective Service at District level, the functioning of the Detective Service at Station Level and the functioning of the DSC at station level. Furthermore, SAPS policy on Crime Scene Management, National Instruction 1 of 2015 and the different phases it describes namely, responding phase, controlling phase, handover phase, planning phase, investigation and processing phase, debriefing phase, restoring phase, releasing phase and evaluation phase will be discussed. This will be followed by discussions on specific National Instructions that are linked in some sections specifically to the investigation of crime and in particular the processing of crime scenes in the SAPS such as National Instruction 12 of 2017 that directs the functioning of the Detective Service within the SAPS, National Instruction 3 of 2011 that directs the registration and opening of case dockets, National

Instruction 13 of 2017 that directs the management of case dockets. In the conclusion to the chapter National Instruction 8 of 2017, that directs exhibit management, and the seizure of exhibits will be discussed.

The SAPS policy on the Detective Service, National Instruction 12 of 2017 state that this National Instruction necessitates to be read with SAPS policies relating to the management of dockets, exhibits, arrest, detention of a person, release of person from the custody, stock theft, sexual offences, the enquiry docket, fingerprint register, search and seizure, crime scene management, registration and finances of informers, identification parades, children in conflict with the law, care in protection of children, registration of case dockets on CAS or ICDMS, victim empowerment, prevention and combating of torture and any other order or instruction that the National Commissioner issued or may issue related to the investigation of crime (SAPS, 2017a).

In the context of this study, focus will only be direct to those SAPS National Instructions that related to the investigation of crime and specifically to the processing of serious crime scenes. The SAPS refers to the "management "of crime scenes in National Instruction 1 of 2015. Although the National Instruction refers to the "management" of crime scenes, these organisational policy directives are the same or similar when being applied, expected, and directed on regulating the processing of crime scenes during the investigation of crime in the SAPS.

It is important to explain in the context of this study, which Section or Division in the SAPS is responsible for the investigation of crime. The structure, responsibilities, and the functioning of the investigation of crime within the SAPS is equally important. The following discussion explores the structure, responsibilities and functioning of Division Detective Service at National level which is responsible for the investigation of crime within the SAPS.

4.2   AN OVERVIEW ON FUNCTIONS OF DETECTIVE SERVICE WITHIN THE SAPS

The mandate of the Detective Service in the SAPS is the effective investigation and detection of all reported crime by gathering and analysing evidence resulting in the identification and successful prosecution of offenders, SAPS Policy for the Detective Service, National Instruction 12 of 2017 (SAPS, 2017a). The processing of crime

scenes forms an important part of the investigation of crime. The Division Detective Service is responsible for the investigation of crime within the SAPS. This means that SAPS members attached to the Detective Service is responsible for the processing of crime scenes.

Figure 4.1 below illustrates the organisation chart of the SAPS on a National level. The figure also shows that the Deputy National Commissioner for Crime Detection within the SAPS is responsible for Detective Services, which includes crime investigations and the processing of crime scenes. The figure further shows that the National Head Directorate for Priority Crime Investigations, Deputy National Commissioners for Policing, Crime Detection and Support Services as well as Provincial Commissioners, are accountable to the National Commissioner of the SAPS.
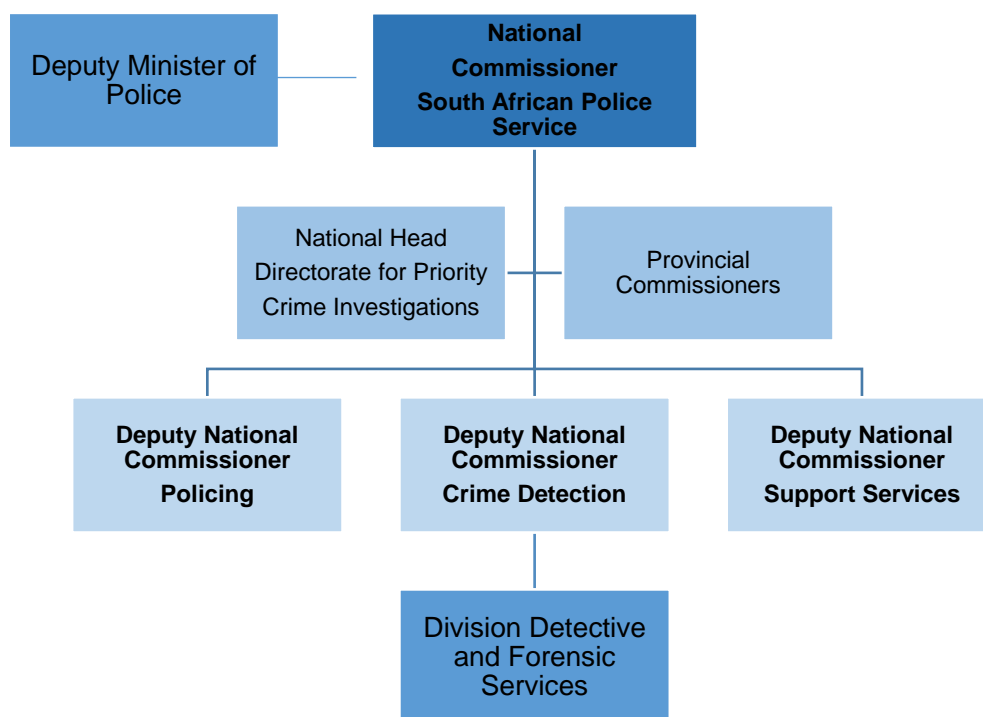
Figure 4.1: **Organisation chart of the SAPS on National level**
(Source: SAPS, 2020b)

Figure 4.1 above, indicates that the National Commissioner is the Head and Accounting Officer of the SAPS and directly reports to the Minister of Police. Under the National Commissioner, there are three Deputy National Commissioners who directly report to the National Commissioner (SAPS, 2020b). These Deputy National

Commissioners are responsible for Policing, Crime Detection and Support Services. The Deputy National Commissioner for Crime Detection is accountable to the National Commissioner for the Detective Service within the SAPS in respect of the investigation of crime. The Divisional Commissioner for the Detective Service and Forensic Services are accountable to the Deputy National Commissioner, Crime Detection.

Figure 4.2 below, indicates typical organisation chart of the Provincial level downwards to District Commissioner and Police Station Commander at local level (SAPS, 2020b). Once a crime has been reported to the SAPS the detectives attached to the DSC at the police station are responsible for the preliminary investigation of these newly includes reported cases which includes the processing of crime scenes within the policing precinct.
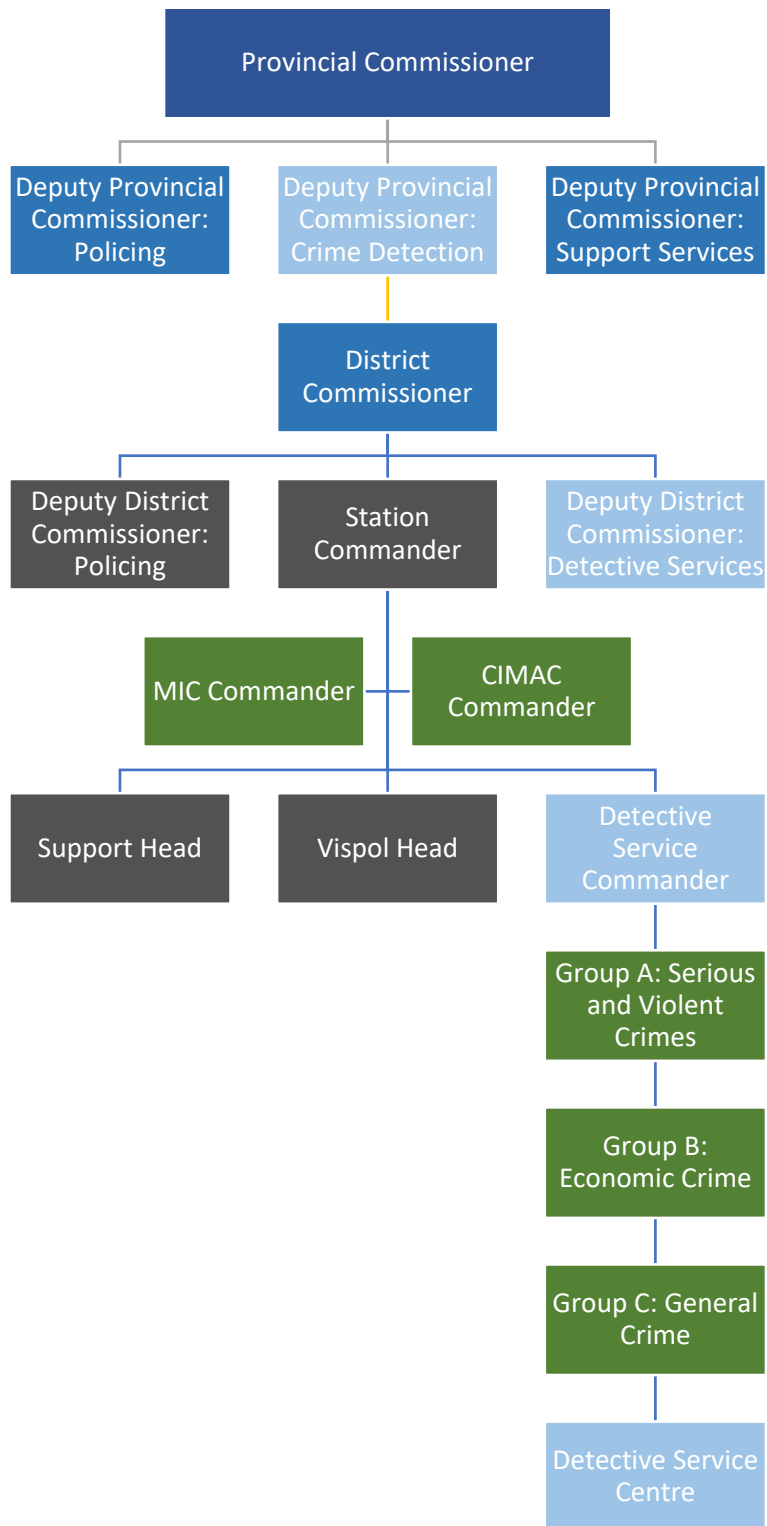
Figure 4.2: **Organisation chart of the Provincial level downwards to District Commissioner and Police Station Commander at local level**

(Source: SAPS, 2020b)

Figure 4.2 above indicates that the Provincial Commissioner is the Head Officer of the SAPS within the Province and directly reports to the National Commissioner (SAPS,

2020b). Under the Provincial Commissioner, there are three Deputy Provincial Commissioners who directly report to the Provincial Commissioner. These Deputy Provincial Commissioners are responsible for Policing, Crime Detection and Support Services. The Deputy Provincial Commissioner for Crime Detection is accountable to the Provincial Commissioner for the Detective Service within the Province in respect of the investigation of crime. The District Commissioner are accountable to the Provincial Commissioner. The Deputy District Commander for Detective services is accountable to the District Commissioner in respect in respect of the investigation of crime (SAPS, 2020b).

Furthermore, Figure 4.2 above, illustrates that the Station Commander is the Head of the police station and is ultimately responsible for the command and control of all other sections, including the Detective Service section. The Station Commander is accountable to the District Commissioner, who in turn directly reports to the Provincial Commissioner. It is imperative to further indicate that at police station level, members of the Detective Service are divided into groups that are assigned to investigate the crimes reported to the SAPS. The Detective Service Commander is also responsible for the command and control of the DSC and assign detective members to perform duties such as the preliminary investigation in all newly reported cases which includes the processing of crime scenes.

In each police station in the country there is a Detective Service that is responsible for the investigation of all crimes reported in the station's policing precinct. These Detective Services have Detective Service Commanders who is directly accountable to the Station Commanders of these police stations. Under the command of the Detective Service Commanders are crime investigation groups who are supervised by a commissioned officer (Group Commander) in the form of a Captain or Lieutenant-Colonel. These investigation groups investigate certain categories of crimes. As such, police investigators are normally called "detectives" and are allocated case dockets reported to the police station to investigate.

The Detective Service Commander is also responsible for the DSC and must allocate resources and a DSCC to manage and supervise the DSC activities. For the purpose of this study, the researcher focused on the Detective Service at police station level and on the DSC at the police station. Detectives attached to the Detective Service at

the local police station are responding and attending to all newly reported crime scenes in the station policing precinct on a 24-hour basis. This responding and attending to crime scenes includes the processing of serious crime scenes. The detectives performing duties in the DSC is accountable to the DSCC and the Detective Service Commander at station level.

The Divisional Commissioner, Detective Service is amongst others responsible for determining policy standards and operational procedures for the Detective Service in respect of the rendering of service and monitoring, as well as other matters pertaining to the functions of the Detective Service which require national uniformity in South Africa (SAPS, 2017a). The SAPS Policy for the Detective Service, (SAPS, 2017a) explains the structure on the different levels from the SAPS National level to the local police station level and describes the different responsibilities and functions on the various levels namely, National-, Provincial-, District- and Local level (police station level). The following discussion explores the functioning of the Detective Service at National level.

4.2.1   The functioning of the detective service at National Level

The Divisional Commissioner, Detective Service is accountable to the National Commissioner of the SAPS and the designated Deputy National Commissioner for Crime Detection for the effective and efficient functioning of all components and units of the Division Detective Service (SAPS, 2017a). The Divisional Commissioner, Detective Service is responsible for managing the activities of the Detective Service, through proper planning, in accordance with the mission and priorities of the SAPS, and for actively implementing and exercising effective control over crime investigation activities (SAPS, 2017a).

SAPS Policy for the Detective Service further describes the responsibilities of the Divisional Commissioner of the Detective Service, amongst others, as to determine policy standards and operational procedures for the Detective Service regarding the rendering of service and monitoring thereof, as the functions of the Detective Service which involve national uniformity, implementation and maintenance of policy, including standards for the Detective Service as determined by the National Commissioner (SAPS, 2017a). The Divisional Commissioner Detective Service is thus responsible

and accountable to the National Commissioner and Deputy National Commissioner for Crime Detection, for managing and planning of Detective activities within the Detective Service environment which in the context of this study includes the processing of serious crime scenes in informal settlement areas.

The station commander at station level is finally responsible and accountable to the Provincial Commissioner, Deputy Provincial Commissioner, Crime Detection, and the District Commissioner for the investigation of crime within the station precinct, which includes serious crime scenes in informal settlement areas. This further implies the effective implementation, execution, and control over of operational detective activities such as processing serious crime scene, in informal settlements. The following discussion explores and discusses the functioning of the Component Head of the Crime Investigation Service at National level (SAPS, 2017a).

4.2.1.1 The functioning of the component Head Crime Investigation Service, National Level

The Component Head, Crime Investigation Service (CIS) is accountable to the Divisional Commissioner Detective Service for the effective and efficient functioning and investigation of crime within the Detective Service components at SAPS police stations in the country (SAPS, 2017a). The investigation of crime and specifically the processing of crime scenes in informal settlements are included in SAPS investigation activities in respect of crimes reported to the SAPS. In the context of this study the effective and efficient processing of crime scenes is one of the responsibilities of the Component Head, Crime Investigation Service.

The SAPS Policy for the Detective Service (SAPS, 2017a), describe responsibilities of the Component Head, CIS as follows: Manage the activities of his or her component through proper planning, in accordance with the mission and priorities of the Service, and for actively implementing and exercising effective control over these activities (which include crime investigation service, harmful and occult related crimes, crime stop and missing persons); Ensure adherence to national policy and standards set by the Divisional Commissioner, Detective Service for the effective and efficient investigation of crime and support the Divisional Commissioner Detective Service in all endeavours.

The Component Head of CIS is based at the SAPS Head Office in Pretoria and directly accountable to the Divisional Commissioner Detective Service for the effective and efficient functioning and investigation of crime within the Detective Service components at SAPS police stations in South Africa. This includes police stations that serves informal settlement areas within their police station precincts. The investigation of serious crime and specifically the processing of serious crime scenes in informal settlements are included in SAPS investigation activities regarding serious crimes reported to the SAPS (SAPS, 2017a).

In the context of this study the effective and efficient processing of serious crime scenes at all police stations including informal settlements, is the responsibility of the Component Head of the CIS. All Detective investigation activities including the response, attendance, and processing of serious crime scenes in informal settlement areas and set national standards and adherence aspects forms a crucial part of the duties and responsibilities of Component Head of the CIS. The SAPS Policy outlined the responsibilities of the Component Head of the CIS above (SAPS, 2017a). In the following section the researcher discusses the functioning of the Detective Service at Provincial on level.

4.2.2   The functioning of the Detective Service at Provincial Level

The Deputy Provincial Commissioner, Crime Detection is responsible for the effective and efficient investigation of crimes as well as the processing of crime scenes within the province (SAPS, 2017a). Deputy Provincial Commissioner, Crime Detection is accountable to the Provincial Commissioner of the specific province and the Divisional Commissioner, Detective Service for the effective and efficient functioning and the investigation of crime of all Detective Components at SAPS police stations and Units of the Detective Service in that particular province (SAPS Policy for the Detective Service, 2017a).

The Provincial Head, Crime Investigation Service is accountable to the Deputy Provincial Commissioner, Crime Detection for the effective and efficient functioning and investigation of crime of all Detective Components at SAPS police stations and Units of the Detective Service in that province (SAPS Policy for the Detective Service, 2017a). In the context of this study all crimes committed within a particular province is

included in the responsibilities and functions of the Provincial Head, Crime Investigation. The effective and efficient investigation of crime and in particular the processing of serious crime scenes in informal settlements is therefore one of the responsibilities and functions of the Provincial Head, Crime Investigation.

The responsibilities and functions of the Provincial Head, Crime Investigation Service is outlined in the SAPS Policy for the Detective Service (SAPS, 2017a) as follows: Managing the activities of the Detective Service, through proper planning, in accordance with the mission and priorities of the Service, and for actively implementing and exercising effective control over these activities; and Ensuring adherence to national policy and standards set by the Divisional Commissioner: Detective Service for the effective and efficient investigation of crime. All serious crimes scenes within the context of this study in a specific province is the responsibility of the Provincial Head, Crime Investigation in the specific province.

The Provincial Head of Crime Investigation is responsible for managing all activities regarding the Detective Service within the province. This includes the effective and efficient investigation of serious crime scenes which occurred in informal settlements within the province. The effective management responsibilities and functions of the Provincial Head, Crime Investigation is thus to ensure that all detective activities are applied to during the processing of serious crime scenes in informal settlement areas within the province. These responsibilities and functions of the Provincial Head, Crime Investigation Service is outlined above. The following discussion delves into the functioning of the Detective Service at District level.

4.3   FUNCTIONING OF THE DETECTIVE SERVICE AT DISRTICT LEVEL

Policing "districts" is aligned to the current "district" Municipal boundaries and therefore the concept "district" in the SAPS. The District Commissioner of a specific Municipal District is appointed by the SAPS to assist the Provincial Commissioner of a specific Province and the Deputy Provincial Commissioner of Crime Detection in respect of managing amongst others the investigation of crime in the district. This responsibility and function include overseeing and managing the investigation activities in respect of informal settlements within the specific province.

The District Commissioner and the Deputy District Commissioner for the Detective Service are therefore also responsible for the effective and efficient processing of serious crime scenes in informal settlements by Detective Service at station level within the district. The District Commissioner is accountable to the Provincial Commissioner and the designated Deputy Provincial Commissioner, Crime Detection in respect of the investigation of crime within the district (SAPS, 2018:5). The SAPS Policy for the Detective Service (SAPS, 2017a) outline the responsibilities of the District Commissioner the Deputy District Commissioner Deputy District Commissioner for the Detective Service as follows: The District Commissioner and the Deputy District Commissioner for the Detective Service, as an extension of the provincial office, assists the Provincial Commissioner and the designated Deputy Provincial Commissioner, Crime Detection with the effective and efficient functioning of the Detective Service including the processing of serious crime scene in informal settlements at police station level.

The Deputy District Commissioner for the Detective Service at District level is directly accountable to the District Commissioner and the Deputy Provincial Commissioner, Crime Detection. The SAPS Policy for the Detective Service (SAPS, 2017a) outline the responsibilities of Deputy District Commissioner for the Detective Service as follows: Assist the District Commissioner in monitoring the effective and efficient investigation of crime according to National and Provincial directives by conducting inspections, interventions and evaluations at Detective Service sections at stations; Monitor adherence to the directives at operational level; and Coordinate detective operations within the district.

According to National Instruction on the Detective Service (SAPS, 2018:6) the Deputy District Commissioner for Detective Service at district level is accountable to the District Commissioner and to the Provincial Commander, Crime Investigation Service. National Instruction 1 of 2018 outline the responsibilities of the Deputy District Commissioner for Detective Service Detective Service amongst others as to assist the District Commissioner to monitor the investigation of crime in accordance with National and Provincial directives and standards (SAPS, 2018:6). The District Commissioner and the Deputy District Commissioner for the Detective Service are responsible for the effective and efficient crime investigation within a particular demarcated municipal

district and accountable to the Provincial Commissioner and Deputy Provincial Commissioner for Crime Detection for the investigation of serious crime within the district including in informal settlements.

Serious crimes are reported by communities from both suburban-and informal settlement areas to the SAPS at police station level. The District Commissioner and the Deputy District Commissioner for the Detective Service are therefore responsible for managing and planning of detective activities in the detective environment within the district in both suburban-and informal settlement areas. In the context of this study the processing of serious crime scenes in informal settlements is part of detective activities during the investigation of crime within the district. The following discussion explores and discusses the functioning of the SAPS at police station level.

4.3.1 The functioning of the SAPS at Police Station Level

The Police Station is the place where SAPS police members are on duty on a 24-hour basis performing various policing functions and responsibilities. These policing services differs respectively from matters such as complaints regarding crime and criminal activities which are reported to the SAPS by members of the public. These complaints normally need prompt respondence and attendance to serious incidents. These duties are a service provided to the communities by the SAPS to receive and attend to complaints from members of the public regarding crime (SAPS, 2018:6). Members of the public report complaints regarding crime in person or telephonically to the police station.

The SAPS personnel on duty at the police station register such complaints and criminal cases and take appropriate action in responding and attending to these incidents (SAPS, 2011:2). The SAPS appoints Station Commanders to manage SAPS police stations at local level. The Station Commander is accountable to the District Commissioner and Provincial Commissioner and is responsible for the investigation of, combating and detection crime in the police station precinct (SAPS, 2018:6). In the following discussion, the functioning of the CSC at station level is unpacked.

4.3.2   The functioning of the Community Service Centre (CSC) at Station Level

The CSC is centre at a SAPS police stations operating on a 24-hour basis where members of the community can report complaints, and open criminal cases for investigation by the SAPS (SAPS, 2011:2). The CSCC is responsible for the performance of all duties pertaining to the CSC and performs these duties under the command and supervision of the Relief Commander. The CSCC is responsible to ensure that complaints or reporters of crime, whether the crime was committed in his or her station area or in the station area of another police station, are treated courteously and that a comprehensive affidavit is taken from the complainant or reporter (SAPS, 2011:2).

Complainants or victims of serious crime reports cases at the CSC at the police station. A case docket is opened and registered and the CSC personnel hand the case docket to the DSCC who allocates the case docket to a detective from the DSC to attend to the serious crime scene. The detective will attend to the serious crime scene and conduct the preliminary investigation, which includes the processing of the serious crime scenes. The detective member also summons LCRC members to assist and support in the processing of the serious crime scenes in informal settlements. The following discussion outlines the functioning of the DSC at station level.

4.3.3   The functioning of the DSC at Station Level

The local Detective Service based at the local SAPS station is responsible for the investigation of crime in that station precinct. The Commander of the Detective Service is directly accountable to the Station Commander and District Commander for the investigation of crime in the station precinct (SAPS, 2017a). The Station Commander is responsible and remains accountable for the correct registration and transfer of case dockets and for the effective investigation of all case dockets under investigation at his or her station. (SAPS, 2011:6)

The SAPS Policy for the Detective Service (SAPS, 2017a) specify amongst others the responsibilities of the Detective Service Commander in this regard as to conduct investigations in accordance with National and Provincial instructions and to ensure adherence at operational level to manage and control the Detective Service at station

level (SAPS, 2018:6). This responsibility of the Detective Service Commander also applies to serious crime in informal settlement areas. DSC is described as a centre at the SAPS police station, resourced with local detective members, who is responsible to conduct preliminary investigation of all newly reported cases at a police station.

Detective members attached to the Detective Service at the local police station performs preliminary investigation duties on a 24-hour basis at the police station (SAPS, 2017a). These preliminary investigation duties include the processing of serious crime scenes in informal settlements in the context of this study. National Instruction 12 of 2017 stipulates and prescribe that the Station Commander of the police station, Detectives Services and Commander and the DSCC are responsible for the effective and efficient investigation of all case dockets reported and case dockets still under investigation at a particular police station (SAPS, 2017a).

The DSCC is responsible to ensure that all newly reported case dockets are effectively and efficiently investigated, and these duties are performed under the direct command of the Detective Service Commander at the station (SAPS, 2011:3 & 4). The SAPS policy on Detective Service (SAPS, 2017a) instructs and describe the functioning of the DSC as follows: The Station Commander of a police station, holding the rank of Colonel or higher, must ensure the implementation of a DSC at that station that detective members are allocated to the DSC. The DSCC, supervising must keep an OB (SAPS 10) at the DSC wherein all incidents and the activities of the members of DSC are recorded.

An Officers Visit Register must be maintained in the DSC to record visits made by commissioned officers to the DSC. The DSCC should manage all the resources allocated to the DSC is expected manage the dispatching of detectives to crime scenes and screen all case dockets received from the CSC and assign a DSC detective to perform a preliminary investigation. The DSCC must inspect case dockets as soon as possible after receiving it from the DSC and if further investigation is required, forward the case docket to the Detective Service Commander (SAPS, 2017a).

Based on the researcher's experience as a Detective Service Commander at station level, the DSC's duties include attending to all newly reported cases within the police

station precinct, often in conjunction with Visible Policing (VISPOL) members. When crimes are reported, VISPOL members respond and inform the detective members at the DSC, who then attend the crime scenes, which include serious crime scenes and summon members of the LCRC. The detectives, in conjunction with the LCRC, are responsible for processing serious crime scenes within the police station's precinct, including informal settlements.

The SAPS refers to the "management" of crime scenes in the SAPS policy, National Instruction 1 of 2015. Although the National Instruction refers to the "management" of crime scenes, these organisational policy directives are the same or similar when being applied, expected, and directed on regulating the processing of crime scenes during the investigation of crime in the SAPS. The following discussion relates to the current SAPS policy on Crime Scene Management, National Instruction 1 of 2015.

4.4 THE SAPS POLICY ON CRIME SCENE MANAGEMENT (NATIONAL INSTRUCTION NO. 1 OF 2015)

National instruction 1 of 2015 is the current policy in the SAPS on the Management of Crime Scenes. This policy was implemented during 2015 and replaced the previous policy on Crime Scene Management, Policy 2 of 2005. The purpose of this National Instruction is to regulate the management of crime scenes in the SAPS to ensure that crime scenes are properly controlled, managed, documented, investigated and that the integrity of items with potential evidential value is maintained. The principles of crime scene management and the different phases of handling crime scenes is set out in this National Instruction and should be applied to any type of crime scene (SAPS, 2015:2).

The roles and responsibilities described in the handling of each phase may be assumed by the same person (SAPS, 2015:2). The SAPS policy on the management of crime scenes, National Instruction 1 of 2015, further explains and describes the eleven different phases to be followed when a crime is reported to the SAPS (SAPS, 2015:7). In this regard, the researcher discusses the different phases prescribed by the current SAPS policy on Crime Scene Management, National Instruction 1 of 2015, namely, reporting phase, activation phase, responding phase, controlling phase, hand-over phase, planning phase, investigation and processing phase, debriefing

phase, restoring phase, releasing phase and the evaluation phase in the context of this study as follows. Figure 4.3 illustrates the different phases in the processing of crime scenes.

Activation phase: authorities are activated and response
Responding phase: the first responders arrive at the scene
Controlling phase: the crime scene is secured and controlled
Hand-over phase: investigating officer is handed crime scene crime scene commander
Planning phase - the investigating officer plans and manages the investigation process
Investigation and processing phase - the investigation process is carried out
Debriefing phase - a final survey of the crime scene is conducted
Restoring phase - the crime scene is restored
Releasing phase - the crime scene is released to the relevant party
Evaluation phase - a meeting is held to evaluate the processes followed at the crime scene

Figure 4.3: **An illustration of different phases in the processing of crime scenes** (Source: SAPS, 2015:21)

Figure 4.3 above indicates an illustration of different phases in the processing of crime scenes. During the application of the different phases as illustrated in Figure 4.3 above several physical infrastructural- and environmental physical conditions in informal settlements impact and influence on the providing of policing service to informal settlement areas. The physical conditions in the area include inadequate building structures and poor housing. Overcrowding and high population density are prevalent. There is a lack of electricity and access roads, along with narrow passageways. Safety and security infrastructure, such as burglar bars on doors and windows, is insufficient.

Additionally, there is a lack of street lighting and absence of house names and numbers.

The planning for services related to unhealthy and hazardous environmental conditions is also inadequate. These conditions further manifest as inadequate sanitation, poor solid waste management, lack of safe water and storm drainage, and insufficient wastewater management. These unbearable physical conditions in informal settlements normally obstruct and influence service delivery by the SAPS personnel negatively and the processing of serious crime scenes in the context of this study. All these different phases above when applied in informal settlements is obstructed and influenced by these aspects or factors during the processing of serious crime scenes by detectives and forensic experts or field workers from the SAPS. In the following sub-sections, the researcher discusses the different phases utilised when responding to a reported crime scene.

4.4.1   Reporting phase

The reporting phase is described by the SAPS policy on the management of crime scenes, National Instruction 1 of 2015, as the actions by a complainant which can be either telephonically, or in person to a police station to report a crime (SAPS, 2015:7). The SAPS policy on the management of crime scenes, National Instruction 1 of 2015, describe the procedure to of reporting a crime to the SAPS as follows: The call taker, police officer in the vicinity of the criminal incident, or police officer who are approached by a complainant at a police station must obtain all the necessary information accurately and as detailed as possible. The information must be captured on the computerised system and dispatch the information via radio request for the nearest patrol vehicle (van) to respond to the crime scene immediately.

This SAPS policy also stipulate that SAPS members to whom a crime could be reported, or call takers must be competent in the management of actions in respect of crimes reported to the SAPS. This includes for example SAPS members at the CSC, 10111 Centre and Operational Rooms (SAPS, 2015:7). Gehl and Plecas (2016:51) explain that Police officers may be called to action in various ways which includes a radio dispatch call to attend an emergency, a citizen flagging down a passing police vehicle to report an incident, or an officer coming upon a crime in progress. Whatever

the means of being called to action, this is the first step of the police officer becoming engaged in a process to gather and evaluate information, making decisions, and take appropriate action.

Hlophe, Marumoagae, Naidoo, Omar, Singh, Steynberg, Theophilopoulos, Tshehla and van der Merwe (2020:52) explain the process of reporting a criminal complaint to the SAPS as follows: A criminal complaint may be reported to a police officer in the vicinity of the criminal incident, or in person by a complainant to a police station. The police officer receiving the complaint at a police station will note the complaint in the OB and where necessary send out a radio request for the nearest patrol vehicle (van) to respond to the crime scene immediately. A police officer at CSC will write out the complaint in the form of a sworn statement which will be signed by the complainant. A police docket will be opened, and the signed statement is filed in the docket and the docket will be transferred to the Detective Service at the DSC for preliminary investigation.

Lochner and Zinn (2015:7) explain that the official on duty in the CSC or at the police station receiving the initial call is responsible for despatching the SAPS member on patrol to the crime scene. Lochner and Zinn (2015:7) however, highlight the fact that the dispatching officer is an example of an official unknowingly taking part in crime scene management process and although the dispatching officer and patrol officer are not directly involved in the crime scene management process itself, they are the links in the crime scene management.

The authors Hlophe et.al. (2020:52), Gehl and Plecas (2016:51) and Lochner and Zinn (2015:7) are all in agreement with the provisions of the SAPS policy on crime scene management, National Instruction 1 of 2015, regarding the procedure to be followed after the SAPS received information, in respect of a crime and the subsequent dispatching of such information to a patrol officer in the vicinity of the crime scene location to attend immediately to such crime scene. Lochner and Zinn (2015:7) explain that the management of a crime scene is a complex activity that consists of numerous stages and actions.

According to Lochner and Zinn (2015:7) it is important for investigators to know that the principles of crime scene management have progressed over many years and different crime scene management processes are accepted internationally as

standard operating procedures. Lochner and Zinn (2015:7) also explain that although these procedures may differ from agency to agency and from country to country, the aim and goals remain the same. Gardner and Krouskup (2019:51) explain that to understand and ultimately achieve an answer to the conundrum that each crime scene represents, several people such as the initial responding officers, the crime scene technicians, the investigators, and the laboratory scientists that are required to work together since each one plays a critical role in performing specific responsibilities.

Standard operating procedures (SOP) and practice define specific responsibilities differently in various police agencies and the failure of groups to work together will be detrimental to the investigation (Gardner & Krouskup, 2019:51). Gardner and Krouskup (2019:51) also emphasise that the initial responding officer's responsibility is clearly described in crime scene recommendations and his or her role is critical. The initial responding officer do not process crime scenes as the crime scene technician or investigator accomplishes the processing and his or her responsibility is to set the stage for a successful processing of the crime scene by controlling and coordinating resources on the crime scenes (Gardner & Krouskup, 2019:51).

The dispatching of information regarding a complaint via radio request for the nearest patrol officer to respond to the serious crime scene immediately in the real-world is operating effectively in well-developed areas as road infrastructure is in good condition. When a patrol officer is requested by the dispatcher to attend to a serious crime scene the patrol officer is already near the address location of the serious crime scene to immediately respond and attend such serious crime scene. The patrol officer is to be able to accesses the serious crime scene without any challenges or difficulties. In these well-developed areas streets have names, the houses are numbered, and the location of the serious crime scene can thus easily be found.

The infrastructure conditions in informal settlements are totally opposite than infrastructure conditions in well developed areas. Informal settlements have no developed infrastructure to promptly provide effective services to the inhabitants living in these informal settlements' areas. Policing services cannot be effectively provided because of the absence or lack of access roads to and between housing structures in informal settlement areas. In informal settlement areas there is no street names, the housing structures are not numbered, and the location of the serious crime scene

cannot easily be found and thus delaying the response time. Informal settlement areas are normally provided with policing services by police stations located in well-developed areas.

This means that to report serious crime to the SAPS, informal settlement residents are bound to depend on services from police stations which are far distances away from informal settlements and thus have to travel or walk long distances to get to the nearest police stations to report crime. As such, the long distance travelling or walking off to get to the nearest police stations to report crime results in a delay in time to attend immediately to the serious crime scenes to secure and protect the crime scenes and prevent the risk of contamination of evidence on serious crime scenes. Informal settlement residents who can afford mobile communication devises are able to telephonically contact the police station and provide information regarding the complaint.

The dispatcher who received information regarding serious crime and the location is not able to give the information to a patrol officer near the vicinity as no vehicle patrols duties can be performed in informal settlement areas because of no access roads to and between residence structures in informal settlements for patrolling. The dispatcher is duty-bound to communicate the information to the patrol officers, patrolling in the well- developed areas. The patrol officers in the well-developed area are normally confronted with a variety of challenges before locating the crime scenes in informal settlements. These challenges include aspects such as access roads to the serious crime scene, the parking of the state vehicle with crime scene processing equipment far distances away from the actual serious crime scene and is compelled to carry the crime scene processing equipment on foot between the narrow alleyways, without street names and housing structure numbers.

These obstacles result a delay in response to serious crime scenes and threatens the safeguarding of the serious crime scene and increase the risk of contamination of evidence on the serious crime scenes. The absence or lack of access roads to and between residential structures in informal settlements obstructs the immediate attendance to serious crime scenes in informal settlement areas. According to the SAPS Policy on crime scene management, National Instruction 1 of 2015 the first responder is a SAPS member regardless of his or her unit, who arrives first at the

crime scene (SAPS, 2015:3). The first responder patrol officers, fire-fighters, and emergency medical personnel are usually first to arrive at the scene of a crime and are thus referred to as first responders since they are assigned and trained to respond to an emergency event or crime (Dutelle, 2017:55).

Fish, Miller, Braswell and Wallace (2013:32) explain that the first responders are generally the patrol officers, firefighters and emergency medical personnel who are dispatched to crime scenes or scenes of an urgent situation nature. The SAPS Basic Police Development Learning Programme (SAPS,2013:8) defines a first responding officer as any SAPS member that will be the first responder at the crime scene. From the general idea of the above-mentioned literature, first responders may include various role players such as the personnel from the fire department or emergency medical personnel (Fish et al., 2013:32; Miller, 2014:118) or any member of the SAPS (SAPS, 2013:8).

In the context of this study the first responding officer can be regarded as any member of the SAPS regardless of rank or unit who arrives first at the crime scene, after being dispatched to crime scenes or scenes of an urgent situation. From the literature's viewpoint, supplementary activities were identified by Lochner and Zinn (2016:111) whereby these authors have added that the first respondent must separate the eyewitnesses and the suspects if there are any, to minimise intimidation against the victims and the witnesses and to determine the level of personnel required at the crime scene. As a result, the additional responsibilities for the first respondent can be added into the roles of first respondent specified in SAPS policy on crime scene management, National Instruction 1 of 2015.

According to Geldenhuys (2017:47), the first respondent must preserve and safeguard the crime scene from the start, and only then can investigators be able to collect all the evidence that can play a vital role in solving the case. James, Nordby and Bell (2013:46) state that the first respondents are the only people to view the crime scene in its most original or pristine condition and that their actions at the crime scene form the basis for successful or unsuccessful resolution of the investigation. Ogle (2012:50-52) explain that first respondents have the possibility to make a valuable influence at crime scenes by determining the need for emergency actions and emergency personnel, taking and keeping witnesses and suspects from the crime scene.

Ogle (2012:50-52) further explain that first respondents need to secure the crime scene and create the crime scene perimeter, collecting crime scene data, by doing the preliminary assessment of the crime scene and taking of actions to safeguard any fragile evidence at the crime scene. If their conduct conforms to the guidelines for first respondent, the chances of the investigation process being concluded successfully is greatly enhanced (Baxter, 2015:4).

4.4.2   Activation phase

The activation phase can be described as the SAPS member (dispatcher) who received information regarding crime, activating and dispatching such crime information to a patrol officer in the vicinity of the reported crime scene to respond to the crime scene immediately (SAPS, 2015:8). The duties and responsibilities of the dispatcher is outlined as follows during the activation phase:

- The dispatcher must have immediate access to a current contingency plan;
- The dispatcher must obtain the necessary information from the call taker to activate members to the crime scene;
- The dispatcher must activate the available member who is nearest to the crime scene (first responder), and provide all relevant information to such member;
- The dispatcher must record all actions on the computerised system or if a computerised system is not available, on the SAPS 297, which includes, (a) the time the first responder acknowledges receipt of the call; (b) the time the first responder arrives on the crime scene; (c) details of the SITREP result from the first responder; (d) details of other role players that have been activated to be entered in the SAPS 297 official register; maintain open lines of communication.
- (In certain circumstances such as national events or special operations as directed by the Provincial Commissioner it may be necessary to also keep a separate radio channel open); await further SITREP's from the first responder; activate backup, as required, in accordance with the contingency plan; monitor the situation; and render support as long as required (SAPS, 2015:8).

Gehl and Plecas (2016:49) explain that tactical investigative response is handled by operational officers, who are involved in the frontline response to criminal incidents and the police are regularly faced to respond to such actions, which sometimes are

life threatening situations, where information is limited, and critical decisions must be made to act. In these tactical investigative responses, the responding officers often have to rely on the information of a dispatched complaint, coupled with their own observations on arrival on the crime scene (Gehl & Plecas, 2016:49).

Gehl and Plecas (2016:51) further explain that responding officers will often be faced with other calls where danger exists to the safety of persons and the decision to enter or wait for back-up must still be made. In these cases, the responding officer must weigh the available information and respond or wait for back-up per their own threat vs risk assessment of the facts. Police officers might be called to action by many different means such as a radio dispatch call to attend an emergency, a citizen flagging down the passing police vehicle to report an incident, or an officer coming upon a crime in progress. Gehl and Plecas (2016:51) emphasise that whatever the means of being called to action, is the first step of the police officer becoming engaged in a thinking process to gather and evaluate information, make decisions, and act.

The first step of this thinking process for the investigator is to make the evaluation based on the following questions:

> Is this an active event requiring a tactical investigative response?
> Is this an inactive event requiring a strategic investigative response?

Gehl and Plecas (2016:51) further explain that as a subsequent part of this evaluation determining an active event or inactive event, the investigator should also be alert to the type of crime being encountered. For example, is it an assault, a robbery, or a theft? From the perspective of police tactical investigative response, an investigator confronted with an active event must first assess the threat level. Is there a danger to the life or safety of persons that would require a level one priority result, taking immediate action to protect life and safety of persons, including the life and safety of attending police officers? In assessing these threat levels to life and safety, police are often faced with very limited information.

Sometimes there is only a possible threat, or an implied threat to the life or safety of persons. In such cases, it is only necessary for the police to suspect that there is a threat to the life or safety of a person to evoke the extended powers provided by crucial circumstances. In these cases of implied threats, the responding officer must weigh

the available information and respond or wait for back-up per their own threat vs risk assessment of the facts. (Gehl & Plecas, 2016:51). First responders to serious crime scenes in informal settlements experience challenges and difficulties when activated to serious crime scenes by the dispatcher. These challenges and difficulties include the absence or the lack of access roads to and between housing structures in informal settlements, the absence of street names and house structure numbers. These factors lead to a delay in locating serious crime scenes to attend to it promptly and to take control of these serious crime scenes and to secure it.

The absence or lack of infrastructure currently in informal settlements makes it difficult for police to patrol these informal settlements and to respond to emergencies or to access serious crime scenes immediately and without any difficulties. These informal settlements are characterised by unstructured roads that are mostly of soil, gravel and muddy streets. The absence of access roads in these communities' force informal inhabitants to move around using alleyways or footpaths created by the spaces left in between housing structures. This absence of roads causes difficulties for SAPS personnel such as detectives as well as members of the LCRC when trying to access serious crime scenes in these informal settlements.

The SAPS personnel are then left with no other means to move around by using the narrow alleyways or footpaths in between housing structures to access serious crime scenes. These personnel are expected to handle and carry the crime scene investigation equipment walking on foot to the serious crime scenes as the streets and alleyways are very narrow to be accessed with a motor vehicle through these narrow spaces. Detective personnel and members from the LCRC can because of the absence of access roads to and between housing structures do not access these informal settlements by vehicles but are instead forced by these inaccessibility difficulties to park their state motor vehicles in an unsafe and secured area, far distances from the serious crime scenes.

SAPS personnel are risking their safety and lives in carrying crime scene processing equipment by hand in these dark and dangerous alleys and pathways to the crime scenes which made them vulnerable to criminal acts such as mugging and robbing. During night-time the absence of street lighting creates a challenge in making it difficult trace and locates trace, search and locate a specific address where a crime scene is.

These physical conditions in informal settlements cause difficulties for SAPS personnel when expected to locate crime scenes for the processing of these crime scenes. These physical conditions of the absence of access roads in informal settlements worsen during the night-time when it is dark.

4.4.3   Responding phase

The responding phase can be described as the actual arrival of the first responder at the crime scene after being dispatched to attend to a crime scene (SAPS, 2015:8). The duties and responsibilities of the first responder is explained and described on how he or she must approach crime scenes. These considerations include the following aspects:

The first responder should consider his or her own safety first and consider the safety of others; and should further secure and preserve the crime scene. On arrival at the crime scene, the first responder must confirm his or her arrival at the crime scene to the dispatcher who initially requested him or her to respond to the specific crime scene. The first responder must assess the situation with regard to initial observations, arrest the suspect if he or she is available as prescribed, maintain the first responder report and ensure that all unauthorised persons are removed from the crime scene and that they remain outside the outer cordon. The first responder is usually a member from Visible Policing but may be any other member who arrives first at the crime scene (SAPS, 2015:8 & 9).

Dutelle (2017:55) explain that first respondents have two primary duties namely the protection of life by rendering the crime scene safe and provide emergency services for individuals in need. Lochner and Zinn (2016:111) describe the roles of the first respondent at the crime scene are as follows:

- To ensure that if there are likely suspects and witnesses at the crime scene, they should be split on the arrival of the first respondent;
- To protect the crime scene with the goal to ensure that the physical evidence is not contaminated;
- To ensure that the risks are minimised against the victims and witnesses;
- To determine whether the crime scene is key or minor with objectives to determine the level of assistance necessary for the crime scene; and

- Lastly, the first respondent must identify any physical evidence or any potential eyewitnesses of the crime scene.

Benson, Horne and Coetzee (2010:22), explain that the roles of the first respondent at the crime scene consists of the control and protection of the scene as well as the preliminary assessment and walkthrough of the scene. Geldenhuys (2013:47) states that the first respondent has to assess the situation immediately. It is important that police members and emergency personnel secure the crime scene, establish a boundary and create a route into and out of the crime scene for paramedics, police members or firefighters working on the crime scene to use (Geldenhuys, 2013:47). Geldenhuys (2013:47) further explain that a prompt search of the area be conducted to ensure that no physical evidence is disturbed before a path is marked out and create one point of entry where responders can walk to minimise contamination on the crime scene.

Gardner and Krouskup (2019:51) explain that the basic goals of crime scene management that the initial responder is responsible for, can be achieved and expressed in five specific objectives at the crime scene to gain control of the crime scene safely and effectively, namely:

- Document the supplied information;
- Not become a victim;
- Provide for emergency care;
- Secure and control the scene and all those within it; and
- Release the scene to the appropriate authorities (the investigating detective or crime scene technician)

In the field of police investigations, the initial response by officers to a crime scene is critical in gathering information and securing evidence. Gardner and Krouskup (2019:52) stress the importance of officers documenting what witnesses or suspects say upon arrival, as well as making note of their own observations, such as the time of arrival and any arrivals or departures from the scene. Gardner and Krouskup (2019:52) also emphasise the use of all senses, including smells, which can provide critical information. Once the initial response has brought the situation under control,

the investigation becomes a strategic investigative response (Gehl & Plecas, 2016:49).

Gehl and Plecas (2016:49) stresses the importance of officers documenting what they were told and what they saw to justify their actions. Olge and Plotkin (2018:35) highlight the impact the first responder's actions can have on the quality of the investigation, emphasising the need to secure the scene and determine a perimeter. Overall, the actions of the first responder can significantly impact the success of a criminal investigation. First responders to serious crime scenes experience challenges and difficulties before they arrival at serious crime scenes in informal settlements. These challenges and difficulties include the absence or the lack of access roads to and between the housing structures in informal settlements.

SAPS personnel after being activated to attend to serious crime scenes in informal settlement areas are because of this absence or lack of access roads bound to park state vehicles far distances away from serious crime scenes and carry the crime scene processing equipment through the alleyways between housing structures in informal settlement areas to serious crime scene locations. The absence of street names and housing structures numbers also creates challenges for SAPS personnel in locating the exact serious crime scene. These physical conditions in these informal settlement areas delay the arrival of SAPS personnel to immediately attend to serious crime scenes and this delay leads to an increase of the risk of contamination of evidence on serious crime scene or the removal of evidence from these serious crime scenes.

The physical conditions such as the unplanned layout of housing structures are not conducive to be easily accessed in these areas without encountering difficult challenges and risking conditions for SAPS members, who are expected to process serious crime scenes in informal settlements effectively under these physical conditions. During night-time these physical conditions creates an even more dangerous circumstances as the surroundings in these informal settlement areas are not conducive for the effective processing of crime scenes. The type of material that is normally used for the construction of these shacks or shelters such as cardboard, scrap wood wooden boards and plastic increase the risk of fire threats.

During night-time informal settlement inhabitants make fires to cook food using various energy methods to prepare food such as paraffin, coal, firewood, oil, petroleum, gas illegally connected electricity extra. During winter-time the situation of energy demand is much higher as the inhabitants also need to warm themselves against the cold element of nature and therefore make open fires to ease the cold. These various methods of energy generating by informal settlements inhabitants has caused shack fires and led to numerous shacks being destroyed in the past. These risks created by the physical conditions such as shack fires that can occur before or during the crime scene processing process are obstructing and influencing crime scene processing by detective personnel negatively.

Footprints of possible suspects that lead to and from the serious crime scenes can be destructed since there are no alternative routes to be taken to the serious crime scenes. The exposed electric wires which are illegally connected by the informal settlement's dwellers create the risk of fatalities, electrical shocks to SAPS personnel. The risk of possible mugging of crime scene investigation equipment for SAPS personnel whilst walking to the crime scenes also exists. The structures in informal settlements are poorly built and constructed with unreliable and scrap material which creates the risk that it might fall unexpectedly during the processing of crime scenes. Poor ventilation is normally caused by the absence or insufficient windows, and this happens when a crime is committed indoors.

4.4.4 Controlling phase

The Controlling phase can be described as taking control and evaluation of the crime scene by the first responder until the handover of the crime scene to the Crime Scene Commander (SAPS, 2015:9). The duties and responsibilities of the first responder is further explained and described during this phase. The first responder to the crime scene must execute all the duties of the Crime Scene Commander until he or she handover the crime scene to the Crime Scene Commander. SAPS (2015:9) outlined the duties and responsibilities of the first responder regarding the controlling phase as follows:

The first responder must, upon arrival at the crime scene, after taking all the necessary steps to prevent the contamination and disturbance of evidence on the crime scene as follows:

- Assume control of the crime scene; identify the nature of the incident;
- Give a SITREP to the dispatcher;
- Arrange for the suspect to be removed from the crime scene as soon as possible if an arrest has been made;
- Assist the injured persons with due consideration of the integrity of physical evidence if the member is competent and certified or contact the relevant authorities as a matter of priority;
- Document the place where the injured person was found and make notes accordingly;
- Record the particulars of the injured person and emergency personnel; and
- After taking control of the crime scene, the first responder must evaluate the safety status of the crime scene and request the assistance of a safety official as identified and in accordance with the contingency plan, if required.

The first responder should direct the emergency services and other official role players at the scene to prevent evidence from being disturbed or contaminated. In the event of a reported crime, the first responder, a member of the SAPS, must take the necessary steps to secure and protect the crime scene. These steps include establishing an inner and outer cordon around the perimeter of the crime scene, protecting exhibits from contamination or destruction, completing the exhibits log if exhibits must be moved, and dealing with deceased bodies as a source of evidence. In addition, the first responder should identify and protect other scenes that might have a direct connection with the primary scene.

Control should be accessed as well as maintaining an access log. determine access routes for emergency services and other authorised members, keep the media out of the crime scene, refrain from releasing information about the crime scene, and record the particulars of all individuals who entered the crime scene prior to the arrival of the Crime Scene Commander. These procedures ensure that the integrity of the crime scene is preserved, and that evidence is not compromised (SAPS, 2015:9-11). Taking control of the crime scene in part requires identifying and controlling all witnesses and

other involved parties found on the crime scene and the officer will turn to controlling and limiting the actions of the people on the crime scene.

The first responder must not disturb the crime scene unnecessarily and evidence preservation is an absolute mandate for every law enforcement officer working the crime scene (Gardner & Krouskup, 2019:53). According Lochner and Zinn (2015:111) it is the responsibility of the first officer on the crime scene usually the first responding officer who is nearest to the crime scene (whether a uniformed officer or not) must take the necessary action steps in respect of the crime scene. These actions include aspects that needs immediate attention such as suspects and possible witnesses, prevention of disturbances, destruction and contamination of the crime scene and protection of physical evidence.

Lochner and Zinn (2015:111) explain that the action steps taken by the first officer on the crime scene in respect of the assessment and walk- through plays a crucial role in the success of the investigation later on. The first officer on the crime scene should stay /remain in command of the crime scene because several problems could arise. For example, too many officers or senior employees of the company might want to take control of the crime scene, or there is no specific officer or designated employee of the company to take control. The presence of unauthorised personnel, onlookers and senior employees entering the crime scene can cause crucial evidence to be lost.

Lochner and Zinn (2015:113) further explain that after determination of the boundary, the crime scene must be cordoned off and access and exit routes must be determined for official and emergency purposes to and from the crime scene. Crime scenes are dynamic, rapidly changing environments because of the initial actions, or delays of first responders which can dictate the success or failure of investigative efforts. The first responder must secure and preserve the crime scene and evidence on specific crime scene. The first responder must effectively take control of the crime scene to be able to secure and prevent the destruction or diminished value of physical evidence on the crime scene (Dutelle, 2017:55).

The authors, Ogle (2012:50-52), James, Nordby and Bell (2013:46), Baxter (2015:4) and Geldenhuys (2017:47), indicated the value added by the first respondents when they carry out an effective preliminary investigation process. This process includes the

controlling of onlookers at the crime scene, assisting the injured if any, cordoning off the crime scene, cordoning off visible physical evidence and handing over the crime scene with information to the investigating officer. These actions are directly connected to the provisions prescribed in the SAPS policy on crime scene management, National Instruction 1 of 2015 (SAPS, 2015:8 & 9).

The initial survey of the crime scene should be done in a systematic manner, taking notes of observations as to possible evidence present, any evidence that has been removed, the person responsible for this evidence, and observations regarding the pertinent data. It is imperative that nothing be disturbed at the crime scene until the crime scene has been photographed and sketched in the condition found. The initial survey of the crime scene should be issue oriented and include an assessment of the potential evidence present at the crime scene (Olge & Plotkin, 2018:37). The control of serious crime scenes in informal settlements is difficult and challenging as the first responder need to deal with the safe securing of the serious crime scene and on the other hand the physical conditions which are prevalent in informal settlements simultaneously.

It is difficult to protect and maintain the integrity of the serious crime scene and control bystanders and onlookers to prevent contamination and destruction of evidence on serious crime scenes in informal settlements because of overcrowding and density in these informal settlements. Overcrowding, in informal settlements results from the lack of space within the alternative space sourced for housing structures. Overcrowding resulting in bystanders and onlookers gathering on the serious crime scenes and it is normally the responsibility of the SAPS to manage and control these crowds. It is difficult in informal settlement areas to barricade, prevent people from walking to and from their housing structures whilst processing a serious crime scene.

These bystanders and onlookers gathering on the serious crime scenes contaminate the crime scene by toughing and removing exhibits on the serious crime scene. Overcrowding disrupts and obstructs on proper serious crime scene processing. It is challenging to handle many onlookers and to control large numbers of people and to ensure that large crowds can still use alleyways whilst the investigation is still in progress on the serious crime scenes. Unemployment also plays a role in the numbers of bystanders and onlookers as there be many unemployed persons who may be

present at such a serious crime scene in informal settlements, even in the middle of a weekday.

Many informal settlement structures are overcrowded, with five and more persons sharing a one-room structure. This one room structures are normally used for cooking, sleeping, and living. The high population density is contributed by aspects such as traditional customs and extended families that must consist of households with five persons or more. Multi-purpose use of rooms will affect crime scene processing as it led to more contamination of the serious crime scene because people are forced to have to continue to use a room where a serious crime was committed before SAPS arrives or before the conclusion of the serious crime scene processing.

Detective personnel always have difficulties in controlling the crowds of bystanders and onlookers more so on serious crime scenes in informal settlement areas with limited space in and around the serious crime scenes. Prescribed crime scene processing principles cannot be followed because of people who is part of the household present on the serious crime scenes that cannot be moved to other rooms inside the housing structure, which is a one roomed structure. Crowds and bystanders first need to be removed from serious crime scenes before the actual processing of a serious crime scene can commence but is more difficult since there is limited space to move them too.

These crowds and bystanders normally contaminate crime scenes, by touching and removing exhibits as they have to use the same alleyways next to or even having no alternative route than through the serious crime scenes. These crowds and bystanders can be due to the conflict and high levels of stress easily become hostile towards to detectives and police personnel. These crowds are therefore difficult to control and can be a challenge to manage under such hostile conditions posting a danger and threat to the safety and security of detective personnel, LCRC members and inhabitants of informal settlements, during the processing of serious crime scenes in informal settlements.

SAPS personnel that are busy doing the serious crime scene processing can get agitated out of fear for their own safety and security in such a hostile situation can get anxious and losing focus in doing the serious crime scene processing correctly and

effectively. The absence of formal access to electricity, households in informal settlements use alternative energy carriers which include candles, paraffin, wood, coal for cooking and other energy needs. In many instances, use of alternative fuels is problematic because of inadequate regulation and enforcement in these informal settlement areas in respect of consumer standards and safety regulations. This physical condition of the absence of electricity in informal settlements obstructs and influences the processing of serious crimes scenes and cause detective personnel not to be effective in the processing of crime scenes.

The SAPS personnel experience difficulties of seeing and identifying exhibits and objects whilst processing crime scenes in bad light such as hand torches. The serious crime scene processing equipment can therefore not effectively be utilised in the absence of electricity and impacting negatively on the value and integrity of the crime scenes.

4.4.5   Handover phase

The handover phase can be described as the physical handing over of control of crime scene activities by the first responder to the Crime Scene Commander (SAPS, 2015:9). The continuity and control of the crime scene must be ensured and therefore the first responder must remain in control of the crime scene until he or she hands the cordoned area over to the Crime Scene Commander. The first responder must ensure that the Crime Scene Commander is summoned and attends the crime scene and may not leave the crime scene until permission is granted by the Crime Scene Commander or his or her commander. If the commander grants authority that he or she may leave the crime scene, this authority must be recorded by the first responder in his or her Pocket Book (SAPS, 206).

The SAPS 206 is a pocket size, soft cover, official booklet with numbered pages, wherein record is kept in terms of dates and times in respect of their official daily work-related activities performed all the non- commissioned officers in the SAPS. The SAPS policy on Crime Scene Management (SAPS, 2015:9) explain that the duty officer of the Investigating Unit must designate the Crime Scene Commander, provided that, in cases where a death occurred in police custody or because of police action, a Crime Scene Commander must be designated in consultation with the Independent Police

Investigative Directorate (IPID). The SAPS policy on Crime Scene Management (SAPS, 2015:9) also outlined the responsibility of the first responder upon handover of the crime scene is described as follows:

- Briefing of the Crime Scene Commander on the activities whilst he or she was at the crime scene;
- Give a final situational report (SITREP) to the dispatcher after handing over the crime scene;
- Complete the first responder report and hand it together with relevant logs to the Crime Scene Commander; and
- Provide the access log and list of particulars of persons who were at the scene before the Crime Scene Commander takes control of the scene.

The responsibility of the Crime Scene Commander after the handover is that the Crime Scene Commander must take control of the crime scene and ensure the responsibilities outlined by the SAPS policy on Crime Scene Management (SAPS, 2015:11-12) are attended to as follows:

- Ensure the signing of the first responder report;
- Obtain a comprehensive SITREP from the first responder;
- Ensure that all responsibilities as provided for in the Controlling phase, have been attended to;
- If necessary, assign an Investigating Officer to the crime scene; and
- Ascertain which additional services and experts must be requested to attend the crime scene.

Once a crime scene technician or detective arrives to take charge of the crime scene, there is typically a waiting period for the patrol officer. During this idle time, the patrol officer may take advantage of the opportunity to document their initial observations, actions taken upon arrival, and any statements made by individuals present on the scene. This window of time may also be conducive to conducting interviews with firefighters and emergency services personnel who may have arrived at the scene prior to the arrival of the police. On arrival of the detective on crime scene, passing of responsibility to the investigative team is very important. The officer responsible for the crime scene, and certainly the initial responding officer, must brief the investigative

team on all aspects of what he or she knows, what she or he found, and what he or she did upon arrival (Gardner & Krouskup, 2019:61).

On completion of all these actions, the responsibility for the crime scene transitions from the initial responding officer to the crime scene team and detectives. After the handing over the initial responding officers take on a support role, and the actual processing of the crime scene begins (Gardner & Krouskup, 2019:62). The first responder to the crime scene will have information about conditions at the crime scene prior to any alterations and other information about the incident known at that time. During the handover of the crime scene by the first responder, the crime scene investigator must obtain information as to what areas have been entered and by whom, so that elimination samples can be obtained from these individuals.

The crime scene investigator must tour the crime scene with the first responder, making sure to follow any established pathway. All pertinent observations should be recorded during this tour with the first responder and comparing notes with the first responder as to observations made regarding the types of physical evidence that may be present. Any alterations to the condition of the crime scene prior to the arrival of the investigating team should be noted. Note must be taken about any evidence that has been collected by the first responders at the crime scene. Record must be kept as to which items were collected and by whom, whether or not the chain of custody was initiated, and who will be responsible for booking the evidence into the evidence room (Olge & Plotkin, 2018:39).

The continuity and control of serious crime scenes cannot be ensured in informal settlements because of the physical conditions and overcrowding in informal settlements. It is difficult in informal settlements to barricade, prevent people from walking to and from their housing structures whilst processing serious crime scenes. The bystanders and onlookers gathering on the serious crime scenes contaminate the serious crime scenes by touching and removing exhibits on these serious crime scenes. The overcrowding of people in informal settlements disrupt and obstructs effective and proper serious crime scene processing and creates and increase the risks of contamination of evidence on serious crime scenes in informal settlements.

4.4.6   Planning phase

The planning phase entails a walk through the crime scene by the Crime Scene Commander and communication with the relevant role players as well as an evaluation of the situation to consider appropriate action on the crime scene (SAPS, 2015:13). The planning of activities is key to the successful crime scene processing. This includes, inter alia, a walk through the crime scene by the Crime Scene Commander and meetings with all the role players such as the Crime Scene Examiner, Forensic Pathology Official, other experts and emergency personnel. The Crime Scene Commander must evaluate the situation and if appropriate do the first walk through the crime scene, taking into consideration that the route used might need to be processed prior to the walk through and that the appropriate PPE must be worn (SAPS, 2015:13).

According to the SAPS policy on crime scene management, SAPS (2015:13), the Crime Scene Commander must determine the investigation goals with other all role players and considering the following aspects:

- The safety of all members;
- The expected outcome of the investigation;
- The resources and services that will be required; and
- The team meeting.

The Crime Scene Commander, in collaboration with the Crime Scene Supervisor, determines the resources and methods for investigating and processing the crime scene. They are responsible for requesting a Crime Scene Examiner from the LCRC and keeping the Crime Scene Commander report. The Crime Scene Commander should also be present during processing where appropriate (SAPS, 2015:14). The Local Criminal Record Centre must provide a Crime Scene Supervisor and examiner, with Provincial or National teams only deployed after consultation. The number of examiners should be limited, based on the complexity of the crime scene, and maintaining its integrity. Crime Scene Examiner(s) must attend the crime scene within a reasonable time (SAPS, 2015:14).

The SAPS policy on Crime Scene Management (SAPS, 2015:15) outlined the roles and responsibilities of the Crime Scene Supervisor as follows:

- Accompany the Crime Scene Commander and any additional Investigating Officer;
- Evaluate the situation to determine the compilation of the Crime Scene Processing Team;
- Identify, note and protect possible physical evidence;
- Represent the Crime Scene Processing Team at the planning session;
- Determine and summon the necessary resources for processing of the scene;
- Decide on methods to be used during processing;
- Establish and activate the Crime Scene Processing Team;
- Keep the Crime Scene Examiner report updated; and
- Ascertain in collaboration with the Crime Scene Commander which other resources or other forensic experts and services are required.

The Crime Scene Supervisor may take on the roles and responsibilities of the Crime Scene Commander, if the appointment of the Crime Scene Commander or arrival of the Crime Scene Commander is delayed, provided he or she consults with the dispatcher. The Crime Scene Supervisor must then hand the mentioned roles and responsibilities over to the Crime Scene Commander as soon as he or she arrives (SAPS, 2015:15).

According to Lochner and Zinn (2015:112-113) a walk through must not be regarded casually. It is a goal- and objective driven action intended to assess the crime scene. The walk-through phase gives the investigator the opportunity to determine the nature and the extent as well as the perimeter of the crime scene. Once the perimeter has been determined, the crime scene should be cordoned off. The general rule is to look and observe, think and not to touch anything. The investigator must assess the circumstances in order to decide on an organised, systematic, careful and logic plan of action to identify possible evidence. The investigator must determine access and exit routes for official and emergency personnel to and from the crime scene and these routes must not overlap with the routes taken by the suspects (where possible).

When the crime scene is secured, the first responder should tour the crime scene, making notes as to the conditions of the crime scene. Particular attention should be paid to any suspected points of entry or exit by the suspect, conditions of doorways and windows, and the presence of any evidence that needs to be brought to the

attention of the investigators. The first responder needs to establish a pathway for those individuals entering and leaving the crime scene, such as emergency medical personnel, other officers, detectives, and the crime scene investigators. The pathway will help minimise the possibility of evidence destruction and will also establish an orderly crime scene search.

The pathway should be documented in the officer's notes in order to provide a permanent record for follow-up investigators. The success of crime scene investigations depends on the first responder and their responsibility in securing the crime scene to prevent contamination (Olge & Plotkin, 2018:35). The planning phase on serious crime scenes in informal settlements is influenced by the limited space in informal settlements housing structures. The housing- or business structures are normally consisting of one room structures. Many informal structures are overcrowded, with five or more persons staying in a one room structure. These individuals utilised this one room structures as a place to prepare food, as a dining room, as a living room and as a bedroom to sleep.

The multi-purpose use of these housing structures affects the processing of serious crime scenes as the presence of people of the household are forced to continue to use the housing structure where the crime was committed before the arrival of the SAPS or before the completion of the processing of the serious crime. This means that when the housing structure became a serious crime scene all these individuals should be accommodated or to be inconvenienced especially during night-time.

4.4.7   Investigation and processing phase

The investigation and processing phase activities refer to both the gathering of all physical evidence as well as relevant information (SAPS, 2015:15). The Crime Scene Commander (CSC) is responsible for overseeing various aspects of the crime scene investigation process. To this end, the CSC must ensure that effective communication is maintained among all role players, and that updates and reviews are provided to guide and evaluate their efforts. The identification and protection of witnesses is also a critical responsibility, as is ensuring that appropriate crime scene documentation is used. Additionally, the CSC must identify and communicate relevant needs, and ensure that crime scenes are optimally examined.

In cases where a specific investigation comprises multiple crime scenes, the same Crime Scene Examiner should be utilised if practically possible. The CSC must ensure that all members involved in the investigation remain on the scene until they are released to ensure that all questions are asked, and all actions are completed. Furthermore, the CSC is responsible for ensuring that examiners from the Forensic Science Laboratory attend drug processing sites and that all exhibits, chemicals, items, or articles collected by the examiners are recorded in the exhibit log and SAPS 13 register. Lastly, arrangements must be made for adequate storage of any chemical or equipment if the investigating unit has specifically requested that it not be disposed of by the Forensic Science Laboratory (SAPS, 2015:15).

The Crime Scene Supervisor plays a critical role in the efficient and effective processing of the crime scene. The following aspects must be attended to by the Crime Scene Supervisor:

- Managing the team responsible for processing the crime scene, ensuring the collection of appropriate forensic evidence, and coordinating the processing of the scene for physical evidence.
- Additionally, the Crime Scene Supervisor must coordinate the gathering of information for the purpose of determining the point of entry and event reconstruction, collaborate with the pathologist or forensic pathology officer in a death investigation, and maintain communication between the investigation team and Crime Scene Processing Team.
- Specifically, the Crime Scene Supervisor must ensure that the crime scene is photographed or recorded to provide a visual representation of the scene, that all evidence collected has been logged and handled according to the directives for the collection and packaging of exhibits, and that continuity of possession and integrity of the evidence are maintained (SAPS, 2015:16).

During the investigation phase the investigator begins conducting the actual investigation by gathering information about the crime. The investigation phase starts with the documentation and searching of the crime scene. It is important that immediate notes - taking is done, which records facts on the crime scene as they stand and can be instantly recalled years after the incident. Photographs needs to be taken

immediately as it is the best way to quickly and accurately document evidence and the crime scene. Photographs can be seen as a permanent provable record of the facts, including the position of the evidence on the crime scene.

The collection of evidence is one of the most important steps in the investigation of crime and therefore nobody can tell an investigator what to collect and why it should be collected, as the importance of items varies from crime scene to crime scene. The collection of evidence must be conducted with an open mind and with the aim of linking the suspect to the commission of the crime (Lochner & Zinn, 2015:114). The documentation of the first responding officer is very important to the outcome of the investigation. Most investigations begin at the crime scene, and the initial actions taken may have a profound effect on the case. There is no substitute for precise documentation, with adequate notes of the crime scene actions, diagrams, and crime scene data forms completed accurately and thoroughly (Olge & Plotkin, 2018:36).

Olge and Plotkin (2018:37) further explain that the principle function of the crime scene investigator(s) is to document the crime scene with appropriate methods, to convey crime scene findings to the other members of the investigative team and to those who were not present on the crime scene via oral and written reports, and to testify as to the findings at the crime scene in the courtroom. Olge and Plotkin (2018:37) outlined these methods as follows:

- Taking ongoing notes of all observations;
- Preparation of essential sketches;
- Photographing the crime scene location and evidence items using appropriate photographic equipment;
- Recovering all evidence items using proper collection and packaging methods for each type of evidence; and
- Preparation of comprehensive reports concerning all actions taken at the crime scene

Detective personnel and SAPS members of the LCRC cannot perform serious crime scene processing duties, in informal settlements effectively. These SAPS personnel are disturbed and or obstruct by these contributing risks and realities created which are prevalent in informal settlement areas. These contributing risks and realities are

factors and conditions such as the poor quality of housing structures are hazardous and unsafe to inhabitants and SAPS personnel, the limited and restricted space for movement by SAPS personnel, the movement of crime scene investigation equipment, the absence of sufficient ventilation in one room housing structures, the absence of wastewater management and solid waste management. These factors disturb and or obstruct the processing of serious crimes and in particular the investigation and processing phase where vital information and evidence must be collected on serious crime scenes in informal settlements.

4.4.8   Debriefing phase

The debriefing phase includes the conducting of a final review of the crime scene and the completed activities with all relevant role players during a debriefing session by the Crime Scene Commander (SAPS, 2015:17). The role of the Crime Scene Commander is integral to ensuring a successful investigation. The following aspects must be attended to by the Commander in collaboration with team members. Firstly, the Commander must conduct a final survey of the crime scene and review all completed activities during a debriefing session with team members. Secondly, the Commander should review the extent to which the objectives have been met.

Thirdly, in conjunction with the Investigating Officer, the Commander must determine who should attend the autopsy (if it is a death investigation), which forensic exhibits need to be collected, and the scope of further investigation required. Fourthly, the Commander must identify individuals from whom forensic exhibits may be taken for elimination or identification purposes. Additionally, the Commander must decide on additional actions to be taken and how they should be addressed. The Commander must ensure that all reports are completed, collected, and handed over to the Investigating Officer.

Finally, the Commander must facilitate information sharing between all members involved in the crime scene, including the Investigating Officer, Crime Scene Examiner, and Forensic Science Laboratory experts. By attending to these aspects, the Crime Scene Commander can ensure a comprehensive and effective investigation is conducted (SAPS, 2015:17). The Crime Scene Examiner plays a vital role in processing a crime scene and ensuring that all necessary tasks are carried out. To

this end, it is imperative that the following aspects are attended to. Firstly, the Examiner must attend to any additional actions required of the processing team.

Secondly, the Examiner should determine responsibility for the collected exhibits and maintain an exhibit log, ensuring that a copy is provided to the Crime Scene Commander or the responsible Investigating Officer. Thirdly, the Examiner must decide on a procedure for evidence gathered after the initial investigation. Fourthly, the Examiner must obtain a copy of the access log to determine which individuals need to provide fingerprints and other samples for elimination purposes. Additionally, the Examiner must ensure that the Crime Scene Examiner report is completed and handed to the Crime Scene Commander during the attendance of major crime scenes.

Finally, the Examiner must determine any tasks to be performed at a later stage and allocate them to the relevant team members. By attending to these aspects, the Crime Scene Examiner can effectively process a crime scene and assist in ensuring that justice is served (SAPS, 2015:17 & 18). The Investigating Officer plays a critical role in the successful completion of an investigation. To fulfil his or her duties effectively, the Investigating Officer must ensure the following responsibilities are met. Firstly, the Officer must update his or her Pocket Book (SAPS, 206) or the investigation diary, if available, regarding decisions taken during debriefing. Secondly, the Officer must obtain all relevant documentation related to the investigation.

Thirdly, the Officer must deal with exhibits assigned to him or her. Fourthly, the Officer must provide the station and CAS numbers to the Crime Scene Examiners if not already provided. Fifthly, the Officer must ensure that the exhibits taken to the station are registered in the SAPS13 register and that exhibits taken by the Crime Scene Examiner or other experts are logged in the exhibit log. Sixthly, the Officer must ensure that exhibits to be examined by the Forensic Science Laboratory are submitted within seven (7) working days after collection. Finally, the Officer must ensure that the crime scene is adequately secured until it has been decontaminated (where appropriate) and released. By carrying out these duties, the Investigating Officer can facilitate a thorough and successful investigation (SAPS, 2015:17 & 18).

It is imperative that the investigating team debriefs the initial responding officer on all pertinent details and actions on the crime scene. If fragile evidence was recovered or

responding officers took photographs, ensure that the investigating team is made aware of this as well. The status of the crime scene perimeter should be discussed as well, with particular attention paid to concerns or issues that might affect scene integrity. Often times, patrol resources will be tasked with continuing the crime scene security or enhancing it as the investigative team performs its mission. Responsible supervisors should ensure that no one leaves their security post unless a proper authority has given authorisation and a relief is in place.

The time assigned to these security duties is perfect for the officer to use to catch up on notes of observations, actions, or other information developed because of the officer's investigation (Gardner & Krouskup, 2019:61). At the conclusion of the crime scene search, a crime scene debriefing team should be assembled prior to releasing the crime scene. The debriefing team should include the investigator(s) in charge of the crime scene, other investigators, and evidence collection personnel such as photographers, evidence technicians, latent print personnel, specialised personnel, and initial responding officer(s), if still present. The debriefing session allows the members to share information regarding crime scenes, finding and provides an opportunity for input regarding follow-up investigation, special requests for assistance, and the establishment of post crime scene responsibilities (Olge & Plotkin, 2018:46).

Olge and Plotkin (2018:46-47) further identify the aspects that the debriefing team should address as follows:

- Have all areas been documented and searched?
- Have witness statements develop information that indicates that further searches are necessary additional areas, other evidence?
- Have all parties completed their assignments?
- Is all evidence collected, properly packaged, and accounted for?
- Has a re-search of the crime scene(s)been made?
- Carefully go over the crime scene again, looking for any evidence items missed;
- A crime scene searched at night almost always should be re-searched when the sun comes up;
- Should the crime scene remain preserved/secured?
- Initiate any action(s) identified in the debriefing required to complete the crime scene investigation;

- Discuss potential forensic testing and the sequence of tests to be performed;
- Brief the person(s) in charge upon completion of assigned crime scene tasks;
- Established post crime scene responsibilities for law enforcement personnel and other responders; and
- Perform final survey of the crime scene.

The physical conditions in informal settlements influence the effectiveness of the processing of serious crime scenes negatively. The difficulties and challenges encountered that impact negatively on the processing of serious crime scenes must be included in the debriefing. Possible best practices used to overcome obstacles and challenges encountered during the processing of serious crime scenes in informal settlements can be used for future processing of serious crime scenes in informal settlements.

4.4.9   Restoring phase

The restoring phase includes the restoring of the crime scene by the Crime Scene Commander and the Investigating Officer to remove any items or equipment used during the crime scene attendance and processing (SAPS, 2015:19). During the restoring phase, the Crime Scene Commander and the Investigating Officer are responsible for removing any items or equipment used during the crime scene attendance and processing. Additionally, they must ensure that detailed visual representations have been compiled and managed, and that all evidence is accounted for and logged. If the crime scene is not suitable for release to the relevant party, the Crime Scene Commander must hand the crime scene to the appropriate authorities for further handling or safeguarding.

The Forensic Science Laboratory (FSL) must facilitate any decontamination of illicit drug processing laboratories (if applicable). Furthermore, all documentation, statements and exhibits or items that are required to be booked in the SAPS 13 register, excluding the exhibits taken by the crime scene examiner, must be handed to the Investigating Officer. The Crime Scene Examiner must, in collaboration with the Crime Scene Commander, ensure that all personal protective equipment (PPE), consumables and equipment used at the crime scene is removed and safely disposed of at the Division: Forensic Services. (SAPS, 2015:19).

A final survey of the crime scene should be conducted to ensure that pertinent evidence has been collected, that evidence, equipment, or materials generated by the investigation are not inadvertently left behind, and any dangerous materials or conditions have been reported and addressed. The investigator(s) in charge should conduct a walk -through and ensure that each area identified as part of the crime scene is visually inspected. At the conclusion of the debriefing and final walk-through, investigator releases the crime scene in accordance with the jurisdictional requirements (Olge & Plotkin, 2018:47).

The unsanitary living conditions and environmental hazards prevalent in informal settlements have a detrimental impact on the well-being of SAPS personnel, impeding their ability to effectively perform their duties in processing serious crime scenes. The physical environment in these settlements, characterised by unsanitary conditions, contaminated groundwater, and a proliferation of flies, heightens the risk of contamination. Consequently, SAPS personnel experience pressure to expedite crime scene processing to prevent further deterioration of conditions, inadvertently leading to the unintentional oversight of crucial information and evidence. This compromises the integrity of the crime scene processing. Despite these challenging circumstances, SAPS personnel face tremendous pressure to uphold the effectiveness and integrity of crime scene processing, even within informal settlements where adverse physical environmental conditions hinder the restoration of crime scenes.

4.4.10 Releasing phase

The releasing phase can be described as the releasing of the crime scene to the owner or occupant by the Crime Scene Commander after the crime scene processing is concluded (SAPS, 2015:19). The SAPS (2015:19) emphasises the importance of the Crime Scene Commander in overseeing the release of the crime scene, thereby concluding the investigation process. The Crime Scene Commander holds a crucial responsibility of ensuring that the following aspects are effectively executed: identifying the relevant party, such as the owner or occupant, to whom the crime scene should be released after the crime scene processing is concluded; authorising the release of the crime scene; and coordinating the release of the crime scene to the identified party.

These measures are necessary to ensure that the crime scene is properly handed over to the relevant authority, and to avoid any potential tampering or contamination of evidence. Lochner and Zinn (2015:120) explain that after the investigation, the crime scene is released or handed back to the owner of the premises, or the person identified as the responsible person. The crime scene is released only when it is reasonably certain that all the facts, evidence and information and answers have been obtained. The investigator must be sure that all pertinent physical evidence has been documented and properly collected. Lochner and Zinn (2015:127) further explain that the release of the crime scene is done only after the final survey has been concluded, which includes whether the objectives were met and will review all activities that had taken place at the crime scene.

When investigators are satisfied that they have thoroughly documented the crime scene and associated evidence, and that they have recognised and collected where appropriate every relevant item, the crime scene can be released. Once a crime scene has been released, it is usually not possible to go back and collect anything else, because there is no longer a direct chain of custody from the original crime scene and evidence collected after a crime scene is released could be ruled inadmissible by a court. Serious crime scenes can only be released when it is certain that all the facts, evidence and information have been collected obtained and the physical conditions in informal settlements does not allow it. During night - time without electricity and no proper lights it is difficult to observe and identify objects and exhibits in and around serious crime scenes before releasing serious crime scenes (Harris & Lee, 2019:61).

4.4.11   Evaluation phase

The evaluation phase can be described as an evaluation and determination whether the crime scene has appropriately been processed by the Crime Scene Commander and the Investigating officer (SAPS, 2015:19). The Crime Scene Commander and the Investigating Officer have a joint responsibility to ensure that several key aspects are attended to in order to effectively process a crime scene. They must evaluate and ascertain whether the crime scene has been appropriately processed, identify any further actions that need to be taken in relation to the investigation of the case, and determine whether the information and evidence collected may assist in the investigation (SAPS, 2015:19).

Additionally, the Divisional Commissioner, Detective Service or the Provincial Head, Detective Service in consultation with the Section Head, Crime Scene Management from the Division, Forensic Services may arrange a meeting between the different role-players who were present at the crime scene to evaluate the processes that were followed at the crime scene to identify shortcomings and improve current practices. Furthermore, they may make recommendations to improve procedures to be followed at crime scenes, with the aim of improving the effectiveness of future crime scene processing (SAPS, 2015:20).

The presence of difficult infrastructural and environmental conditions in informal settlements hampers the processing of serious crime scenes, giving rise to uncertainties surrounding the thoroughness of attention paid to essential elements. These adverse physical conditions pose obstacles and have a negative impact on the successful processing of crime scenes. Ensuring adequate processing of serious crime scenes in informal settlements is essential, yet achieving a definite determination is often unattainable. Additionally, environmental factors within these settlements play a significant role, as they can exert substantial influence and contamination on crime scene evidence.

Variables such as wind, sunlight, extreme heat, rain, snow, and temperature fluctuations have the potential to cause damage. The following discussion outlines various other National Instructions, which are relevant in certain sections to the investigation of crime and specially to the current SAPS policy on crime scene management, National Instruction 1 of 2015. The SAPS Detective Service Policy, National Instruction 12 of 2017 that deals with the mandate and purpose of the Detective Service at the different levels of crime investigation will be discussed briefly to give context to the reason why certain specific SAPS policies (National Instructions) will be discussed.

4.5 THE SAPS DETECTIVE SERVICE POLICY (NATIONAL INSTRUCTION 12 OF 2017)

The Detective Service Policy, National Instruction 12 of 2017 deals with the mandate and purpose of the Detective Service within the SAPS and its functioning on different

levels, namely, national, provincial, district and local. The SAPS Detective Service policy, National Instruction 12 of 2017 stipulates that it necessitates to be read in conjunction with certain specific SAPS policies (National Instructions) relating to the management of dockets, exhibits, arrest, detention of a person, release of person from the custody, stock theft, sexual offences, the enquiry docket, fingerprint register, search and seizure, crime scene management, registration and finances of informers, identification parades, children in conflict with the law, care in protection of children, registration of case dockets on CAS or Integrated Case Docket Management System (ICDMS), victim empowerment, prevention and combating of torture and any other order or instruction that the National Commissioner issued or may issue related to the investigation of crime (SAPS, 2017a).

In the context of this study the focus will only be directed those National Instructions issued by the SAPS which are relevant to the investigation of crime and specifically the processing of serious crime scenes. Each one of these specific National Instructions namely, National Instructions 3 of 2011, that directs the registration of case dockets, National Instruction 8 of 2017 that directs exhibit management and the seizure of exhibits and National Instruction 13 of 2017 that directs case docket management will be summarised. National Instruction 1 of 2015 that directs crime scene management is discussed in detail in section 4.3 above. These specific National Instructions are linked to certain aspects of crime investigation and in particular the processing of crime scenes in the SAPS. The following discussion presents SAPS National Instruction 3 of 2011 that relates to the registration of case dockets at SAPS police stations.

4.5.1   SAPS National Instruction 3 of 2011 (Opening and Registration of Case Dockets)

National Instruction 3 of 2011 regulates and directs the opening and registration of case dockets opened at SAPS police stations. National Instruction 12 of 2017 amongst others stipulates and outlined the responsibilities and duties of the Station Commander, Section Commander of Detectives Services and Commander of the DSCC who are all based at the local police station level in respect of the reporting and registration of criminal cases opened by members of the public at police stations (SAPS, 2017a).

SAPS Crime Administration System (CAS) is the computer system that is used to register, manage, control and keep record of case dockets (SAPS 3M) that are reported to the SAPS. The purpose of National Instruction 3 of 2011 is to ensure that every case docket and enquiry that is opened for investigation is immediately registered on the CAS by utilising the definitions of crime manual and rules on crime manual of the SAPS, 2011:1).

When a crime or alleged crime is reported at a police station or to a member on patrol attending to complaints, irrespective of whether the crime was committed in the station area of that police station or the station area of another police station, the member receiving the report must interview the complainant (reporter) and, ensure that what is alleged to have happened does indeed constitute a crime. The SAPS member must take down an affidavit indicating all the elements of the crime and describe in detail what happened by utilising the "what", "when", "who", "where", "why", and "how" principles and open a case docket. The completed case docket must be handed over to the community service centre commander for perusal and registration on CAS (SAPS, 2011:1).

Joubert (2018:1) explain that civilisation is dependent on order and a civilised society therefore needs a legal system to persuade everyone to act in an acceptable manner that will ensure that order prevails. Joubert (2018:1) state also that the law is at the heart of the legal system and anyone who disobeys the law will face consequences or some form of punishment. According to the Constitution police officials are responsible for upholding and enforcing the law and Section 205(3) of the Constitution of the Republic of South Africa, (Act No. 108 of 1996) prescribe the powers and duties that police officials have in order to perform their policing work. It is therefore important that police officials understand what the law is and how it is classified (Joubert, 2018:1).

Joubert (2018:1) indicates that in practice the SAPS primarily deal with the prevention and investigation of crimes. Members of the public report complaints regarding crime to the police and police officials need to distinguish correctly between criminal incidents and civil matters (Joubert, 2018:1). Joubert (2018:10) further explain the in-interpreting of police law, police officials are assisted by SAPS policies and procedural guidelines to direct them when and how to use their powers to perform their duties. These policies and procedural guidelines are formulated by experts within the SAPS

to ensure that SAPS members content is in accordance with the law. In the context of this study the current SAPS policy on crime scene management, National Instruction 1 of 2015 is such a policy as mentioned by Joubert (2018:10) to direct SAPS members when processing crime scenes. This policy however does not provide directives to SAPS personnel when processing serious crime scenes in informal settlements, where infrastructural- and environmental physical conditions obstructs the effective processing of serious crime scenes.

The CSC Commander must, after a case docket has been opened at the police station inspect and peruse all newly reported case dockets to personally verify that all prescribed required administrative aspects are completed and adhered to (SAPS, 2011:2). All the newly reported case dockets must be allocated to the Detective Service. Members performing duties in the DSC will acknowledge receipt of case dockets after receiving it and conduct the preliminary investigation, which includes the processing of serious crime scenes. The opening of a case docket marks the beginning of an investigation process that necessitates management by the SAPS. Therefore, attention is directed towards National Instruction 13 of 2017, which provides the directives for managing case dockets within the SAPS which is addressed hereafter.

After the opening of a cases docket the preliminary investigation is conducted by detectives attached to the DSC. This preliminary investigation includes the processing of the serious crime scenes in suburban areas and informal settlement areas. After the preliminary investigation the case docket is allocated to a permanent investigating officer to investigate the case. This investigation in the case must be monitored by the Detective Service Commander and Group Commanders at the police station level. The Detective Service Commander or Group Commander must inspect the case docket 24 hours after the allocation and thereafter monthly. If the perpetrator is arrested the case docket is placed on a court roll in court and this case docket will be inspected two days before the next court date and when it returns from court to ensure compliance with the state prosecutor's requests or instructions. This type of inspection will continue until the case is finalised in court and the case docket will be closed and archived at the police station.

4.5.2   SAPS National Instruction 13 of 2017 (Management of Case Dockets)

Graf (2016:35) state that case management is organising evidence and information to be workable, retrievable, and understandable in the context of the crime scene and providing the foundational and structural framework for both the investigator and crime scene reconstruction (CSR) analyst. McMahon (2023:np) explain that the investigative case management is a series of procedures for following investigations and the information generated by detectives while conducting investigations. Law enforcement agencies, such as the SAPS as well as private investigators rely on their methods and techniques for case management to ensure information in respect of evidence is not overlooked in presenting the case (McMahon, 2023:np). McMahon (2023:np) also state that when detectives investigate cases, they need to be able to collect and store data in a useful and meaningful way so they can access this information at a later stage.

Investigative case management involves pursuing investigations and the evidence generated from these investigations (McMahon, 2023:np). McMahon (2023:np) further explain that traditionally, in the SAPS investigative case management required and prescribe detectives to start paper file (SAPS 3M case docket) to track evidence collection, record the outcome of various lines of investigation. In investigative case management, the SAPS assign case numbers, classifying the number with evidence they collect so it can be easily found again. They make sure to record data at every step of the investigation, in the investigation diary (SAPS 5 diary) along with supporting references.

Investigators use investigative case management to keep track of materials and also for the purpose of staying on task with an investigation. It is necessary to follow every line of investigation and record the outcome, making careful data collection and organisation very important. Supervisors can review the files to see how an investigation is proceeding and to make suggestions to assist detectives with advice and guidance in respect of the investigation (McMahon, 2023:np). SAPS National Instruction 13 of 2017 regulates and directs the management of case dockets reported at the SAPS police stations, under investigation. The purpose of this National Instruction is to regulate the administration of a case docket after being reported by the complainant, informant, or any witness.

After the opening of a case docket each case docket must be captured on the CAS or ICDMS. SAPS members are required to utilise the prescribed case docket cover (SAPS 3M) together with any other statements or documents containing the information whereby it can be decided whether a prosecution must be instituted, and which evidence can be led in court (SAP, 2017c). The South African Case Docket Analysis Learner Manual describes a docket as 'an official document in which a record is kept of a reported crime and the investigation conducted into such a crime' (SAPS, 2002:2).

The investigating official to whom a case docket is allocated for investigation must conduct the necessary investigation in the case docket and the case docket must be inspected by the Commander of the Detective Service as soon as possible, but in any event not later than the next day following the booking out/allocation of the case docket to the investigating official. The Commander of the Detective Service at station level must ensure that all case dockets for investigation are inspected at least once a month and that clear and constructive guidance or instructions are recorded in the Investigation Diary (SAPS 5), (SAP, 2017c).

All case dockets must be inspected before taking it to court or to the public prosecutor for decision. Every case docket, in which an accused has been charged, must be thoroughly inspected by the Section Commander, Detective Service, Unit Commander, Sub-Section Commander or a member specially designated for this purpose before the case is referred to the Public Prosecutor for remand or trial. Should the case docket be forwarded to court for a further remand, the inspecting officer must make and sign an entry in the Investigation Diary indicating to the Public Prosecutor the reasons for requesting the further remand and also indicating all outstanding investigations in the case docket. Should the docket be ready for trial, the inspecting officer or member must make and sign an appropriate entry in the Investigation Diary (SAPS 5) that the case is ready for trial (SAP, 2017c).

Every case docket returned to the station from court, in which an accused has been charged, must be thoroughly inspected by the Commander of the Detective Service. If reasonable doubt exists as to whether the Public Prosecutor will institute criminal proceedings or not against a particular person and it is deemed necessary to submit the case to him or her for a decision, the submission of such a docket must only be

done on the instructions of a Commissioned Officer who must make an entry to this effect in the Investigation Diary (SAPS 5) and sign it. After a case has been finalised, the relevant investigating official must ensure that all relevant notices are cancelled, exhibits are disposed of, fingerprint records (SAPS 69) are completed and returned to the LCRC (SAP, 2017c:).

A certificate for closure of the case docket, must be made in the Investigation Diary, by the investigating official, indicating that all the prescribed requirements have been complied with. Thereafter the case docket must be handed to the Commander to close the case. The Commander should make a final entry in the SAPS 5 to certify that no further administration or investigation is outstanding, and the case docket is ready to be filed (SAP, 2017c).

At police station level each case docket under investigation whether the perpetrator is arrested or not must be inspected by the Detective Service Commander or Group Commander monthly, to ensure that cases under investigation are attended to by the investigating officer. If there are no further information or clues in a case under investigation the inspecting commissioned officer is allowed to close such case after recording the reason for closure in writing in the Investigation Diary (SAPS 5) of the case docket. Court cases where an accused is charged, and a court date is set must be inspected two days before the actual court date, by a commissioned officer before being sent to court. When court cases returned from court it must again be inspected by a commissioned officer, before handing it back to the investigating officer. All case docket inspections must be recorded in writing in the Investigation Diary (SAPS 5) of each case docket.

4.5.3   SAPS National Instruction 8 of 2017 (Handling of property and seized exhibits)

SAPS National Instruction 8 of 2017 regulates and directs the handling of all property and exhibits seized by the SAPS. This National Instruction prescribe the procedure that need to be followed in taking custody and storage of such exhibits and property and explains the responsibilities of the SAPS members involved. The purpose of this National Instruction is to regulate the handling of all exhibits, property taken into

custody by the SAPS and the property register (SAPS 13), and the safe storage of property stored by the SAPS in the exhibit (SAPS 13) Stores (SAP, 2017b).

Whenever a member of the SAPS seizes an exhibit in terms of Chapter 2 of the Criminal Procedure Act 51 of 1977 or any other legal provision, he or she must record the particulars thereof in certain official administrative registers in the SAPS. Thereafter the seized article should be handed in as an exhibit at the community service centre of the police station in the area in which it was seized for secured safekeeping (SAP, 2017b). If an exhibit is seized in by a SAPS member, other than the investigating officer, such a member must make a note of the exhibit seized in the Investigation Diary (SAPS 5) of the case docket opened in respect of the case. The member must also submit an affidavit (seizure statement) setting out the circumstances surrounding the seizure of the article (when it was seized, from whom, where and a description of what was seized).

Should the docket not be readily available, the member must, as soon as reasonably possible, hand the affidavit to the investigating officer concerned (SAP, 2017b). The member who records the exhibit in the SAPS 13 Register, must record the reference number of the SAPS 13 concerned in the applicable space on page 1 of the case docket and the relevant part of Page 6 of the case docket. Care must be taken to ensure that all exhibits are safely and securely stored, and that contamination of an exhibit is prevented. The SAPS members in the CSC are responsible to complete the first four (4) columns of the SAPS 13 Register whenever property is handed in. A proper description of every item must be given to items entered into the SAPS 13 Register.

Items must be identifiable by the written description alone (SAP, 2017b). All properties entered in the SAPS 13 Register must be locked in a temporary storage facility in the CSC (e.g., safe, trunk, strong room, steel lockable cupboard, etc.) where they must be kept safely until handed over to the Station Commander or Exhibit official. CSC Commanders are responsible for safekeeping of all SAPS 13 property until the Exhibit official in the SAPS 13 storage facility takes charge of the property (SAP, 2017b:3). Joubert (2018:32) explains that the Criminal Procedure Act (No. 51 of 1977) (CPA) provides for procedures and related matters in criminal proceedings. The Criminal Procedure Act (No. 51 of 1977) prescribes procedure relating to the obtaining of

evidence, methods or securing attendance of an accused in court and the granting of bail.

Police officials are awarded far-reaching powers and authority for these purposes by the CPA, such as searching a person or premises, seizing certain articles, arresting a person, and even using force to exercise their powers. Joubert (2018:38) further explains that in terms of subsection 35 (5) of the Constitution of South Africa (Act No. 108 of 1996) evidence obtained in a manner that violates any right in the Bill of Rights may be excluded at a trial in court. The use of wrongful tactics by police officials creates the risks of causing criminals to walk free because of evidence obtained in a manner that might not be admissible in court.

Whenever the investigating officer of serious crimes committed in informal settlements seizes an exhibit during the investigation, he or she must in practice after the seizure thereof, hand in the seized exhibit at the community service centre of the police station for secured safekeeping. The investigating officer must also record the SAPS 13 register serial number on the front page of the case docket, on page 6 of the case docket a description of the seized exhibit should be indicated, an affidavit regarding the seizure needs to be filed in the case docket and an entry must be made in the SAPS 5 investigation diary of the case docket regarding the seizure.

4.6   SUMMARY

The objective of this chapter was to determine the contents and implications of the SAPS policy on crime scene management, specifically National Instruction 1 of 2015. Additionally, the researcher aimed to create an understanding of the influence of this policy on the processing of serious crime scenes in informal settlements, as outlined in paragraph 1.5 of Chapter 1. To put the discussion into perspective, the researcher explained, described and discussed an overview on functions of Detective Service within the SAPS, the functioning of the Detective Service at national level, the functioning of the Detective Service at provincial level, the functioning of the Detective Service at district level, the functioning of the SAPS at police station level, the functioning of the CSC at station level and the functioning of the DSC at station level.

The SAPS policy on crime scene management, National Instruction 1 of 2015, including the eleven different phases of crime reporting was discussed in the context

of this study. In the context of the SAPS Detective Service policy, National Instruction 12 of 2017 that stipulates that it necessitates to be read in conjunction with certain specific SAPS policies (National Instructions). The following Policies (National Instructions) which are relevant to the investigation of crime, namely, National Instruction 12 of 2017, National Instruction 3 of 2011, National Instruction 13 of 2017 and National Instruction 8 of 2017 was discussed in the context of this study.

The research shows that the mandate of the Detective Service within the SAPS is the effective investigation and detection of all reported crime by gathering and analysing evidence resulting in the identification and successful prosecution of offenders. The research also shows that the Divisional Commissioner of the Detective Service is accountable to the National Commissioner of the SAPS and the designated Deputy National Commissioner for Crime Detection for the effective and efficient functioning of all Detective Service components and units of the Division Detective Service.

The research reveals that the Divisional Commissioner of the Detective Service holds the responsibility of managing the activities of the Detective Service. This involves careful planning aligned with the mission and priorities of the SAPS, as well as active implementation and exercise of effective control over crime investigation activities. The research reveals that the SAPS Policy for the Detective Service assigns responsibilities to the Divisional Commissioner, including the establishment of policy standards and operational procedures for the Detective Service to ensure national uniformity and adherence to standards set by the National Commissioner.

Additionally, the Component Head of CIS is accountable to the Divisional Commissioner for the effective functioning and investigation of crime within the Detective Service components at SAPS police stations. The research also indicates that the investigation of crime, including the processing of crime scenes in informal settlements, is part of SAPS investigation activities, and within this study's context, it highlights the Component Head's responsibility for the efficient processing of serious crime scenes in informal settlements. The research reveals that the SAPS Policy for the Detective Service assigns responsibilities to the Divisional Commissioner, including the establishment of policy standards and operational procedures for the Detective Service to ensure national uniformity and adherence to standards set by the National Commissioner.

Additionally, the Component Head of CIS is accountable to the Divisional Commissioner for the effective functioning and investigation of crime within the Detective Service components at SAPS police stations. The research also indicates that the investigation of crime, including the processing of crime scenes in informal settlements, is part of SAPS investigation activities, and within this study's context, it highlights the Component Head's responsibility for the efficient processing of serious crime scenes in informal settlements. The research reveals that on Provincial level the Deputy Provincial Commissioner, Crime Detection is responsible for the investigation of crime in the province and accountable to the Provincial Commissioner and the Divisional Commissioner Detective Service for the effective investigation of crime within the SAPS.

The research also reveals that on District level the District Commissioner and the Deputy District Commissioner for the Detective Service are responsible for the investigation crime in informal settlements at police stations within the district. The research further reveals that crime are reported to the local police station on a 24-hour basis and SAPS members respond and attend to reported crime incidents. The research also reveals that the Station Commanders are responsible to manage SAPS police stations and is accountable to the District Commissioners and Provincial Commissioners for the investigation of crime in the police station precinct.

Additionally, the Detective Service Commander is directly accountable to the Station Commander and District Commander for amongst others responsible to conduct crime investigations in accordance with national and provincial instructions and to ensure adherence at operational level to manage and control the Detective Service at station level. The research also indicates that the responsibility of the Detective Service Commander also applies to the processing of serious crime scenes in informal settlement areas. This research shows that the purpose of the SAPS Policy, National Instruction 1 of 2015, on the Management of Crime Scenes is to regulate the management of crime scenes in the SAPS to ensure that crime scenes are properly controlled, managed, documented, investigated and that the integrity of items with potential evidential value is maintained.

The research also shows that there are eleven different phases of handling crime scenes and should be applied to any type of crime scene reported to the SAPS. The research further shows that there is agreement amongst international- and national authors on the different phases of handling serious crime scenes and should be applied to any type of crime scene reported to the SAPS. From a South African perspective, specific selected serious crime scenes on which this research is based, namely, robbery of a motor vehicle, residential robbery and business robbery were reflected from the perspective of the literature. This research shows that although there is agreement on a different phases of crime scene processing as suggested by international -and national literature that this literature do not include crime scenes in informal settlements.

It is thus assumed that the consulted literature on the different phases of crime scene processing is only advantageous to be applied in well-developed suburban areas. In the light of the infrastructural and environmental physical conditions in informal settlements currently these different phases of crime scene processing are not practical implementable in informal settlement areas since the areas are underdeveloped. The literature shows that there is at least some agreement among international- national authors regarding the eleven different phases namely, reporting phase, activation phase, responding phase, controlling phase, hand-over phase, planning phase, investigation and processing phase, debriefing phase, restoring phase, releasing phase and the evaluation phase in the context of this study.

This research shows that the SAPS Policy on the management of crime scenes, National Instruction 1 of 2015 is interconnected to several other national instructions such as National Instruction 12 of 2017, National Instruction 3 of 2011, National Instruction 13 of 2017 and National Instruction 8 of 2017, since these national instructions are connected or appropriate in certain sections and instructions to the investigation of crime and in particular to the processing of serious crime scenes in informal settlements in the context of this study.

To explore the infrastructural and environmental physical conditions in informal settlements that hampers and obstructs the effective processing of serious crime scenes. In the following chapter the researcher discusses various aspects regarding

the global existence of informal settlements, characteristics and challenges of informal settlements as well as the involvement of the United Nations Development Programme on global human settlements. That would be followed by a discussion on informal settlements in South Africa well as specific appropriate housing legislative and policy frameworks to improve housing in South Africa in the context of this study, concluding with a discussion on the White Paper on Policing of 2016.

CHAPTER 5: INFORMAL SETTLEMENTS IN THE CONTEXT OF CRIME SCENE PROCESSING

5.1 INTRODUCTION

On the 3rd of November 2022, Dr Imtiaz Sooliman, the founder of the Gift of the Givers Foundation, a non-governmental organisation in South Africa, expressed his observations to Nicole Mccain, a News 24 reporter, stating, "To walk through the informal settlement, you see how people live in those conditions. It's the most undignified way of living" (News 24, 3 November 2022). Dr Sooliman further emphasised the importance of organised and coordinated communities that actively work to prevent overcrowding and monitor crime.

This statement came in response to a devastating fire that displaced 400 individuals in Masiphumelele, an informal settlement in Cape Town. The Gift of the Givers Foundation promptly helped and support to the affected residents, highlighting the immediate and critical need for aid within the community (News 24, 3 November 2022). The current physical infrastructural- and environmental conditions in informal settlements impacting and influencing negatively on the processing of serious crime scenes. This chapter delves into the physical conditions found in informal settlements. These conditions include inadequate building structures, poor housing, overcrowding, and high population density.

Additionally, challenges such as lack of electricity, limited access roads, narrow passageways, absence of street lighting, and the lack of house numbering contribute to the difficulties faced within these settlements. Furthermore, there is a lack of planning for essential services, resulting in unhealthy and hazardous conditions, such as insufficient sanitation facilities, inadequate solid waste management, absence of safe water and storm drainage systems, and inadequate wastewater management. These intolerable physical conditions in informal settlements obstruct and influence service delivery by the SAPS negatively and the processing of serious crime scenes in the context of this study.

The focus will be on how these identified physical and other conditions in informal settlements, obstructs and influence the processing of serious crime scenes by

detectives and LCRC members from the SAPS. The examination of these physical conditions will therefore focus on determining suitable infrastructural- and environmental physical conditions in informal settlements. The required and suitable physical conditions in informal settlements for effective crime scene processing must be identified. The obstructing physical conditions that influence and challenges services provided by authorities such as the SAPS on policing duties must be identified.

The identified influences and challenges need to be replaced with suitable solutions for processing crime scenes in informal settlements. In this chapter the researcher provides an evaluation on the existence of informal settlements globally. It would endeavour to answer the objective "*To determine the physical conditions that complicate and influence the non-compliance and non-adherence of the SAPS policy requirements by detectives when processing serious crime scenes in informal settlements*" as described in Section 1.5 of Chapter1. There are various infrastructural- and environmental conditions in informal settlements that obstruct and impacting on the effectiveness of the processing of serious crime scene in informal settlements.

Furthermore, the researcher discusses various aspects regarding the global existence of informal settlements, characteristics, and challenges of informal settlements as well as the involvement of the United Nations Development Programme. Subsequently, that would be followed by a discussion on informal settlements in South Africa well as specific appropriate housing legislative and policy frameworks to improve housing in South Africa in the context of this study. The conclusion in this chapter would elaborate on the White Paper on Policing of 2016.

5.2   THE GLOBAL EXISTENCE OF INFORMAL SETTLEMENTS

To gain a comprehensive understanding of the terminologies "infrastructural" and "environmental" conditions as employed in discussions concerning informal settlement areas within the context of this study, it is crucial to provide definitions and descriptions for these terms. This explanation will offer insights into the specific characteristics and context of the surrounding conditions prevalent in informal settlement areas under discussion. Infrastructure is defined as the basic physical systems of a business, region, or nation and often involves the production of public goods or production

processes. Infrastructure for example include transportation systems, communication networks, sewage, water, and school systems (Boyle, 2023:1).

Environmental conditions, or the quality and state of the environment, are an unavoidable part of daily life that can impact on health of residents in informal settlements (Schaider, Swetschinski, Campbell & Rudel, 2019:3). Environmental conditions such as water quality, air quality, and weather often vary among populations and geographic locations (Balazs & Ray, 2014:603). While many conditions of the environment are naturally occurring, the quality and impacts of the environment are often affected by historical, economic, and socio-political factors (Mikati, Benson, Luben, Sacks & Richmond-Bryant, 2018:481). The location and environmental variables in informal settlements suggests a variety of injustices that comes with location, limited access to water, poor or lack of sanitation, challenges with transport availability, accessibility, affordability, and lack of other social services.

Environmental justice has been a central concern in a range of disciplines, and both the concept and its coverage have expanded substantially in the past two decades (Schlosberg, 2013:37). Environmental justice as a concept consists of multifaceted movements, community struggles, and discourses in contemporary societies that seek to reduce environmental risks, increase environmental protections, and generally reduce environmental inequalities suffered by the minority and poor communities (Khosravaninezhad & Akbari, 2014:56).

The concept of informal settlements includes multiple terms, such as slums, squats, shantytowns, spontaneous settlements, uncontrolled or unplanned (Nuissl & Heinrichs, 2013:116), and concealed and subnormal or spontaneous. Estimates show that 1 billion people live in informal settlements across the globe, most of them located in the countries in the Global South (UN-Habitat, 2015a). It is projected that informal settlement dwellers will increase to 2 billion by 2030 and 3 billion by 2050, especially if the current trends persist (Mahabir, Crooks, Croitoru & Agouris, 2016:419). Unable to adequately meet the demands of the growing population, informal settlements have emerged and continue to multiply in many countries in the Global South (Jones, 2017:1).

The growth of informal settlements, which are poor residential neighbourhoods is a global phenomenon associated the growth of urban populations. An estimated 25% of the world's urban population live in informal settlements, with 213 million informal settlement residents added to the global population since 1990 (UN- Habitat, 2013:126). Brown (2015:9) explain that informal settlements are residential areas where residents often have no security of tenure for the land or dwellings, they reside in: informal settlement areas usually lack basic services and infrastructure; informal settlements housing structures do not comply with planning and building regulations.

UN-Habitat (2015a) defines informal settlements as suburban areas where the inhabitants often have no security of tenure of the land or dwellings they occupy or the neighbourhoods, that are usually lacking essential services to city infrastructure, and where housing does not comply with planning and building regulations. Brown-Luthango, Reyes and Gubevu (2017:493) report that informal settlement dwellers are unduly affected by ill health, violence, and many other socio-economic challenges connected to the unhealthy and unsafe physical conditions in which they live in informal settlements. The informal settlement phenomenon seems to be more pronounced in the developing economies, as 90% of the areas in the developing countries are home to informal settlements (UN-Habitat, 2017:2).

However, local governments appear to lack technical and financial plans to deal with the dilemma of informal settlement issues (Satterthwaite, 2016:118). Thus, most cities and governments struggle to keep pace with the spread of informal settlements in the 21st century (da Cruz, Rode & McQuarrie, 2019:19). According to UN-Habitat (2015a) informal settlements are caused by a range of interrelated factors, including population growth and rural-urban migration, lack of affordable housing for the urban poor, weak governance, economic vulnerability and underpaid work, discrimination, marginalisation and displacement caused by conflict, natural disasters and climate change.

The UN-Habitat (2022b), Human Settlements Programme emphasises that informal settlements are housing over 10% of the world population and are home of the most vulnerable communities on the planet. This report states that the matter of informal settlements is seen as a challenging issue by local and national governments. The report also states the increasing urbanisation and migration sometimes driven by

climate change and violent conflict force people into underserviced areas that lacks access to basic infrastructure that accelerates the growth of informal settlements. The appearance of informal settlements is among the most obvious challenges in the fast-urbanising world.

Despite the numerous upgrading attempts around the world, informal settlements remain a universal harmful side-effect of urbanisation (Niva, Taka & Varis, 2019:1). Parnell and Seto (2018:1) emphasise that presently over half of urban population in lower income countries and a total of 863 million people globally live in informal settlements. The UN-Habitat (2022b), Human Settlements Programme state that over 1 billion people currently live in informal settlements and these people living in appalling conditions, with neither access to basic infrastructure, such as running water or sewage, nor a decent roof under which to shelter and sleep at night.

This multidimensional issue affects developing countries almost completely, with more than 80% of informal settlement populations located in Eastern and South-Eastern Asia, Sub-Saharan Africa, Central and Southern Asia and Latin America. In some countries across these regions, the percentage of the urban population living in informal settlements is over 50%. The UN-Habitat (2022b), Human Settlements Programme and the UN Habitat (2016a) state that by characterisation, the inhabitants of informal settlements are exposed to numerous dangers and vulnerabilities given the extremely dense population and lack a safe and clean-living environment, and access to the most basic services.

The UN-Habitat (2022b), Human Settlements Programme state further that informal settlement dwellers usually have no formal access to basic services and face a whole range of issues, including inadequate and lack of infrastructure. Informal settlement dwellers also often have to breathe polluted air or drink water that is unsafe, despite the fact that housing and access to basic services is recognised as a human right by law in most countries as well as in international agreements. Patel (2013:32) explain that basic infrastructure for informal settlements includes water, sanitation, solid waste management, drainage, electricity, roads, and transport. Patel (2013:32) also explain that social services include education, health care, policing, childcare and care for those with special needs.

Patel (2013:32) further state that municipalities are increasingly faced with the responsibility of overseeing the provision and maintenance of public services of infrastructure and social services into informal settlements. Housing and its associated challenges mainly in informal settlements have become a serious global problem and different countries' planners and policymakers are struggling to solve the challenges concerning the issue (Zanganeh, Varesi & Zangiabadi, 2013:180). Governments around the world has a huge challenge in improving living conditions of communities living in informal settlements.

These are sprawling outward from the city, often settled in a chaotic way and manner with no outward plan and design and are densely inhabited with limited internal infrastructure and services (UN DESA, 2014:1). Informal settlements are mainly characterised by informal land tenure, inadequate access to basic urban services, substandard housing, and structures (Brown, 2015:9). It is therefore necessary to explore the characteristics that are dominant in global informal settlements in the following discussion.

5.3   THE CHARACTERISTICS OF GLOBAL INFORMAL SETTLEMENTS

The existence of informal settlements provides concrete proof of the violation or potential violation of essential human rights, with particular emphasis on the right to adequate housing (UN Habitat, 2017:22). Insufficient housing conditions exert a wide-ranging influence on multiple facets of individuals' lives, restricting their access to vital resources like water and sanitation, healthcare services, and opportunities for sustainable livelihoods (UN Habitat, 2017:22). Residents of informal settlements face persistent discrimination and disadvantages stemming from the absence of recognition by governmental authorities. These challenges include limited access to land, insecurity of tenure, the constant threat of forced evictions, hazardous livelihoods, heightened exposure to disease and violence, and increased vulnerability to the adverse effects of climate change and natural disasters (UN Habitat, 2017:22).

Poorly planned and managed urbanisation creates spatial inequalities and divided urban centres, often characterised by gated communities and informal settlement areas, that are energy-intensive, contribute dangerously to climate change, and create economic hardship, unequal access to urban services and amenities, and an

inadequate standard of living. This also leads to greater implications as people living in inadequate housing conditions tend to be those who experience vicious intergenerational cycles of discrimination, exclusion, and poverty (UN Habitat, 2017:22).

Informal settlement dwellers are unduly affected by ill health, violence, and many other socio-economic challenges connected to the unhealthy and unsafe physical conditions in which they live Brown-Luthango et al., (2017:493). The population estimates indicate that at a certain point the world's urban population will equal the world's rural population and that growth in the urban population will continue to rise to a projected almost 5 billion in 2030. Much of this urbanisation is predicted to take place in the developing world, with Asia and Africa having the largest urban populations (Baker, 2008:1). Urban city life also present conditions of overcrowded living, congestion, unemployment, lack of social and community networks, stark inequalities, and crippling social problems such as crime and violence.

The majority of challenges faced by habitants on urban poverty are rooted in a complexity of resource and capacity constraints, inadequate Government policies at both the central and local level, and a lack of planning for urban growth and management. Given the high growth projections for most cities in developing countries, the challenges of urban poverty and more broadly of city management will only worsen in many places if not addressed more aggressively (Baker, 2008:1). The living conditions of the urban poor can be dismal and poor urban residents face many of the challenges in daily life, with the burden of overcrowded and often unsanitary living conditions (Baker, 2008:5).

Individuals living under the same roof in urban areas experience at least one of the following four basic shelter deprivations namely, the lack of access to improved water supply, lack of access to improved sanitation, overcrowding and dwellings made of nondurable material, these households are classified as informal households (Baker, 2008:5). The increase in residential areas that lack basic infrastructure and services, housing structures are constructed on land without security of tenure and proper building plans which forms informal settlements that have been a challenge for governments of most countries (UN-Habitat, 2015a).

Some of the characteristics of informal settlements include the presence of mainly temporary housing structures such as makeshift housing structures which deviate from standard building regulations (Abunyewah, Matthew, Thayaparan Gajendran & Maund, 2018:45). Informal settlements are characterised by poor housing that does not comply with building or planning regulations, a lack of sufficient basic services, inadequate healthcare and other public amenities, and housing that offers no tenure security for inhabitants. Informal settlements are characterised by dilapidated housing with inhabitants that suffer from deprivation in one or more of the following categories namely, access to potable water, security of tenure, access to sanitation and an adequate living environment (UN-Habitat 2015a).

A general characterisation of informal settlements can be described as informal settlements with poor quality housing, limited access to services, and often on insecure land. The location of informal settlements is either in the centre of a city near to employment opportunities, or in the peri-urban area where residents are more isolated. Older settlements tend to have more services and better-quality housing as the population becomes better off. The poor often end up on insecure public or private land as it is their only option (Baker, 2008:6). The risks of living particularly in high density informal settlements, also mean exposure to several disasters, health, and environmental risks affecting the poor.

These informal settlements are often in sites vulnerable to floods and landslides, with the absence of infrastructure or lack of, and housing is substandard and prone to fire damage or collapse. The high concentration of informal settlement populations, inadequate water and sanitation facilities, poor drainage and solid waste management, and indoor pollution contribute to acute respiratory diseases, diarrheal disease, and a wide collection of other transmittable diseases such as tuberculosis, hepatitis, pneumonia, cholera extra (Baker, 2008:8). Environmental problems affect the urban poor unfairly because of poor quality and overcrowded housing and the inadequacies in the provision of water, sanitation, drainage, health care and garbage collection.

The urban poor also often live in environmentally unsafe areas, such as polluted sites near solid waste dumps, open drains, and sewers, and near industrial sites as these are the only lands available (Baker, 2008:9). Informal settlements experience the worst climate change effects because of their ill preparedness, poor construction materials,

and lack of preventative infrastructure that makes informal dwelling structures highly vulnerable to high risks of floods and landslides (Satterthwaite, Archer, Colenbrander, Dodman, Hardoy, Mitlin & Patel, 2020:156). Informal dwelling structures tend to be in flood prone areas such as flood plains or in proximity to water bodies. Poor housing characterised by temporary structures is a common feature of informal settlements with most ill-equipped to deal with any adverse events associated with climate change (Abunyewah et al., 2018:24).

With the global urban population figure expected to rise in the future, informal settlements are emerging as a dominant urban residential form in many countries yet informal settlements remain a side-lined priority in planning, policymaking, and development (Samper, Shelby & Behary, 2020:25). For informal settlement residents, life in an informal settlement is often described by precarity and a sense of invisibility due to the limited public services provided and the fragmentation of physical connections with the rest of the city. Informal settlements and informal settlement residents often remain well-cohesive socially and economically with their surrounding urban areas, meaning "most developing cities are unsustainable without them" (Dovey & King, 2011:11).

Recently, increasing attention has been placed on digital technologies and emerging data sources to better understand informal settlement development and characteristics (Tjia & Coetzee, 2022:122). The UN and UN-Habitat was established to serve a specific purpose which includes human rights and improving the lives of informal settlement dwellers (UN-Habitat, 2023a). The following discussion relates to the challenges, which influence and impact on the provision of various basic services in informal settlements.

5.4   CHALLENGES IN GLOBAL INFORMAL SETTLEMENTS

Housing affordability is a global challenge that affects virtually all households (UN-Habitat, 2020a). Globally, prospective homeowners are compelled to save more than five times their annual income to afford the price of a standard house (UN-Habitat, 2020a). Tenant households often spend more than 25% of their monthly income on rent and this high level of unaffordability means that inadequate housing and informal settlements remain the only housing option for low-income households (UN-Habitat,

2020a). Response to the negative aspects of informal settlements governments is required to recognise the challenges informal settlement residents face and actively include them in wider city systems.

However, the regularisation of informal settlements may not overcome the stigma associated with living in these informal settlement areas (UN-Habitat, 2015c). UN-Habitat (2015c) identifies and explain certain key aspects that governments must act upon as follows:

- The recognition of informal settlements and human rights in which urban authorities need to adopt rights-based policies and integrated governance to create prosperous, sustainable and inclusive urban cities;
- The governments must provide and direct leadership which must provide enabling environments to develop and implement appropriate policies to bring about change in informal settlement areas; and
- Government at all levels must connect key stakeholders, harness local knowledge, enact policies and plans and manage incremental infrastructure development.

The implementation of systemic and citywide approaches to enhance initiatives to work best when they capitalise on agglomeration economies; use innovative financing and taxes; ensure equitable land management; recognise multiple forms of employment; reintegrate informal settlements with infrastructure and services via planning and design; clarify administrative responsibility for peri-urban areas; and undertake sensitive planning to avoid exposure to environmental hazards. The integration of people and systems in which governments must develop and coordinate broader integrated frameworks that are underpinned by urban planning, legislation and finance arrangements; are supported by interconnected institutional arrangements; and ensure the inclusion of marginalised groups and key stakeholders (UN-Habitat, 2015c).

Participation must be at the heart of this approach, ensuring an understanding of economic and social community dynamics. The provision of affordable, adequate housing, including the upgrading and avoidance of forced evictions, security of tenure and livelihood and employment generation, all play a role in urban prosperity. Long-term financial investment and inclusive financing options. Sustained investment in

affordable housing and upgrading programmes is critical. This includes pro-poor housing plans and financing support for all tiers of government. The development of participatory, standardised, and computerised data collection.

Residents of informal settlements should be engaged in local data collection and data collected at community level must be standardised and linked to city, regional, national and global comparative indicators. Data collection must also be embedded in monitoring and evaluation processes. The provision of peer learning platforms that draw on stakeholders' knowledge should be prioritised to facilitate peer learning. These platforms may include a range of communication strategies and multimedia mechanisms. Informal settlement dwellers face numerous of challenges that threatened their well-being and survival, a finding that is similar to findings reported in existing literature on informal settlements (Monney, Odai, Buamah, Awuah & Nyenje, 2013:728).

Monney et al. (2013:728), macro-categorised these challenges into three main themes namely, lack of basic and critical social services, bad housing facilities, and unsafe environments. The lack of basic and critical social amenities challenged the survival of informal settlement dwellers, as the informal settlements had minimal basic services and infrastructure provisions such as electricity, water supplies, sanitation, roads, drainage, and social amenities, due to their inherent non-legal status (Monney et al., 2013:728). Mitlin and Satterthwaite (2016:19) emphasise that many challenges need to be addressed if excluded groups are to be engaged more effectively and inclusive cities are to be achieved.

Mitlin and Satterthwaite (2016:19) highlight eight (8) key challenges in this regard, namely, a lack of household income and the continuing prevalence of informal incomes; a lack of state investment capacity; a lack of political will and state capacity even when political will is established; a lack of the basic data needed for addressing poverty; a lack of space for participation, especially by the lowest income groups; a lack of vision for what an inclusive city means; the constraints on inclusion from city governments organised sectoral; and the lack of channels through which international agencies can support urban governments and civil society groups.

The basic point to realise is that the scale and depth of urban poverty in Africa and much of Asia and Latin America is greatly underrated because of unacceptable descriptions and measurements. Understanding the causes of such inaccurate measurement provides insight into those groups who are typically excluded and marginalised because they are "invisible" to those authorities tasked with supporting them Mitlin & Satterthwaite, 2016:2). Approximately one in seven of the world's population lives in poor quality and usually overcrowded housing in urban informal settlement areas and most of these people lack provision for basic services such as safe sufficient water, sanitation, and many other basic needs.

These include very large numbers of urban informal settlement dwellers who are starving and suffer premature death or disease burdens that are preventable (Mitlin & Satterthwaite, 2016:2). Mitlin and Satterthwaite (2016:19- 22) explain and describe eight key challenges that need to be addressed to engage excluded groups more effectively and inclusive as follows: A lack of income is a major reason for social exclusion on the grounds of residency and an inability to invest in human capital and so improve labour market access and health. Many of the opportunities that are created are most easily accessed by those who have some resources. Banks may not locate close to informal settlements and subsidy finance and special provision for those with low incomes may also be more difficult (Mitlin & Satterthwaite , 2016:19- 22)

In South Africa, the water and electricity subsidy are offered based on formal residency in low-income settlements. Households informally renting a room or backyard shack, or housing structures cannot access such state redistribution. In cities across the global South, household access to piped water may be offered but be available only to those with the capital to invest in the line and meter. It should be recognised here that income inequalities may also be significant in addition to inadequate absolute income. High levels of income inequality and the spatially segregated cities to which they contribute appear to reduce social mobility. A particular difficulty is that high levels of informal employment in labour markets contribute to income insecurity and may be associated with dangerous and difficult working conditions.

Many cases local government has very little funding for citywide urban management and to improve infrastructure and basic services for areas that lack such investment.

Rapidly growing cities face problems as they have to provide for incoming populations without the revenue base. Lack of government finance means that programs are partial (not universal) and the lowest-income and least powerful groups receive very poor-quality public services or are not provided for at all. To secure the kinds of political relations need for inclusion and the need to secure the political commitment at both the national and city scales.

Resource scarcity favours clientelist political relations in which a hierarchical community leadership is established with dependency on a patron who secures access for the neighbourhoods to low-quality and limited public services in return for votes. Not only does this maintain very poor environmental conditions in informal settlements, but also it maintains vertical social relations of patronage and is associated with a lack of public accountability. At the local level, powerful leaders may capture the benefits of programs regardless of the intent of those designing and managing the implementations. The lack of basic data about conditions in neighbourhoods across cities. Local and national government lack the ability to make investments on the basis of need and are vulnerable to powerful interests subverting improvement programs.

Local government may have little idea of the numbers living in informal settlements, the nature of services in these areas, and in the larger cities may not even know where they are located. This is true even in countries such as South Africa that have local government departments with considerable skills and personnel. Consequently, responsible state agencies cannot, for example, know about the main health problems in each district. The lack of neighbourhood data is replicated in terms of employment. A high proportion of low-income groups work in what is termed the "informal" economy for which little or no data are available in part because the official data collected on employment have never been able to capture the variety, complexity, and diversity of income-earning sources, working conditions, and hours and their implications for health and income levels.

The lack of capacity in both civil society and government to ensure that participatory processes are inclusive. Acknowledgment is widespread that the lowest-income and most disadvantaged groups often do not participate in these processes. Hence even if less powerful groups are included in participatory and/or improved governance

processes, they may be dominated by those that have better political connections and/or a higher social status. It takes time for disadvantaged people to be comfortable in social interactions that have traditionally been dominated by those with expert and/or leadership status. Although it has been recognised that the more decentralised the level of decision making and planning activities, the more likely it is that inclusion will take place, this is not always acted on. Therefore, little autonomy may be available for the lowest level of council (such as wards) to make their own decisions, and meetings frequently take place in city council officers, rather than community locations.

The lack of vision for what an inclusive city means. Major infrastructure improvements are represented as being in the interests of all, but outcomes are less equitable. For example, the reconstruction of city centres to benefit enterprises almost universally seems to involve the displacement of large numbers of low-income groups and/or informal vendors. An emerging aspirational middle class may be even more anxious to displace the urban poor and "cleanse" their neighbourhoods. Street vendors and those providing forms of low-cost transport may be denied access to the city or restricted to areas. New alternative models of urban planning and development that allow low-income populations to remain in city centre's need to be identified and promoted.

Inclusion needs to reach beyond outcome metrics to include governance. If one almost universal failing in programs and interventions is to be identified, it is the failure to engage low-income groups and their organisations sufficiently both in prioritising what should be done and in actually doing it and supporting these organisations to do so. Many program interventions and policy reforms place too great a confidence on the state. Governments may be unpredictable, and as popular programs are associated with one party, the next to take office may cancel the measures. Greater political inclusion is likely to improve state commitments (Mitlin & Satterthwaite, 2016:21).

Restrictions on inclusion from city governments organised sectoral. Inclusion needs to reach beyond outcome metrics to include governance. If one almost universal failing in programs and interventions is to be identified, it is the failure to engage low-income groups and their organisations sufficiently both in prioritising what should be done and in actually doing it and supporting these organisations to do so. Many program interventions and policy reforms place too great a confidence on the state.

Governments may be fickle, and as popular programs are associated with one party, the next to take office may cancel the measures. Greater political inclusion is likely to improve state commitments.

The lack of channels through which international agencies can support urban governments and civil society groups. This lack of channels indicate that urban development is complex, and too many agencies look for simple single-sectoral interventions. Within governments, this is in part because of the ministerial divisions of responsibility that characterise modern governmental systems. Effective poverty reduction is likely to include the design of systems that make state support easier to understand and to access. This can support urban governments and urban civil society groups, even as these are recognised as key actors in achieving more inclusive cities. In most instances, the focus of the excluded groups' interaction on the part of the state is with local government.

This reflects the primary significance of local government in areas of importance to disadvantaged or excluded residents including not only access to infrastructure and services but also the influence of building and land-use regulations on the cost and availability of housing and land for housing. Local governments are certainly significant, but they generally have very limited capacity to make capital investments and generally support inclusion. However, city governments are critical to efforts to secure more inclusive cities. The rapid urban growth serves as a recipe for the creation of informal settlements because of rising poverty, worsening unemployment, weak and under-resourced municipalities, poor governance structures and the absence of coherent urban planning and housing policies conditions.

Well-planned and managed, urbanisation can be a combination for socioeconomic change and improved quality of life for all. However, informal settlements dwellers will be left behind in this process if their concerns are not integrated into urban planning, urban policy, housing, legislation and financing frameworks. If the concerns of the urban poor and marginalised remain ignored, then the goal to "make cities and human settlements inclusive, safe, resilient and sustainable" will only be achieved partially, and in the process, deny millions the benefits of urbanisation. The challenge is posed

by the continuous increase in informal settlements, especially in Sub-Saharan Africa and in East, South-East, Central and South Asia.

Without concerted action on the part of governments at all levels including civil society and development partners, the numbers of informal settlements dwellers will continue to increase in most developing countries (UN-Habitat, 2020b). Urban sprawl, a spatial phenomenon initially used to describe the suburbanisation of land-rich developed countries of North America and Australia, is now occurring in cities in all over the world. Whether horizontal spreading, dispersed urbanisation or peri-urbanisation, the physical extent of urban areas is growing much faster than their population, thereby consuming more land for urban development. The uncontrolled expansion of urban areas has profound consequences for energy consumption, greenhouse gas emissions, climate change and environmental degradation.

Nevertheless, if urban areas are effectively planned, managed and governed, then the urban expansion in both developing and developed countries will grow. It has been estimated that by 2030, cities are expected to cover three times as much land as they did in 2000, with much of the expansion occurring in relatively undisturbed key biodiversity hotspots. These projections indicate the quantitative value of well-planned urbanisation, which can preserve excess land from peri-urban redevelopment (UN-Habitat, 2020b). Despite the rapid rate of growth of the urban population in developing regions, the expansion of urban areas is occurring even faster.

For example, urban areas in Sub-Saharan Africa expanded at an annual rate of 5.1 per cent between 2000 and 2015, behind East Asia and South-East Asia, where the expansion of urban areas grew at annual average rates of 7.2 per cent and 5.7 per cent, respectively. The rate of urban expansion in these regions is higher than the global average of 4.3 per cent. The expansion of African cities, characterised by the spreading out of large cities at a remarkable pace, has been difficult to manage. In the process, these cities engulf surrounding rural land and adjacent towns, leading to continuous belts of informal settlements. This process of peri urbanisation, which is largely informal, is driven by the efforts of low-income households to secure affordable land in a reasonable location. It has led to the emergence of new settlement forms, which current planning and regulatory frameworks are unable to address effectively.

These sprawling urban peripheries are often disconnected from the main urban fabric. They lack the necessary road connections for efficient urban travel and increase the cost of providing municipal services. The failure to effectively plan and manage the expansion of urban areas has led to serious resilience challenges, such as housing affordability, traffic congestion, poor access to labour markets and public space, natural hazard risk to communities, loss of natural environment and ecosystems and lack of basic services such as water, sanitation and electricity. The absence of basic services increases the vulnerability of these areas to the coronavirus disease, as is currently the case (UN-Habitat, 2020b).

The spatial expansion of cities is an inevitable consequence of urban population growth and other contextual factors. The challenge for planning is to devise mechanisms for directing or controlling the timing, rate and location of urban growth. Urban sprawl, whether suburbanisation in North America, peri-urbanisation in Africa or 'metropolitanisation' in Asia and Latin America are all products of either inappropriate or ineffective planning regulations. All of these types of sprawls necessitate the adoption of more sustainable urban growth management policies where both planned expansion and planned infill play key roles (UN-Habitat, 2020b).

Mathur (2014:1) explain that urban poverty is complex and multidimensional extending beyond the deficiency of income or consumption, where its many dimensions relate to the vulnerability of the poor on account of their inadequate access to land and housing, physical infrastructure and services, economic and livelihood sources, health and education facilities, social security networks, and voice and empowerment. In most of developing Asia, urbanisation has been accompanied by informal settlement and shelter deprivation, informality, worsening of the living conditions, and increasing risks due to climate change and exclusionary urban forms.

UN-Habitat (2020b) state that with the wide range of consequences, climate change is one of the most pervasive challenges facing cities. Urban areas are both the source of the majority of the world's carbon emissions and home to the majority of the world's population that will be the victims of climate change. Urbanisation has been identified as one of the mega-trends that needs to be addressed to achieve the target of limiting mean global temperature increase to 1.5ºC. Cities, especially those in warm climates or low-lying coastal areas, face existential threats due to the risks and impacts of

climate change and natural hazards, such as increased extreme heat (UN-Habitat, 2020b). The following discussion will relate to the United Nations Development Programme, which is mandated by the United Nations with the goal of providing adequate shelter for all.

5.5   THE UNITED NATIONS DEVELOPMENT PROGRAMME

The United Nations, referred to informally as the UN, is an intergovernmental organisation whose stated purposes are to maintain international peace and security, develop friendly relations among nations, achieve international cooperation, and serve as a centre for harmonising the actions of nations (UN-Habitat, 2015a). The UN is the world's largest international organisation, which is headquartered on international territory in New York City, and the organisation has other offices in Geneva, Nairobi, Vienna, and The Hague, where the International Court of Justice is headquartered(UN-Habitat, 2023a).

The UN was established after World War II with the aim of preventing future world wars, and succeeded the League of Nations, which was characterised as ineffective and on 25 April 1945, 50 nations met in San Francisco for a conference and started drafting the UN Charter, which was adopted on 25 June 1945. The charter took effect on 24 October 1945, when the UN began operations. The organisation's objectives, as defined by its charter, include maintaining international peace and security, protecting human rights, delivering humanitarian aid, promoting sustainable development, and upholding international law.At its founding, the UN had 51 member states; as of 2023, it has 193 almost all of the world's sovereign states (UN-Habitat, 2023a).

The organisation's mission to preserve world peace was complicated in its early decades due in part to Cold War tensions that existed between the United States and Soviet Union and their respective allies. Its mission has included the provision of primarily unarmed military observers and lightly armed troops charged with primarily monitoring, reporting and confidence-building roles (UN-Habitat, 2023a). The UN membership grew significantly following widespread decolonisation in the 1960s. Since then, 80 former colonies have gained independence, including 11 trust territories that had been monitored by the Trusteeship Council (UN-Habitat, 2023a). By the

1970s, the UN's budget for economic and social development programmes vastly exceeded its spending on peacekeeping. After the end of the Cold War in 1991, the UN shifted and expanded its field operations, undertaking a wide variety of complex tasks (UN-Habitat, 2023a).

The United Nations Human Settlements Programme (UN-Habitat) is the United Nations programme for human settlements and sustainable urban development(UN-Habitat, 2023a). UN-Habitat was established in 1977 as an outcome of the first United Nations Conference on Human Settlements and Sustainable Urban Development (Habitat I) held in Vancouver, Canada, in 1976. UN-Habitat maintains its headquarters at the United Nations Office at Nairobi, Kenya. UN-Habitat is mandated by the United Nations General Assembly to promote socially and environmentally sustainable towns and cities with the goal of providing adequate shelter for all. It is a member of the United Nations Development Group. The mandate of UN-Habitat derives from the Habitat Agenda, adopted by the United Nations Conference on Human Settlements (Habitat II) in Istanbul, Turkey, in 1996.

The twin goals of the Habitat Agenda are adequate shelter for all and the development of sustainable human settlements in an urbanising world (UN-Habitat, 2023b). The UN-Habitat mandate is also derived from General Assembly resolution 3327 (XXIX), by which the Assembly established the United Nations Habitat and Human Settlements Foundation; resolution 32/162, by which the Assembly established the United Nations Centre for Human Settlements (Habitat); and resolution 56/206, by which the Assembly transformed the Commission on Human Settlements and the United Nations Centre for Human Settlements (Habitat), including the United Nations Habitat and Human Settlements Foundation, into UN-Habitat.

The mandate of UN-Habitat is further derived from other internationally agreed development goals, including those contained in the United Nations Millennium Declaration (Assembly resolution 55/2), in particular the target on achieving a significant improvement in the lives slum-dwellers (UN-Habitat, 2023b). Informal settlements are a recognised issue globally and discussed in various international housing documents, such as the "Habitat Agenda (1996), Declaration on Cities and Other Human Settlements in the New Millennium (2001), European Social Charter, revised (1996), the Vienna Declaration on National and Regional Policy Programmes

regarding Informal Settlements in South Eastern Europe (2004), Millennium Development Goals" (Suditu & Vâlceanu, 2013:65).

These European documents indicate that informal settlements are not only a global south issue, and that Europe should also be prioritised. Europeans advocate for housing policies to regularise these settlements and improve their living conditions (Suditu & Vâlceanu, 2013:np). UN-Habitat (2020b) and World Bank (2018:2) put the following countries among the top countries with highest percentage of the urban population living in informal settlements varying from above 90% to above 60%: Afghanistan, Angola, Benin, Central African Republic, Chad, Democratic Republic of Congo, Ethiopia, Guinea-Bissau, Liberia, Madagascar, Mauritania, Mozambique, Sao Tome and Principe, Somalia, South Sudan, and Sudan. The Sustainable Development Goals (SDG) targets have an explicit focus on reducing inequalities, but national, regional and global averages often mask significant inequalities in service levels between and within countries, between wealth quintiles, and between rural areas and urban areas. South Africa have a shortage of housing which results in the creation of informal settlements and in the context of this study, the following section presents informal settlements in South Africa.

5.6   INFORMAL SETTLEMENTS IN SOUTH AFRICA

South Africa is located at the southern end of the African continent with a total land mass of approximately 1.2 million square kilometres. It is divided into nine provinces and over 260 municipalities of various types. The country shares borders with Namibia, Botswana, and Zimbabwe to the north, and Mozambique and Swaziland to the east. Lesotho is also a neighbour but constitutes an enclave surrounded by South African territory. In comparative terms, South Africa is the twenty-fifth (25th) largest country in terms of land size, and the 24th most populous nation in the world, with an estimated population of 58,048,332 million (World Factbook, 2021:np)

Figure 5.1 below show the location of South Africa at the southern end of the African continent.
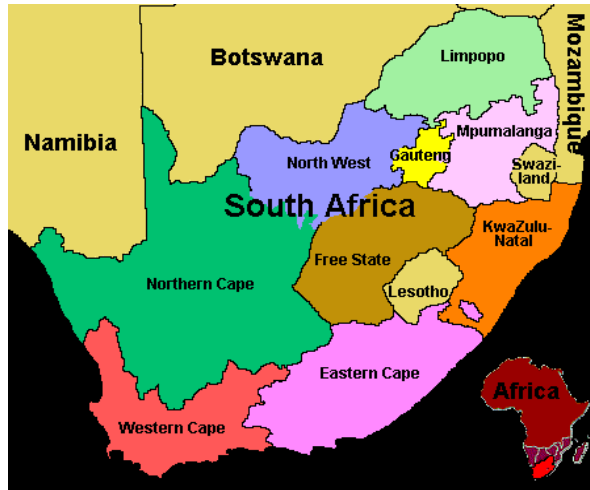
Figure 5.1:   South Africa's location in the African continent

(Source: World Factbook 2021:np)

The South African government failed to implement the addition housing policy because Urban Housing Forum programmes were under the domination of experts pushing business interests (Juta & Mostiliza, 2014:375). Housing is regarded as a fundamental human right and need and the South African government provided housing to many residents. However, housing problems continue to exist, especially among the poor (Manomano, Tanga & Tanyi, 2016:1). Figure 5.2 below shows the disparity between an underdeveloped informal settlement next to a developed suburban area in South Africa as illustrated by (Manomano et al., 2016:4).

Figure 5.2:   The disparity between an underdeveloped informal settlement next to a developed suburban area in South Africa

(Source: Manomano et al., (2016:4).

169

South Africa is a party to the UN Millennium Development Goals (MDGs) which provides under Goal 7 Target 11 to ensure that the lives of over 100 million informal settlement dwellers are significantly improved. South Africa also holds fast to several important declarations under the UN Habitat Programme. These include the Vancouver Declaration on Human Settlements (1976), the Istanbul Declaration on Human, and Other Settlements (1996), as well as the Habitat Agenda (1996), which all aim to alleviate the plight of people without access to adequate housing (Ziblim, Sumeghy, & Cartwright, 2013:4). The South African Department of Human Settlements establishes its own benchmarks, under the Housing Code for identifying informal settlements, which is based on the following characteristics: "(a) Illegality and informality; (b) Inappropriate locations; (c) Restricted public and private sector investment; (d) Poverty and vulnerability; and (e) Social stress"

Generally, cities are linked with prospects and improve promises to attract many people particularly from rural areas, towns and villages. People flock to cities in search for greener pastures, in search for work as well as for an improved standard of living (Sulemana & Nketiah-Amponsh, 2019:144). Nowadays, more than two-thirds of the population in South Africa is based in urban areas, one of the highest ratios in the continent (Pieterse & Parnell, 2014:17). The reality in South Africa is that cities have been excluding most people, specifically blacks, from participating and contributing to the mainstream economy and from accessing opportunities (Todes & Turok, 2017:31).

In identifying and acknowledging the need for housing as well as the activating of all role-players within a joint human rights standard, could make the 2030 advancement agenda for housing practical. Informal settlements are referred to as an unplanned land location which has not been planned as residential areas, comprising largely of erection of informal structures, for example structures that are not approved by the local authority and not planned as permanent structures (Richards, O'Leary, & Mutsonziwa, 2007:388). Informal settlements are unlawful and are located on land that has not been designated for residential use (Ooi & Phua,2007:34).

Similar to other third-world countries, South Africa is challenged with urbanisation and the provision of suitable housing for all citizens. The United Nations (UN, 2019) points out that by 2050, 68% of the global population could be living in urban areas. In 2015, Africa, with the second highest population growth in the world, had almost 200 million

slum dwellers, which adds to serious challenges concerning housing and basic services and the growth of informal settlements (Zanganeh et al., 2013:188).

Informal settlements can be defined as temporary structures or dwellings that are built out of basic materials in residential areas where inhabitants squat or rent informally, lacking basic services, resources, and city infrastructure, such housing does not comply with building regulations and is often situated in environmentally sensitive areas (Brown, 2015:248). According to Statistics South Africa's Household Survey (2016), more than five million Black; 276,348 Coloured; 117,000 Indian and 13,310 White citizens live either in informal dwellings or in the lowest housing bracket.

The uncontrollable rising price of living around the world has led to an increase in informal settlements all around the cities of developing countries such as South Africa. Estimations for South Africa suggest that 13.9% of households live in informal settlements, while 5.9% live in traditional dwellings (Posel & Marx, 2013:831). Inner-city informal settlements are often settings characterised by high levels of poverty, crime, violence, and poor health (Ragnarsson, Townsend, Ekström, Chopra & Thorson, 2010:3). Like somewhere else in the world, poor urban populations in South Africa continue to live in conditions of disheartening poverty and this is normally connected with limited access to formal employment, insecure forms of housing tenure and shelter and insufficient access to sanitation and water (Moore, Gould & Keary, 2003:277).

The United Nations (1997), cited by Cirolia et al. (2016:14), defined the key characteristics of informal settlements as places "where a specific community has constructed housing units on land the occupants have no title deeds or occupy unlawfully". For instance, in South Africa people would illegally occupy land and build structures in the form of shacks or brick and mortar houses in breach with the laws of South Africa. These establishment of illegal structures are a specific type of informal settlements, namely settlements developed by individuals who have unlawfully settled in an area and constructed structures using corrugated iron sheets and wooden material to build houses. The construction of the structures is usually done through a self-help process. The informal settlements in the South Africa could be referred as squatter settlements.

However, Huchzermeyer (2003), cited by Cirolia, Görgens, Van Donk, Smit & Drimie, 2016, stated that the term 'squatter settlements' has unpleasant undertones in South Africa; therefore, it should be avoided and not to be used. Cirolia et al. (2016), further stated that there are other forms of informal housing that are not classified as informal settlements such as informal rental accommodation, taking the form of backyard shacks located adjacent to formal housing. This informal settlement typology is unique in South Africa.

Furthermore, Turok and Borel-Saladin (2015:5) stated that South Africa is somewhat unusual in that much of the latest developments in informal housing has taken the form of backyard shacks situated within established former black townships, as against stand-alone shacks in dispersed and overcrowded squatter settlements. Turok and Borel-Saladin (2015:5) affirmed that the formal structures can be either be erected by landlords/homeowners or the tenant/occupier, and there may be several shacks in a backyard and/or front yard. An example of a backyard shack is where the landlords /homeowners or the tenant/occupier typically shares the municipal services such as electricity, water, sanitation and refuse collection with the tenants/occupiers in backyard and/or front yard shacks in return for rental income.

Physical setting of informal settlements or 'Townships', as they are called in South Africa, or low socioeconomic settlements, are by far not only a single problem in this country, but seems to be a continuing, problematic phenomenon (Mels, Castellano, Braadbaart, Veenstra, Dijkstra, Meulman, Singels, & Wilsenach 2009:330). Since the year 2000, the global population of inhabitants of low socio-economic settlements have risen by 55 million people (UN-Habitat, 2015c). Sub-Saharan Africa is, however, the region in the world with the highest prevalence of low socio-economic settlements (Givens, 2015:109). These low socio-economic settlements face a whole host of societal challenges, such as poverty, unemployment, lack of access to infrastructure, inadequate housing, and crime and several aspects which combine to ensure a cycle of poverty from which residents of such settlements seldomly escape (Brandt-Rauf, 2010:np; Graham & Ernston, 2012:37; Scott & Oelofse, 2005:450).

Although South Africa is not unique on the continent regarding its destiny of colonialism, its constant past of racial divisions and subsequent settlements and migration designs had left the country with a severely unequal and unfair urban setting

(Shortt & Hammett, 2013:616). The Group Areas Act (1950), which was Apartheid legislation, brought about the prohibition and forced removal of African and other non-white citizens such as Coloured's and Indians from city centres, creating poor and side-lined settlements on the peripheries of society (Jürgens, Donaldson, Rule & Bähr, 2013:256). The goal was, in fact, to settle African people as far as possible from white residential areas, and dividing these settlements from the city centre by means of natural and physical barriers (Smit, Lannoy, Dover , Lambert , Levitt & Watson 2016:199 ; Jürgens et al., 2013:257).

O'Regan and Pikoli (2014:30-31) state that there is, for example, only five entry roads or arterial roads leading into the entire Khayelitsha settlement, and access is therefore limited, as well as traffic strained. Many sections of Khayelitsha, especially the informal housing, are entirely cut off from any significant road networks (Dixon & Ramutsindela, 2006:135). Residents of low socioeconomic settlements do not have access to the same environmental- infrastructural conditions in middle/upper-class neighbourhoods (Smit et al., 2016:200). The situation is recognised that the poor suffer first and worst from the effects of climate change (Drivdal, 2016:22; Cock, 2007:17). Moreover, the obvious implications this has for residents' vulnerability to natural disasters such as floods and heavy wind, it also contributes to high levels of everyday problems such as mould and damp, due to the conditions of the location of the settlements (Shortt & Hammett, 2013:621).

There has been a great spread of informal settlements throughout the global South, due to the rapid urbanisation across the globe, and this rapid spread has been unmatched by governments' abilities to guarantee adequate planning for infrastructure and service delivery (Beall, Crankshaw & Parnell, 2000:835; Shortt & Hammet, 2013:616). It is evident from the global discourse surrounding informal settlements is the worldwide motive to 'get rid of' such informal settlements, due to the lack of basic services accessible to inhabitants (Mels et al., 2009:331; Shortt & Hammett, 2013:616). This has been the speech-making in South Africa, with the further pledge of formal housing and basic services, such as water, sanitation and electricity for all, with a sound environmental emphasis.

Shortt and Hammett (2013:616) observe, nevertheless, that the complete eradication of informal settlements overlooks the social links and basics requirements of

inhabitants for a sense of community which has by now been developed in these settlements. The South African Government has acknowledged that townships in the country are no longer temporary structures, but permanent settlements for which long-term solutions and service delivery must be planned (Shortt & Hammett, 2013:617). Even though there is no longer any uncertainty regarding the predictable permanence of townships in South Africa, there remains to be a great lack of infrastructure and services in informal settlement areas (Brunn & Wilson, 2013:286; Storey, 2012:116; Mels et al., 2009:331).

South Africa introduced several post-apartheid policies that were meant to address imbalances of the past. The first aim was to introduce affordable houses for poor people. Nevertheless, housing provision is still a challenge because poor South Africans cannot access cost-friendly human settlements (Juta & Matsiliza, 2014:375). The following discussion relates to the Housing Legislative and Policy Frameworks in South Africa

5.7 HOUSING LEGISLATIVE AND POLICY FRAMEWORKS IN SOUTH AFRICA

While South Africa has a progressive legal and policy framework governing these rights, the housing crisis has persisted. These challenges are particularly important, in the context of informal settlements. People living in informal settlements have inadequate housing, a lack of access to basic services or their maintenance and often face the threat of evictions (Socio-Economic Rights Institute of South Africa, 2018:1).

Given the historical background of South Africa, it becomes clear that informal settlements and the associated forms of self-help housing have neither happened coincidentally nor as an abnormal form of inner-city development. Informal settlements as 'growing' spaces of creation and agency informal settlements identify not only a complexity, but also a dissatisfied creativity, 'capacity' to create something new that cannot readily be assimilated into recognised conceptual frameworks (Huchzermeyer, 2011:80).

The South African government in its efforts to control the growth of informal settlements and to improve the livelihood of poverty in informal settlement in South Africa, developed policy and legislative frameworks, which relates to informal

settlements in South Africa because of the lack of housing and poverty in South Africa. The lack of housing directly influenced and increased the formation and growth of informal settlements in South Africa, and thus necessitates discussion on the relevant policies and legislative framework in the context of housing and, informal settlements in South Africa. The concerning policies and legislation include discussions the Constitution of South Africa (Act 108 of 1996), the Housing Act (Act 107 of 1997), "Breaking New Ground (BNG) (2004)", the National Planning Commission (2012), Urban inefficiencies in South Africa, the housing situation in South Africa, building safer communities in South Africa, the strengthening the criminal justice system in South Africa and the White Paper on Policing (2016). The legal framework and policy relating to housing are discussed below, starting with the Constitution of South Africa.

5.7.1   The Constitution of South Africa (Act 108 of 1996)

According to the Department of Human Settlements 2021:15), Section 26 of South Africa's Constitution (Act 108 of 1996) proclaims access to housing as a Human Right and places a duty on the state to take reasonable measures to realise access to adequate housing. The 1996 Constitution of South Africa contains clear and justiciable provisions under Section 26, which guarantee the right of the individual to adequate housing. Section 26 stipulates that the government at all spheres such as National, Provincial and Local governments have the responsibility to formulate legislation and other procedures, within its available resources, to accomplish the advanced realisation of the right to have access to suitable housing.

According to the Constitution (Act 108 of 1996), the national and provincial governments have concurrent governmental capability on housing, (a) To ensure the providing of services to communities in a maintainable way; (b) To encourage social and economic development, (c) To promote a safe and healthy environment. Section 26 of the Constitution stipulates that it is the responsibility of the government is to ensure that every person has access to adequate housing and people are in an environment that encourages social and economic growth, as well as a safe and healthy environment. Section 26 also stipulates that the government must take steps to provide housing within its available resources; this implies the government has a duty to deliver what it can provide. On the other hand, in terms of implementation, the Constitution has been unsuccessful to apply the policies stated in its visions.

Section 24 of the Constitution highpoints that everyone has the right to, an environment that is not harmful to their health or wellbeing and to have the environment protected for present and future generations. Informal settlements significantly deviate from this section of the Constitution as informal settlements go against it entirely by being connected with harmful health risks. Informal settlements have no interest in the protecting of the environment, but instead, hold adverse influences towards the environment which have been stated in the paper (Du Plessis, 2015:20).

Section 24 of the Constitution also states that the government must pass laws that prevent pollution and damage to our natural resources, promote conservation, and make sure that natural resources are developed while in turn promoting the economic and social development of people. However, the development of informal settlements goes against the Constitution, as informal settlements relate to pollution and deforestation which ignores the Constitution (Du Plessis, 2015:20). This suggests that if such legislation was applied, and municipalities gave importance to the basic needs of communities, housing challenges would be minimal and the remaining informal settlement dwellers would be serviced and they would not resort to living in an environmentally harmful manner.

Chapter three of the Constitution also contains provisions relating to Cooperative Governance, which forms a crucial part of the modalities and processes of informal settlement upgrading. Section 41 stipulates that, all organs of state should endeavour to "*secure the well-being of the people of the Republic*" and to "*provide effective, transparent, accountable and coherent government for the Republic as a whole*". Section 41 furthermore, also charge the various spheres of government to adopt mutual partnerships and harmonious working relationships among themselves in the execution of their functions and responsibilities. The adoption of mutual partnerships and harmonious working relationships are imperative within the context of the Upgrading of Informal Settlement Programme (UISP), given that the programme is a multi-stakeholder enterprise, and local governments are expected to engage with different actors during the implementation process. Considering this, Part 3 of the simplified National Housing Code, which deals with the upgrading of informal settlements, makes explicit reference to the Intergovernmental Relations Framework

Act of 2005 (Act No. 13, 2005). The Act direct municipalities to establish "cooperative governance structures", "systems" and "alignment mechanisms" to facilitate partnerships with informal settlement communities and other public and private institutions, to foresee conflicts and disputes, as well as address capacity challenges in the implementation of the UISP (National Housing Code Part 3, 2009). The following discussion outlines the Housing Act (Act 107 of 1997) of South Africa.

5.7.2   The Housing Act (Act 107 of 1997)

The framework of the national housing policy as set out in the Housing Act of 1997 (Act No. 107 of 1997) indicated that every municipality needs to ensure that its residents have access to housing and related services (Department of Housing, 2004:4). The Housing Act provides for the facilitation of a sustainable housing development process. Further, it lays down the general principles applicable to housing development in all spheres of government, including defining the functions of national, provincial, and local governments in respect of housing development. The Housing Acts requirements are to see to it that municipalities ensure that inhabitants of its area of jurisdiction have access to adequate housing on a progressive basis, that conditions not conducive to the health and safety of the inhabitants of its area of jurisdiction are prevented or removed, and that services in respect of water, sanitation, electricity, roads, stormwater drainage, and transport are economically efficient (Department of Human Settlements, 2021:23)

The Housing Act of 1997 together with the revised Housing Code of 2009 was enacted to give effect to Section 26 of the Constitution. The Housing Act of 1997(Act No.107 of 1997) provides for a sustainable process of housing development by laying down the general principles that should govern such processes in all the spheres of government. It also spells out among others, the functions, and relationship between the various levels of government and the individuals and communities with regards to housing development (Tissington, 2011:8). The Housing Act of 1997 (Act No.107 of 1997) further stipulate relevant provisions under Section 2, which obliges municipalities to ensure a non-discriminatory, pro-poor, racially integrated, and participatory process of upgrading of informal settlements based on the principles of good governance. Section 2 also stipulate that national, provincial and local spheres of government must give priority to the needs of the poor with respect to housing

development as well as consult meaningfully with individuals and communities affected by housing development. Section 2 further instructs all the spheres of government to ensure that housing development provides as wide a choice of housing which is economically, fiscally, socially, and financially affordable. The sustainable housing should be based on integrated development, which is administered in a transparent, accountable, and equitable manner, and upholding the practice of good governance (Department of Housing, 2004:4).

Additionally, significantly, Section 2 further provides for the establishment, development, and maintenance of socially and economically viable communities, and or safe and healthy living conditions to ensure the elimination and prevention of informal settlement and informal settlement conditions. Furthermore, Section 2 provides for measures to prohibit unfair discrimination on grounds of gender, and other forms of unfair discrimination by all role-players in the housing development process. The general principles under the Housing Act of 1997 (Act No.107 of 1997) are instructive for the processes and modalities of the upgrading of informal settlements, which has been envisioned to facilitate creation of integrated urban cities and to reduce, if not eliminate social exclusion in South Africa (Department of Housing, 2004:4). The following discussion relates to South Africa's revised housing policy, known as Breaking New Ground, which was introduced during 2004.

5.7.3   Breaking New Ground (2004)

South Africa was faced with addressing the housing needs of the mass of its population in a way that builds long-term settlement sustainability and strengthens the capabilities and livelihood prospects of its citizens. In 1994, South Africa's new housing policy was launched, with the housing capital subsidy scheme as its instrument. The release of a revised housing policy in 2004, known as Breaking New Ground, followed a growing recognition that the programme often resulted in poor quality units; uniform and monotonous settlements on the urban edge; the concentration of the very poor in new ghettoes; and poor-quality residential environments without the necessary social facilities and supportive infrastructure (Department of Housing, 2004:1).

According to the Department of Human Settlements (2021:23) the Breaking New Ground policy of 2004, was formulated in response to the various gaps and criticisms of the earlier approach to low-income housing development. It aimed to shift the housing policy landscape from a ridged housing approach to a human settlements approach to address the whole housing market with the inclusion of new housing programmes, approach to informal settlements, including interim services in line with international best practices. The upgrading process is not prescriptive but instead supports a range of tenure options, infrastructure standards and housing typologies. The BNG policy seeks to address various problems associated with housing under the "RDP" paradigm, which was defined by slow delivery, peripheral housing locations and the absence of simultaneous infrastructure development. In this regard, many aspects of housing development reflected earlier apartheid segregation patterns. Therefore, the BNG included plans to integrate peripheral housing developments into cities and ensure that future housing development occurs on well-located land (Department of Human Settlements, 2021:23).

The scale of the housing problem indicated, for instance, by the growth of informal settlements in areas of economic opportunity was increasing despite the delivery of "RDP" houses. A growing recognition that the programme was a blunt instrument in response to the diverse housing needs of individuals and households. Breaking New Ground attempted to address these concerns by placing emphasis on the utilising housing as an instrument for the development of sustainable human settlements, in support of spatial restructuring (Department of Housing, 2004:1).

BNG saw a need for a new policy that would support the development of a non-racial, integrated society and envisioned the following plan to accelerate the development of quality housing, develop sustainable human settlements, utilise the building of houses as a strategy to provide more jobs, combat crime, promote social cohesion, improve quality of life, and reduce and duality by dismantling the barriers between rich and poor residential properties (Department of Housing, 2004:1).

The new human settlements plan strengthens the vision of the department of human settlements, to encourage the achievement of non-racial, integrated society through the development of sustainable settlements and quality housing (Department of Housing, 2004:1). The key concepts the BNG policy document regarding the formation

of sustainable human settlements are social and economic infrastructure, vision is to develop sustainable human settlements, and pursues to move towards the development of social and economic infrastructure as an essential component of settlements instead of the housing only approach (Department of Housing, 2004:9).

The BNG policy recommends shifting from a commoditised focus of housing delivery toward more reactive mechanisms which addressed the multi-dimensional needs of sustainable human settlements (Department of Housing, 2004:11). The following discussion focuses on the National Development Plan (NDP), developed by the National Planning Commission of South Africa.

5.7.4 National Development Plan (2012)

The National Development Plan was implemented during 2012 with the aim to speed up the process to eradicate poverty and reduce inequality by 2030. South Africa can realise these goals by drawing on the energies of its people, growing an inclusive economy, building capabilities, improving the capacity of the state, and promoting leadership and partnerships throughout society. South Africa has made significant progress in the transition from apartheid to democracy (National Planning Commission, 2012:24). South Africa has been able to build the institutions necessary for a democratic and transformative state.

The Constitution enshrines a rights-based approach and envisions a prosperous, non-racial, non-sexist democracy that belongs to all its people. Access to services has been extended, the economy has been stabilised and a non-racial society has opened to develop. Millions who were previously disregarded have access to education, water, electricity, health care, housing, and social security. South Africa remains a highly unequal society where too many people live in poverty and inequities (National Planning Commission), 2012:24). Chapter 8 of the NDP talks explicitly about the inefficiencies and inequities of our settlement patterns and the need for bold measures to reshape them (Department of Human Settlements, 2021:21).

The legacy of apartheid continues to determine the life opportunities for the vast majority and these immense challenges can only be addressed through a step change in the country's performance. To accelerate progress, deepen democracy and build a more inclusive society, South Africa must translate political emancipation into

economic wellbeing for all. It is up to all South Africans to fix the future, starting today. This plan envisions a South Africa where everyone feels free yet bounded to others, where everyone embraces their full potential, a country where opportunity is determined not by birth, but by ability, education, and hard work.

To eliminate poverty and reduce inequality, the economy must grow faster and in ways that benefit all South Africans (National Planning Commission, 2012:24). The National Development Plan (NDP), (2012:260) suggest that progress has been made since 1994, but South Africa is far from achieving the goals set out in the Reconstruction and Development Programme of "breaking down apartheid geography through land reform, transport, more compact cities, decent public transport and the development of industries and services that use local resources and/or meet local needs".

For this reason, the planning Commission suggests a strategy to address the challenge of apartheid geography and create the conditions for more humane- and environmentally sustainable-liveable -and working environments to address the inefficiencies and inequities in South Africa's settlement patterns. These inefficiencies and inequities are deeply entrenched in South Africa and bold measures are needed to reform (National Planning Commission, 2012:260). This strategy will respond directly to the South African Constitution, and especially to the provisions in the Bill of Rights that affirm the right of all to a healthy environment, access to adequate housing and access to basic services as stipulated in Sections 24, 26 & 27 of the Constitution of South Africa Constitution of South Africa (Act 108 of 1996) (National Planning Commission, 2012:260).

In the context of this study only certain relevant and appropriate sections contained in the NDP discussed because of relevance on informal settlements in South Africa. Therefore, aspects such as urban inefficiencies, challenges, housing situation, building safer communities and the strengthening of the Criminal Justice System in South Africa will be focussed and on. The following discussion focuses on the urban inefficiencies in South Africa.

5.7.4.1 Identified urban inefficiencies

Most South Africans live in a complicated system of towns and cities, which generates about 85% of all economic activity. Urban areas differ enormously in relation to such

factors as spatial form, economic base, and institutional strength. Towns and cities are connected in changing degrees into wider urban systems and their development reflects global and local forces. Economic activity is becoming consolidated in the largest cities and towns. However, other activities including in highly skilled professional services are decentralising partly because of information and communication technology (ICT) and lower transport costs, creating opportunities for smaller urban centres (National Planning Commission, 2012:266).

.

A major trend is the development of city-regions that extend beyond individual municipalities. This offers opportunities but also complicates urban planning and management. Decision-making around land- use management and the coordination of development initiatives are greatly affected by the obscuring of boundaries. Institutional official structures are dysfunctional and not ensuring greater collaboration and harmonisation of plans. The Gauteng city-region and embryonic city-regions around port cities are cases in point, requiring new collective approaches (National Planning Commission, 2012:266).

The National Planning Commission (2012:266) emphasise that South African towns and cities are affected by a variety of challenges that requires an enormous burden on local authorities (municipalities) to provide services in towns and cities. Notwithstanding slower urbanisation than in other parts of Africa, it is estimated that another 7.8 million people will be living in South African cities in 2030 and a further 6 million by 2050, putting pressure on South African cities and towns municipalities to deliver services. A large proportion of new urban residents will be poor, reflecting a phenomenon referred to as the urbanisation of poverty. In particular, the number of young people in cities is growing rapidly and are largely in the working-age category and mainly unemployed or involved in marginal enterprise.

This requires a positive response, as dissatisfied youth are both a hazard and a lost resource to society. South Africa's towns and cities are highly fragmented, imposing high costs on family units and the economy (National Planning Commission, 2012:266). Densities have increased in some urban areas since 1994, and there has also been partial redevelopment of inner cities, coupled with the growth of housing ownership but, overall, slight progress has been made in undoing apartheid

geography. The growth of property value has led to an overall average house price that has made housing unaffordable to many South Africans and has further excluded participation in the property market by historically excluded groupings.

The growth has largely advanced middle- and higher-income groups. (National Planning Commission, 2012:266). There is an insufficient understanding in policy of the informal and adaptive strategies and livelihoods of the poor. The relationship is overlooked how these people live and how they survive. Transportation networks are critical to the spatial transformation of urban areas. There has been progress in some cities in delivering new public transport infrastructure, but the major shift from supporting private cars to incentivising public transport is yet to happen, and insufficient attention has been given to integrating modes of transport and coordination across municipalities (National Planning Commission, 2012:266).

Although cities are generally more resource efficient than scattered settlements, their concentration requires the development of large sources of energy and water and good transport connections which can place strains on the surrounding natural environment. If this is not resolved, cities face varying degrees of water stress, food insecurity and power shortages. Future development depends on the ability of towns and cities to become less resource intensive. The concentration of people, industries and infrastructure in urban areas presents opportunities to use resources more productively. There are also opportunities to create greener urban spaces, even in the densest areas (National Planning Commission, 2012:266).

Towns and cities are not productive enough and do not generate sufficient jobs. While most of the larger cities have performed better than smaller cities, their growth has been disappointing. Manufacturing has performed especially poorly (National Planning Commission, 2012:267). There is also little support for the informal economy, while township economies are unable to retain local spending power or attract productive investment. Many of the challenges are not a result of a vacuum in policy, but rather insufficient institutional capacity, a lack of strong instruments for implementation and a lack of coordination. There is also a critical lack of trust between different interest groups which reduces the willingness of economic players to commit to the kind of long-term investments which are needed to generate jobs and the economic returns

that would support sustainable urban growth (National Planning Commission, 2012:267). The following discussion focuses on the housing situation in South Africa.

5.7.4.2   The housing situation in South Africa

South Africa is faced with addressing the housing needs of the mass of its population in a way that builds long-term settlement sustainability and strengthens the capabilities and livelihood prospects of its citizens (National Planning Commission, 2012:268). In 1994, South Africa's new housing policy was launched, with the housing capital subsidy scheme as its instrument. The Department of Human Settlements estimates that 3.2 million subsidised units have been completed/are in progress for poor families: a considerable achievement. The programme enabled home ownership with title deeds being transferred to the beneficiaries. At the same time, access to basic services expanded – 97.7% of households have access to water and 82% have access to sanitation and 75.8% to electricity (National Planning Commission, 2012:268).

This housing policy has been a learning process (National Planning Commission, 2012:268). The release of a revised policy in 2004, known as Breaking New Ground, followed a growing recognition that the programme often resulted in poor quality units; uniform and repetitive settlements on the urban edge; the concentration of the very poor in new ghettoes; and poor- quality residential environments without the necessary social facilities and supportive infrastructure. Unintentionally, post-apartheid housing policy had reinforced apartheid geography. Further shortcomings became noticeable as the programme approached its first decade which includes, the scale of the housing problem indicated, for instance, by the growth of informal settlements in areas of economic opportunity was increasing despite the delivery of RDP houses.

A growing recognition that the programme was a blunt instrument in response to the diverse housing needs of individuals and households (National Development Plan, 2012:268). Beyond the state programme, the extension of property finance for the lower end of the housing market was muted, with very limited growth in the secondary market at the lower end. It did not adequately transform the apartheid neighbourhood geographies. Breaking New Ground attempted to address these concerns by "utilising housing as an instrument for the development of sustainable human settlements, in

support of spatial restructuring". It emphasised: The need for better-located mixed-income and mixed-use housing projects by extending the scope of the project-linked subsidy programme. More diverse housing forms by structuring new programmes, including tackling informal settlement upgrading as a recognition of entry into the incremental housing-delivery process (National Planning Commission, 2012:268).

Accrediting municipalities with the housing delivery function to effect improved integrated settlement development and linking job opportunities and work creation with housing development processes. This approach was reinforced in 2009 with the creation of a Department of Human Settlements and the adoption in 2010/2011 of the President's delivery agreement on sustainable human settlements and improved quality of household life. Despite efforts to transform South Africa's urban areas, many housing projects do not create efficient urban spaces. There is a lack of enabling policies and implementing instruments to support the development of an appropriate housing mix in inner cities (National Planning Commission, 2012:269).

There are growing housing backlogs in areas of economic growth and in-migration, with a disproportionate number of new houses in areas of little or no growth. This indicates poor spatial targeting of housing projects. In general, the focus remains on housing rather than on developing quality environments for low-income communities, supported by the necessary physical, social, and environmental services. Despite improvements, the existing housing subsidy system continues to fund top structures (houses) rather than producing quality public spaces and infrastructure in the area. Breaking New Ground emphasises affordable inner-city housing. However, municipalities continue to focus on providing individual ownership units where it is easy to meet numerical targets (National Planning Commission, 2012:269).

The National Upgrading Support Programme, which aims to upgrade informal settlements, has made slow progress due to rigid local regulations, ambivalent attitudes towards informal settlements in parts of government, and a lack of capacity to upgrade such settlements (National Planning Commission, 2012:269). The housing issue is complex and needs to be addressed through a cumulative process of reform. There is tension between the need to address housing backlogs quickly and affordably, and the need to provide housing to create well-functioning, high-quality human settlements that will offer greater opportunities for income generation and

human development. The Commission is of the view that a long-term perspective on spatial transformation must be always kept in mind while addressing short-term needs (National Planning Commission, 2012:269).

There is a need to find the correct balance between protecting property rights of vulnerable individuals, protecting state investment, allowing integration of state-provided housing into the property market to stimulate the secondary housing market, and ensuring locational flexibility for housing beneficiaries. To achieve this, there is a need to debate the appropriate role for government and other actors in realising the constitutional right to housing and developmental goals, such as improving income through job creation, providing livelihood support and creating environments that facilitate human development (National Planning Commission, 2012:269).

The Commission envisions a revised approach to human settlement, in which the state properly fulfils its obligation to providing high-quality public infrastructure and environments, while also supporting and facilitating low-income households in acquiring adequate shelter. How this will be realised requires detailed technical work, led by the Department of Human Settlements, but there is an urgency to the matter as the current trajectory of housing provision must be changed if the overall objectives of human settlement transformation are to be achieved. In part the solution may come from a more innovative application of the instruments available by provincial and local governments, but there is a need for new instruments that will incentivise and complement investment by households, such as housing vouchers that are not spatially tied as well as a need to reorient funding towards public infrastructure and public environments (National Planning Commission, 2012:269).

The housing challenge is closely related to the need to provide access to basic services. Despite the achievements in this area since 1994, access to adequate housing, reliable electricity, safe water supplies, accessible public transport and hygienic and dignified sanitation facilities remain a daily challenge for many South Africans, particularly in poor rural and peri-urban communities. These challenges will only be resolved if their underlying causes are addressed. Poorly managed municipalities, with limited human and financial resources. Failure of municipalities to develop bulk capacity to supply all the networks from which households get their services or to develop housing areas where adequate infrastructure is available.

Inadequacies in the maintenance of infrastructure and insufficient reliable data to develop capacity to supply services (National Planning Commission, 2012:269).

There are problems in the distribution of electricity, the quality of water supply, the integration of new public transport networks, and the reduction of waste-to-landfill, which require urgent attention. Municipal spatial planning is often inadequately linked to investment decisions around bulk infrastructure, and this points to the need to improve the capabilities for spatial governance as well as to revitalise the municipal integrated development planning processes and transform it into a practical instrument to guide municipal investment (National Planning Commission, 2012:269). The following discussion relates to the building of safer communities in South Africa.

5.7.4.3   Building safer communities in South Africa

The police should be selected and trained to be professional and impartial, responsive to community needs, competent and inspire confidence. An integrated approach to safety and security will require coordinated activity across a variety of departments, the private sector and community bodies, the latter to include revitalised community-safety centres. All vulnerable groups including women, children and rural communities should enjoy equal protection and their fear of crime should be eradicated through effective, coordinated responses of the police, business, community, and civil society (National Planning Commission, 2012:386).

5.7.5   Vision 2030

According to the Department of Human Settlements (2021:21) the NDP Vision 2030 focuses on the critical capabilities needed to transform the spatial economy and society. The plan highlights the need for a close link and integration between capabilities, opportunities, and employment on social and living conditions. The goal of vision 2030, is amongst others for people living in South Africa to feel safe at home, at school and at work, and they enjoy a community life free of fear. The police service to be well-resourced and professional, staffed by highly skilled officers who value their work, serve the community, safeguard lives and property without discrimination, protect the peaceful against violence, and respect the rights to equality and justice.

This vision requires a well-functioning criminal justice system, in which the police, the judiciary and correctional services work together to ensure that suspects are arrested, prosecuted, convicted if guilty, and securely incarcerated and rehabilitated (National Planning Commission, 2012:386). The National Planning Commission (2012:386) further prioritise five priorities to achieve a crime-free South Africa as follows:

- Strengthen the criminal justice system;
- Make the police service professional;
- Demilitarise the police;
- Increasing rehabilitation of prisoners and reducing recidivism; and
- Build safety using an integrated approach.

A safe South Africa needs a strong criminal justice system. This requires cooperation among all departments in the Justice, Crime Prevention and Security (JCPS) cluster (National Planning Commission, 2012:387). A professional police service is essential for a strong criminal justice system. Recruitment should attract competent, skilled professionals through a two-track system. The decision to demilitarise the police force, moving away from its history of brutality, was a goal of transformation after 1994. The remilitarisation of the police in recent years has not garnered greater community respect for police officers, nor has it secured higher conviction rates.

The Commission believes that the police should be demilitarised and that the culture of the police should be reviewed to instil the best possible discipline and ethos associated with a professional police service. The police require capacity and skills to become more competent, professional, and efficient and the community would then acknowledge the police as a resource that protects them and responds to people of South Africa's needs (National Planning Commission, 2012:287). The following discussion relates to the strengthening of the criminal justice system in South Africa.

5.7.5.1   Strengthen the Criminal Justice System: Seven-point plan

The 2007 Review of the South African Criminal Justice System recommended a seven-point plan that was adopted by Cabinet. The plan set out a modernised, efficient, and transformed system. It included a new coordinating and management structure at every level, from national to local, greater cooperation among the judiciary and the magistracy, the police, prosecutors, correctional services and the Legal Aid

Board and initiatives such as empowering community police forums. The Office for Criminal Justice System Reform began implementing the plan (National Development Plan, 2012:388). The National Planning Commission (2012:388) furthermore set out a seven-point plan which contains seven transformative changes to the criminal justice system to achieve the stated outcomes.

These seven (7) transformations scopes to strengthen the criminal justice system are listed as follows:

- The adopting of a single vision and mission, leading to the JCPS creating a single set of objectives, priorities, and performance-measurement targets for the criminal justice system.
- Establish, through legislation or by protocol, a new and realigned single coordinating and management structure for the system, flowing seamlessly from Cabinet to each court.
- Make substantial changes to the present court process in criminal matters through practical, short, and medium-term proposals to improve the performance of the courts, especially the regional courts.
- Put into operation priorities identified for the component parts of the system, which are part of, or affect, the new court process, especially as it pertains to improving capacity.
- Establish an integrated and seamless information and technology database or system, or both, for the national criminal justice system, containing all information relevant to it.
- Modernise, in an integrated and holistic way, all aspects of systems and equipment. This would include fast-tracking the implementation of current projects and modernisation initiatives.
- Involve the public in the fight against crime by introducing changes to community policing forums thereby expanding its role to deal with all matters in the system, such as policing outcomes, support to correctional supervision of out-of-court sentences and parole boards.

The National Planning Commission (2012:389) recommends the following regarding the seven transformative changes to the criminal justice system:

- That all departments in the JCPS cluster align their strategic plans with the seven-point plan;

- The project manager appointed to the Office for Criminal Justice System Reform coordinates the plan's activities and programmes to ensure that the JCPS departments implement the seven-point plan in synchronise;

- Dedicated budgets for each participating department be established and outcomes reported on in relation to the plan;

- Continuous monitoring by the JCPS cluster and regular reporting on the plan's implementation to Cabinet is institutionalised; and

- The overall implementation of the plan be evaluated annually and assessed against its overarching objectives.

The seven-point plan should be viewed as a package that must be implemented holistically must interrogate, evaluate, and monitor by senior individuals in the respective departments at the level of implementation to ensure adherence. The overall implementation of the plan be evaluated annually and assessed against its overarching objectives (National Planning Commission, 2012:389). The following discussion focuses on the White Paper on Policing of 2016.

5.7.6   White Paper on policing (2016)

The vision of the White Paper is aligned to the National Development Plan and rights and values enshrined in the Constitution of the Republic of South Africa (Act 108 of 1996) (Civilian Secretariat for Police Service, 2016:6). The Civilian Secretariat for Police Service (2016:6) further state that by 2030, South Africa will be a society in which all people:

- Live in safe environments;
- Play a role in creating and maintaining the safe environment;
- Feel and are safe from crime and violence and conditions that contribute to it; and
- Have equal access and recourse to high quality services when affected by crime and violence.

The purpose of developing a new policy on safety, crime and violence prevention is to promote an integrated and holistic approach to safety and security, and to provide substance and direction to achieving the NDP's objectives of 'Building Safer

Communities' (Civilian Secretariat for Police Service, 2016:6). The White Paper will provide direction to government departments in the development and alignment of their respective policies, strategies, and operational plans to achieving safer communities. In addition, the White Paper will provide governance and oversight tools against which departments can be measured and held accountable (Civilian Secretariat for Police Service, 2016:7).

The objectives of the White Paper on Safety and Security are as follows:

- Provide an overarching policy for safety, crime and violence prevention that will be articulated in a clear legislative and administrative framework to facilitate synergy and alignment of policies on safety and security; and
- Facilitate the creation of a sustainable, well-resourced implementation and oversight mechanism, which will co-ordinate, monitor, evaluate and report on implementation of crime prevention priorities across all sectors (Civilian Secretariat for Police Service, 2016:7).

The focus of this White Paper is crime and violence prevention, which a necessary precondition for increasing people's feelings of safety and building safer communities. The White Paper recognises the importance of initiatives that aim to reduce poverty, inequality, and unemployment, as well as those that aim to improve the efficiency of relevant government departments. These interventions are integral to addressing risk factors identified in this White Paper (Civilian Secretariat for Police Service, 2016:8).

The White Paper seeks to realise the vision adopted in the NDP by Cabinet in 2012 which provides a blueprint for South Africa to eliminate poverty and reduce inequality by 2030. The NDP articulates a vision for a safe and secure South Africa and identifies building safer communities as central in achieving an integrated and developmental approach to safety and security, which involves all government departments and levels of government. These departments will, in executing their respective legal mandates, collectively and individually contribute to a safe and secure environment for all South Africans. The White Paper reaffirms that building safer communities is a collective responsibility of both the state and its citizens and is located within the broader developmental agenda of government (Civilian Secretariat for Police Service, 2016:9).

The approach advocated in the White Paper is presented on addressing the risk factors, intervening in the individual, familial, community and structural domains to build resilience, putting in place protective measures and supported by broader structural and environmental change, to promote safer communities. This approach requires effective and integrated planning and implementation by government informed by a sound knowledge base active community participation (Civilian Secretariat for Police Service, 2016:9). Certain approaches towards the safety to crime and violence in South Africa, namely, developmental approach, an intersectoral co-operation and collaboration towards effective integrated planning and service delivery and a knowledge-based approach (Civilian Secretariat for Police Service, 2016:9). The following discussion relate to the approaches towards the safety of crime and violence in South Africa.

5.7.6.1 Developmental approach

The White Paper advocates a developmental approach to safety to crime and violence prevention as articulated in the socio-ecological model. The socio-ecological model recognises that violence results from a combination of multiple influences that interact with each other in different ways. Individuals are in relation to their family, community, and the broader environment. Accordingly, this model considers the multiplicity of factors that put people at risk and that need to be addressed, to protect individuals from experiencing or perpetrating violence, which are otherwise referred to as protective factors. Prevention strategies must therefore address risk and protection factors at different stages of a person's life and development, to increase safety, as each level of human development is associated with different, and often overlapping, set of risk factors (Civilian Secretariat for Police Service, 2016:9).

5.7.6.2 Intersectoral co-operation and collaboration towards effective integrated planning and service delivery

The approach advocated by the White Paper recognises the importance of inter-sectoral consultation, co-operation and collaboration, effective and integrated service delivery, and community engagement and accountability at a local, provincial, and national level - as an imperative for building safer communities. In addition to the criminal justice system, the roles of the health, social development and education system are important in addressing risk factors that contribute to crime and violence.

Short-term measures, such as those undertaken by the SAPS and the broader criminal justice system, need to be increased with long-term prevention approaches that produce positive social change, in order to decrease levels of crime and violence (Civilian Secretariat for Police Service, 2016:9).

5.7.6.3   Knowledge-based approach

The White Paper advocates a knowledge-based approach in which interventions and programmes employed must be based on demonstrated and proven results. The availability of data is a critical element of planning and evaluating strategies and interventions. The collection of reliable data to inform evidence-based interventions is a crucial component of the crime and violence prevention approach advocated in this White Paper. (Civilian Secretariat for Police Service, 2016:13).

Active, public and community participation is recognised in the NDP, with active citizenry and co-ordinated partnerships, as a key component to a sustainable strategy for citizen safety. The White Paper recognises the importance of state parties working with non-state bodies to establish safety needs and develop strategies to address them and proposes the development of sustainable forums for coordinated and collaborative community participation, public and community participation in the development, planning and implementation of interventions, and public and private partnerships to support safety, crime and violence prevention (Civilian Secretariat for Police Service, 2016:17).

Community Safety Forums', (CSFs), as envisaged in the Community Safety Forum Policy, core mandate is to facilitate community participation in safety, crime, and violence interventions. CPF core objectives are to facilitate community participation including issues such as mutual responsibilities in respect of crime fighting programmes, ensuring police accountability to the community, joint identification, and co-ownership of policing programmes and identifying policing projects with the police. Co-operation and partnerships with private sector institutions are another important feature of public participation and active citizenry.

Businesses have a dual responsibility, firstly to ensuring effective crime and violence prevention practices within the work environment and uphold legal and ethical business practices, and secondly, to support crime prevention efforts in the broader

community (Civilian Secretariat for Police Service, 2016:17). According to the Civilian Secretariat for Police Service (2016:18), crime and violence prevention are deemed central, and this perspective is based on six (6) essential themes: an effective criminal justice system, early intervention for crime and violence prevention and safety promotion, victim support, efficient and integrated service delivery for safety, security, and crime prevention, safety through environmental design, and active public and community participation.

In South Africa, 12.9% of the population resides in informal dwellings, with the North West having the highest proportion at 21% of the province's population, followed by Gauteng at 19.2%, and the Western Cape at 14.8%. Additionally, 4.9% of households in the country lack access to toilets and resort to using bucket toilets, with the Northern Cape having the highest proportion at 9.1% of the province's households, followed by the Eastern Cape at 8.5%, and the Free State at 7.9% (Civilian Secretariat for Police Service, 2016:22).

Historically, South Africa has experienced high levels of structural violence under colonial and apartheid rule. Structural violence has continued in post-Apartheid due to persistent inequality in which structural inequalities remain embedded. The relationship between poverty, inequality and crime and its impact on safety outcomes is acknowledged in the NDP, noting that safety and security are 'directly related to socioeconomic development and equality', and requires an environment 'conducive to employment creation, improved educational and health outcomes, and strengthened social cohesion'. People living in communities characterised by a lack of services, with little or poor access to water and sanitation, childcare and health facilities, educational and employment opportunities, or who are marginalised or excluded, are at the most vulnerable to falling victim to crime violence and most at risk in engaging in crime (Civilian Secretariat for Police Service, 2016:23 & 24).

According to the Civilian Secretariat for Police Service (2016:30) the NDP identifies the following five key priorities to achieving a crime-free South Africa namely, strengthening the criminal justice system, professionalising the police service, demilitarising the police service, increasing the rehabilitation of prisoners, and reducing recidivism and building safety using an integrated approach. In addition to creating an effective, responsive, and professional criminal justice system, the NDP

motivates for an integrated approach to building safer communities that recognises the root causes of crime and responds to its social and economic factors. In this regard, the NDP places significant emphasis on the role of local government in understanding the safety needs of individual communities and integrating safety and security priorities into their development plans (Civilian Secretariat for Police Service, 2016:30).

The White Paper on Policing is connected to the National Development Plan and to the Constitution of the Republic of South Africa (Act 108 of 1996). The White Paper on Policing recommend procedure to government departments regarding the development and alignment of their respective policies and strategies in achieving safer communities. The White Paper furthermore provide governance and oversight tools for departments to measure and account on their performance.

There is a relation between poverty and inequality in informal settlements areas and the impact of crime on safety in South Africa. The safety and security in formal settlement areas are directly related to socioeconomic development and the physical infrastructural-and environmental conditions in informal settlements. People living in in informal settlements are identified by a lack of services, with little or poor access to water and sanitation and deprived of basic services. Most government plans and initiatives intended to address identified priorities depend on community partnerships. These plans and initiatives by government to improve the livelihoods of people in informal settlements must be supported and consulted with communities to be successful in creating a crime-free South Africa. However, support from informal settlement communities will be difficult to implemented, without addressing the already absence or a lack of basic services that these communities are experiencing daily. This situation will create scepticism and unwillingness from informal settlement residents to co-operate and be involve in government plans and initiatives.

5.8   SUMMARY

The objective of this chapter was to determine the physical conditions that complicate and influence the non-compliance and non-adherence of the SAPS policy requirements by detectives when processing serious crime scenes in informal settlements as described in Section 1.5 of Chapter1. The researcher in addition,

intended to know and have an understanding on how these physical conditions impact on the processing of serious crime scenes in informal settlements.

In this chapter, the researcher embarked on a comprehensive investigation of informal settlements worldwide, focusing on their distinctive attributes and the challenges they pose, particularly concerning infrastructural and environmental factors impacting the handling of serious crime scenes within these settlements. The study also delved into the role of the United Nations Development Programme in addressing global developmental issues related to informal settlements, placing it in the context of the research's scope. Furthermore, the chapter explored the presence of informal settlements in South Africa and examined the relevant legal framework and housing policies applicable in the country, all within the purview of this study.

The primary objective of this chapter was to provide an extensive and detailed description, exploration, examination, and discussion of the physical conditions that contribute to the complexities surrounding detectives' compliance with and adherence to SAPS policy requirements when dealing with serious crime scenes in informal settlements. Additionally, the researcher analysed the worldwide prevalence, characteristics, and challenges associated with physical conditions in informal settlements. The chapter also included an in-depth assessment of the United Nations Development Programme's involvement in addressing developmental issues linked to informal settlements on a global scale. Moreover, the researcher engaged in a discussion about the existence of informal settlements in South Africa, considering the pertinent legal framework and housing policies specific to the country, all of which were presented within the research's overarching context.

The research reveals that housing and its associated challenges mainly in informal settlements have become a serious global problem and different countries' planners and policymakers are struggling to solve the challenges concerning this matter. This research also reveals that there is agreement amongst international- and national authors that urbanisation and housing is a global challenge for governments globally. The literature reveals that there is some agreement among international- national authors regarding the existence, characteristics, and challenges on the physical conditions in informal settlements. From the international- and national literature it is

apparent that the physical condition in informal settlements is disheartening and depressing for informal settlement inhabitants.

From a South African perspective, the research reveals that South Africa is challenged with urbanisation and the provision of suitable housing for all citizens. Poor urban populations in South Africa continue to live in conditions of disheartening poverty and this is normally connected with limited access to formal employment, insecure forms of housing tenure and shelter and this encourage and influence the formation of informal settlements. The physical conditions in informal settlements contribute to the negative effect of serious crime cases, as crime scenes cannot be effectively processed due to these physical conditions. The selected serious crime scene in this study, namely, robbery of a motor vehicle, residential robbery and business robbery is complex and challenging crime scenes, which must be systematically processed with carefulness and accuracy and without any delay.

This approach will ensure that all evidence found on serious crime scenes are at all times identified, protected, preserved, and collected in its original form on crime scenes. The physical conditions in informal settlements, however, do not allow detectives to process crime scenes effectively and practical as prescribed by the current SAPS policy on crime scene management, National Instruction 1 of 2015. The SAPS policy on crime scene management, National Instruction 1 of 2015, which includes crime scene processing, only provide guidelines for crime scenes in well-developed suburban areas with sufficient infrastructure- and environmental physical conditions and do not provide or adapt for insufficient physical conditions in underdeveloped informal settlement areas.

CHAPTER 6: PRESENTATION AND INTERPRETATION OF EMPIRICAL EVIDENCE FROM INDIVIDUAL INTERVIEWS

6.1   INTRODUCTION

In this chapter, the researcher carefully outlines and discusses the interpretation of the findings of the research study. As such, the chapter objectively evaluates the importance and value of the findings for a more adequate understanding of the processing of serious crime scenes in informal settlements in South Africa. In-depth interviews were conducted, as discussed in Section 2.6.2 of this study. The rationale was to enhance the complex processes and challenges associated with the processing of serious crime scenes in informal settlements. It is against this backdrop that the current chapter focuses on achieving the following research objectives as articulated in Section 1.6 of Chapter 1:

- To determine and assess the present procedure followed by detectives during the processing of serious crime scenes in suburban areas and in informal settlements (to establish the scientific reasons for a difference in the processing of serious crime scenes by detectives in suburban areas and informal settlements notwithstanding one policy on crime scene processing currently in use by the SAPS).
- To determine new knowledge on the aspects that negatively impact and obstructing the processing of serious crime scenes in informal settlements.
- To develop practical guidelines, procedures, and recommendations for the SAPS on crime scene processing of serious crime scenes in informal settlements.

A constructive discussion on the emerging themes was conducted to identify familiar patterns and emerging trends that can be used or isolated to accurately indicate the valuable insight of the goal and objectives of this study, as mentioned in Sections 1.4 and 1.5 respectively. In order to realise these goals, in-depth interviews were conducted with the various participants from the Detective Service at selected police stations, selected LCRC members from selected LCRC Units in Gauteng Province and selected international participants from two selected countries.

The current chapter is structured into two main aspects, namely, the interviewed participants' biographical or demographic information or profiles, as well as the thematically categorised responses or statements based on the questions posed to them by the researcher. This thematic categorisation emphasises the participants' views and understanding of the core phenomenon of crime scene processing and its associated variables in the context of the research topic.

6.2 OVERVIEW OF THE PARTICIPANTS' BIOGRAPHICAL INFORMATION

This section describes and explains the participants' demographic information in respect of their gender, age, working experience as a police official, working experience in the detective environment, training courses attended in relation to crime scene management; as well as crime scene investigation, and crime scene processing. Accordingly, the results of the biographical information are represented graphically in Figure 6.1 to 6.5. The gender of participants will be presented below.

6.2.1 Gender of participants

Figure 6.1 below depicts the gender distribution of the participants (Sample A, B, C and D).
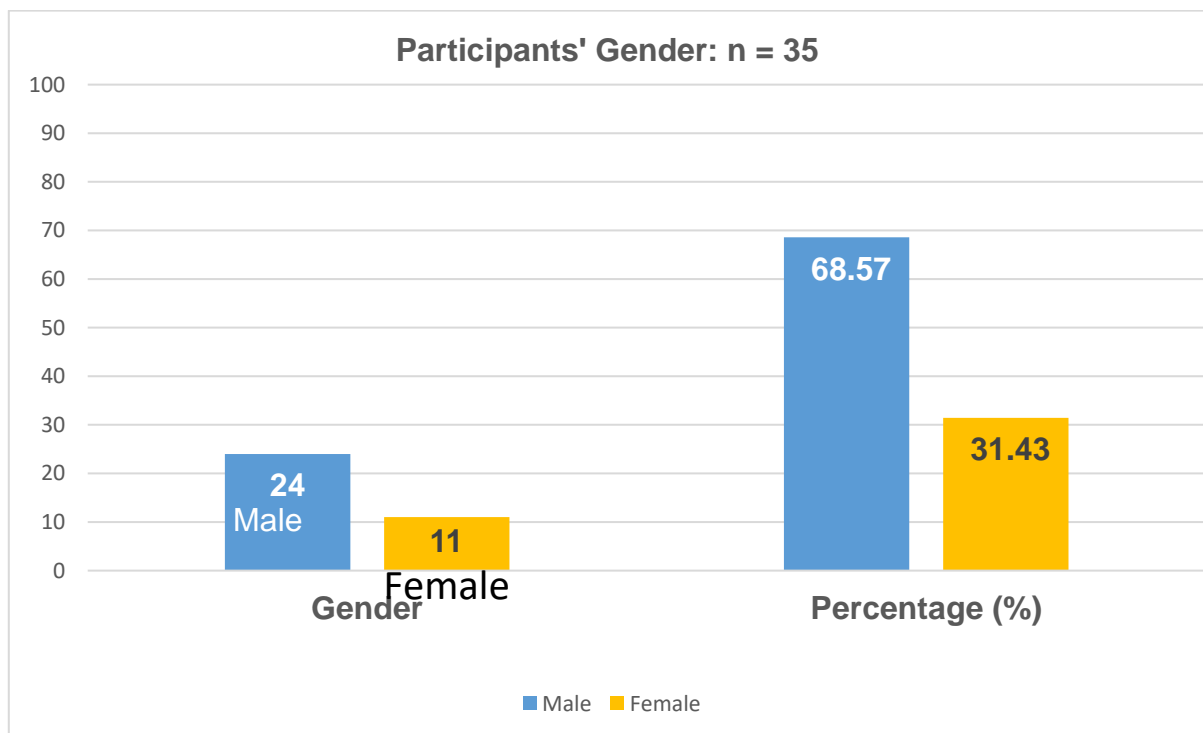
Figure 6.1:   **Gender distribution of the participants (Sample A, B, C and D).**

(Source: Feedback from the participants)

As depicted in Figure 6.1 above, most of the participants were males (n=24, 69%), and the minority (n=11, 31%) were females. In this regard, it is evident that there were more males than females. A discussion of the participants' age groups will follow below.

6.2.2   Participants' age

Figure 6.2 below reflects the respective age groups of the participants. The participants' age was categorised into eight groups, namely:26-29, 30-33, 34-37, 38-41, 42-45, 46-49, 50-53, and 54-57 years.
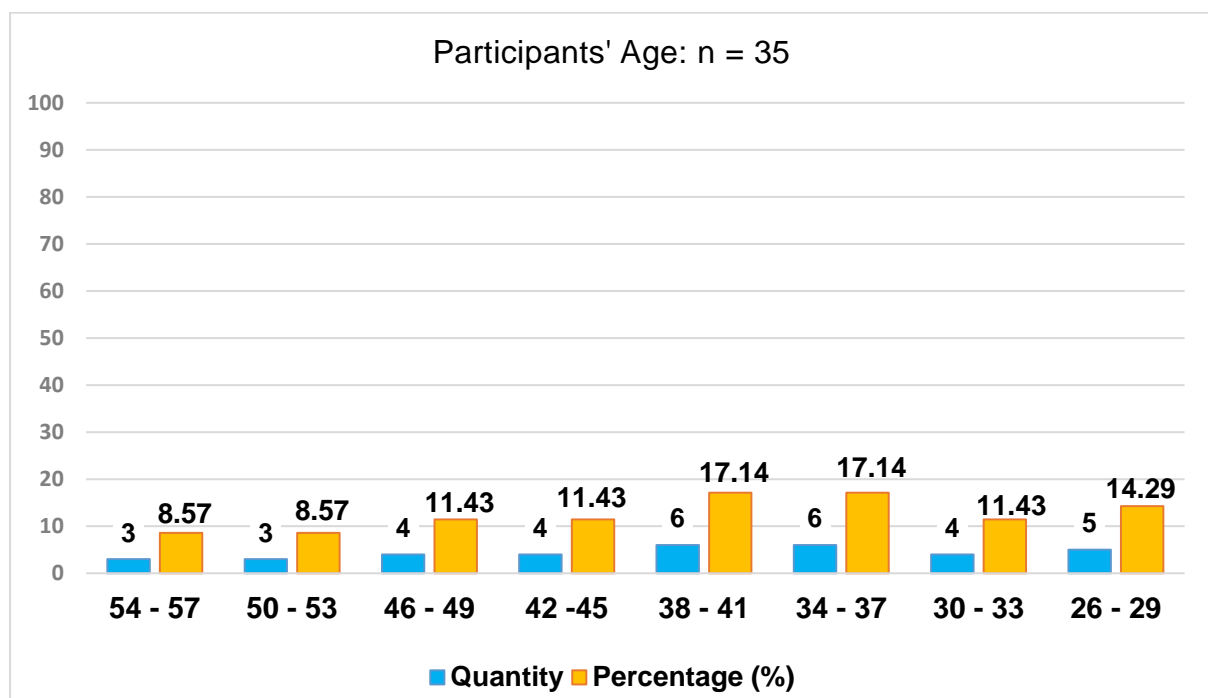
Figure 6.2:   Age of participants
(Source: Feedback from the participants)

Among the 35 participants, the majority of six (6) participants (n=6, 17%) were in the age range of 34-37 years, as well as another six (6) participants (n=6, 17%) whose ages ranged between 38-41 years of age. Five (5) participants' ages (n=5, 15%) ranged between the ages of 26-29 years. Four (4) participants (n=4, 11%) were between the ages 30-33 years, and another (n=4, 11%) whose ages ranged between 42-45 years. Another four participants (n=4, 11%) ranged in the ages between 46-49 years.

A minority of three (3) participants (n=3, 9%) were in the age 50-53 years' age group and 54-57 years age group respectively. In this regard, diverse age distributions highlight the presence of different age groups dominated by young adults in the police service. The participants' working experiences is highlighted in the next section.

6.2.3   Working experience of participants

Figure 6.3 overleaf depicts the participants' work experience. The Samples A and B participants are SAPS employees, while the participants in Sample C and Sample D are in the employ of international police agencies and the SAPS abroad.
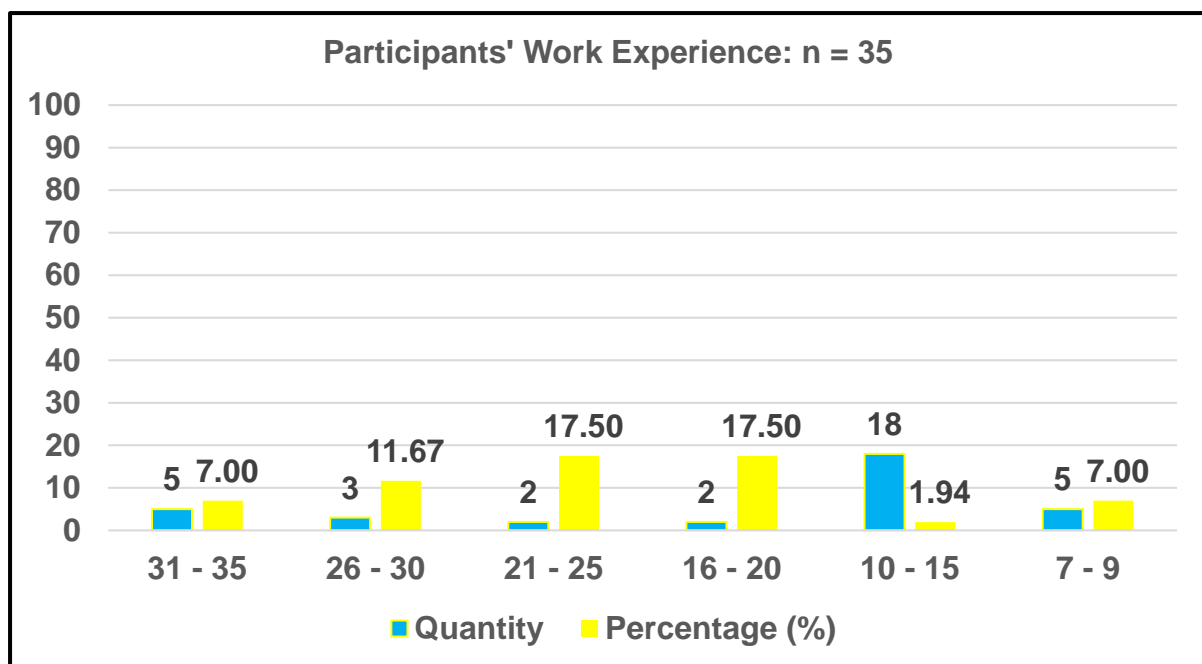
Figure 6.3:   Work experience of participants
(Source: Feedback from the participants)

In terms of Figure 6.3 above, the majority of the participants (n=18, 51%) have work experience of between 10 and 15 years, followed by five (5) participants (n=5, 14%) whose work experience ranged between 31 and 35 years, as well as another five (5) participants (n=5, 14%) whose work experience ranged between 7 and 9 years in the police service. The work experience of the minority of participants (n=3, 9%) ranged between 26 and 30 years. Two (2) participants (n=2, 6%) each have work experience of 21 to 25 years and 16 to 20 years, respectively.

Notably, the work experience of the majority of participants (n=18, 51%) ranged between 10 and 15 years. The latter state of affairs demonstrates the collective wealth of significant police experience. On the other hand, the work experience of the minority six (6) participants ranging from 16 to 25 years is considered substantial and sufficient in the context of police work. In the following section, the researcher outlines the participants' detective experience.

6.2.4 Detective experience of the participants

The duration of service within the Detective Service environment of the SAPS was assessed to determine the period and detective experience gained by the participants in Sample A. Accordingly, Figure 6.4 is an illustration of the Sample participants' detective experience.
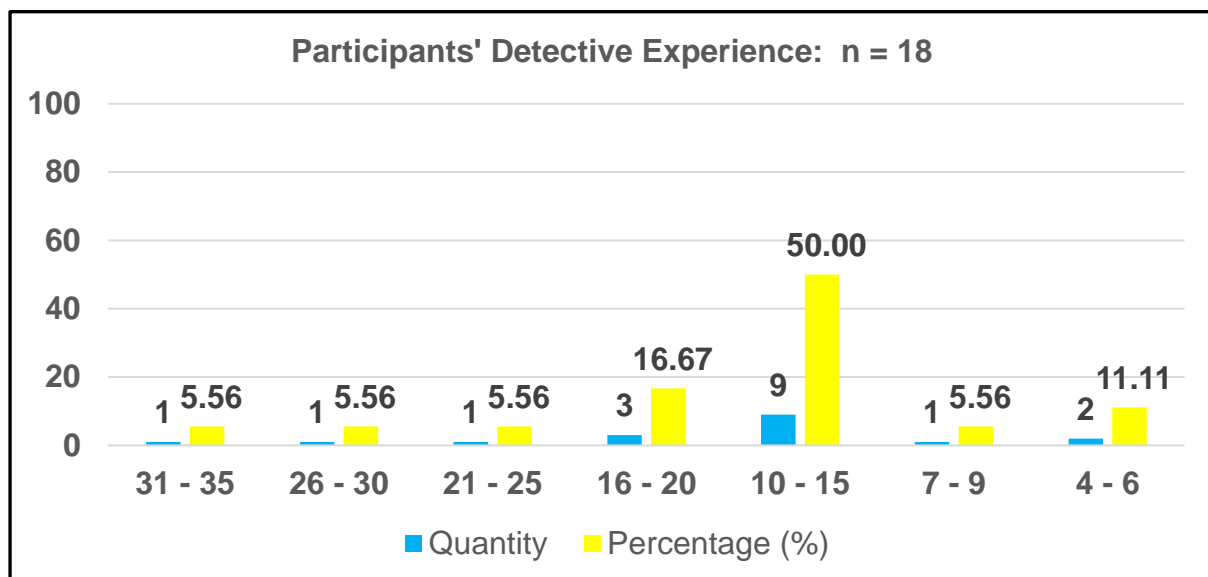
Figure 6.4: Participants' detective experience

(Source: Feedback from the participants)

Extrapolated from Figure 6.4 above, is that the majority of the participants (n=9, 50%) possess a noteworthy range of experience within the detective environment, ranging from 10 to 15 years. Meanwhile, three participants' (n=3, 16%) work experience as a detective ranged from 16 to 20 years. Additionally, only two (2) participants (n=2, 10%) had acquired experience in the detective environment for a duration of 4 to 6 years,

while one (1) participant each (n=1, 6%) have experience ranging from 31 to 35 years, 26 to 30 years, 21 to 25 years, and 7 to 9 years, respectively.

Based on the above information, it is evident that there are more skilled and experienced detectives within the SAPS departments. The following discussion delves into the training and development aspects pertinent to the participants' involvement in detective work and LCRC.

6.2.5   Training and development of detective and LCRC participants

The focus on training and development was intended to determine whether the participants in Sample A and B are adequately trained to discharge responsibilities associated with the processing of serious crime scenes.
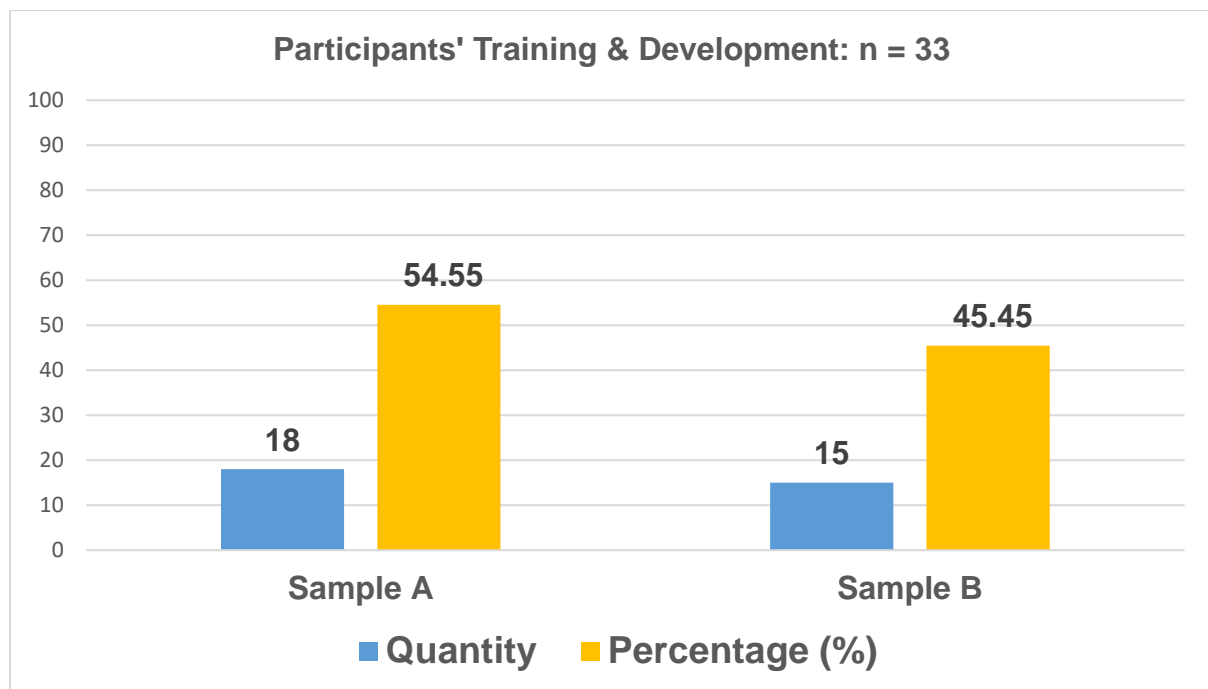
Figure 6.5:   Training and development of detective and LCRC participants
(Source: Feedback from the participants)

In terms of Figure 6.5 above, all participants (n=18, 55%) in Sample A attended the prescribed Basic Detective Orientation course, the standard Detective course, and the requisite crime scene-related courses, including management of crime scenes, crime scene investigation, and crime scene processing. In contrast, 15 participants (n=15, 45%) in Sample B adhered to the prescribed basic requirement of the SAPS, namely, the Advanced Crime Scene Management and Processing course. Successful

completion of this course serves as a prerequisite for all SAPS members assigned to the LCRC unit within the SAPS.

The criteria for evaluating the pertinent training and development for functioning in the detective environment (Sample A) and operating within the LCRC setting (Sample B) are established by the SAPS through prescribed requirements (SAPS, 2019:2-4). Based on the provided data, participants in both Samples A and B appear to be sufficiently trained and developed to proficiently handle serious crime scenes.

The question posed to the participants aimed at ascertaining whether participants in Samples A and B were suitably trained and developed for the processing of serious crime scenes. Therefore, participants in both Samples A and B appear to be adequately equipped to effectively manage and process serious crime scenes. In the next section, the researcher discusses the outcomes of individual interviews and the interpretation of the findings.

6.3   OUTCOMES OF INDIVIDUAL INTERVIEWS AND INTERPRETATION OF FINDINGS

A purposeful sampling technique was employed to conduct interviews with the selected 35 participants. This purposeful sampling technique was premised largely on the participants' expert knowledge, training, and work experience in the processing of serious crime scene environment. Permission was granted by the SAPS management and the police establishments from the selected two international countries (see Annexure B).

The discussion of the themes and sub-themes that emerged during interviews in this section is characterised by the verbatim participant responses as captured in the interview transcriptions. As such, the discussions encapsulate explanation of the themes, a summary of the range of responses, and how each specific theme was identified (Creswell, 2020; Walliman, 2017:58). This enabled the researcher to demonstrate the responses of the participants and introduce the reader to the actual research setting. The thematically categorised findings are incorporated into the discussions in order to complement the relevant selected literature sources.

Furthermore, the literature sources are used to form a comprehensive interpretation of the presented findings (Walliman, 2017:58). Following the presentation of each theme, a critical interpretation is presented, which concludes the discussion of each theme. The themes and sub-themes that emerged during the in-depth interviews with the participants are summarised in Table 6.1 below.

Table 6.1:   Themes and sub-themes that emerged from findings

THEME 1:
TRAINING AND INVOLVEMENT IN PROCESSING OF SERIOUS CRIME SCENES
1.1   Training and development in serious crime scene processing
1.2   The involvement of Detectives and LCRC members in the processing of serious crime scenes. Involvement in processing of serious crime scenes
THEME 2:
CURRENT METHOD ON PROCESSING SERIOUS CRIME SCENES IN SUBURBAN-AND INFORMAL SETTLEMENT AREAS
2.1   Current procedure followed when processing serious crime scenes
2.2   Policy instruction or organisational guideline, regulating current procedure
2.3   Utilisation of same procedure by SAPS members at station or LCRC Unit when processing serious crime scenes
2.4   The necessity for a policy about crime scene processing
THEME 3:
INFRASTRUCTURAL-AND ENVORNMENTAL PHYSICAL CONDITIONS THAT AFFECT SERIOUS CRIME SCENES IN SUBURBAN- AND INFORMAL SETTLEMENT AREAS
3.1   The differences between infrastructural- and environmental physical conditions   in suburban- and informal settlement areas
3.2   The influence of physical conditions on the effectiveness of the processing of serious crime scenes in suburban areas and in informal settlement areas
3.3   The barriers and challenges confronted with when processing serious crime scenes in informal settlement areas
3.4   The impact and influence of barriers and challenges on the effectiveness of crime scene processing in informal settlement areas
THEME 4:
PRACTICALITY AND ADEQUATENESS OF THE SAPS POLICY ON CRIME SCENE MANAGEMENT IN INFORMAL SETTLEMENTS
4.1   The impracticality and inadequacy of the SAPS policy on crime scene management in informal settlement areas
4.2   The inadequacy of SAPS policy to provide for specific conditions in informal settlement areas
THEME 5:

SUGGESTIONS FOR IMPROVEMENT ON THE EFFECTIVENESS IN PROCESSING SERIOUS CRIME SCENES IN INFORMAL SETTLEMENTS
5.1 The inadequacy of SAPS policy on crime scene management to provide for specific conditions in informal settlement areas
5.2 Specific elements and conditions to be considered for possible inclusion in SAPS policy on crime scene management
5.3 Improvement on the effectiveness of processing serious crime scenes in informal settlements
5.3 Best practices to ensure effective processing of serious crime scenes in informal settlements

The first theme to be discussed examines the participants' training and involvement in processing of serious crime scenes. This theme is discussed in conjunction with its associated sub-themes or categories.

6.4 THEME 1: TRAINING AND INVOLVEMENT IN THE PROCESSING OF SERIOUS CRIME SCENES

It was significant for the researcher to determine the participants' competency level in terms of training and development in the processing of serious crime scenes. As such, the objective of this theme was to assess whether the training and development provided to participants in Sample A and B effectively addressed the requirements for improving the processing of serious crime scenes. The researcher also intended to determine whether the training and development add value to the effectiveness in the processing of serious crime scenes. For the researcher, it was also important determine the specific roles responsibilities of the participants, and the exact nature of the participants' involvement in the processing of serious crimes entails. This training and development as well involvement in the processing of serious crimes information was important since these participants are expected to apply the SAPS policy in adherence to policy instructions. To delve into the specified theme and its related sub-themes, the following set of questions were presented to the participants:

- "Please list any training you have received in the processing of serious crime scenes".
- "What does your involvement in the processing of serious crime scenes entails?"

6.5 TRAINING AND DEVELOPMENT IN SERIOUS CRIME SCENE PROCESSING

When persons apply for enlistment in the SAPS, they are required to submit to basic training course in the SAPS (SAPS, 2009:n.p.; SAPS, 2020:n.p.). On completion of the basic training course the SAPS members are recognised as police officials. These SAPS members will be allowed based on their career pathing choice to remain in the Visible Policing environment or to pursue a career within the SAPS different Divisions and Sections. The participants in Samples A and B decided to pursue their careers within the Detective Service and Forensic Services environments some stage in their careers in the SAPS.

Detective Service and LCRC members have various duties and responsibilities during the investigation of crime. One of the responsibilities entails the processing of serious crime scenes. This study's focus is on the processing of serious crime scenes, and the assessment was based on whether the participants were sufficiently trained and developed in processing of serious crime scenes. The participants in Samples A and B, were asked to "Outline the training and development courses attended regarding the processing of serious crime scenes". This was an open-ended question, and participants were free to respond based on their own ideas. Participants were not provided with any options from which to select possible answers.

The question was asked to the participants in Sample A and B in order to determine whether they are adequately trained and developed in respect of the processing of serious crime scenes. The participants in Sample A responses are submitted below:

- Six participants indicated that they attended the prescribed and required detective related courses and in addition also attended a Sexual offence, Domestic Violence- and the First respondent's courses.
- Five participants indicated that they attended the prescribed and required detective related courses and in addition also attended a Fraud-and Information Case ICDMS courses.
- Three participants indicated that they attended the prescribed and required detective related courses and in addition also attended the CAS and the First respondent's courses.

- Two participants indicated that they attended the prescribed and required detective related courses and in addition also attended the Information Case Docket Management System (ICDMS) course.
- Two participants indicated that they only attended the prescribed and required detective related courses.

The participants in Sample B responses are submitted below:

- Four participants indicated that they attended the advance crime scene management and processing course and in addition also attended the Fingerprint comparison-, Photography-, and Evidence collection courses.
- Four participants indicated that they attended the advance crime scene management and processing course and in addition also attended the Criminalistic expert-, Forensic Biology-, Photography-, and Trace evidence courses.
- Three participants indicated that they attended the advance crime scene management and processing course and in addition also attended the DNA evidence recovery-, Trace evidence-, and Evidence collection courses.
- Two participants indicated that they attended the advance crime scene management and processing course and in addition also attended the Documenting and related investigation-, Photography-, and Evidence collection courses.
- Two participants indicated that they attended the advance crime scene management and processing course and in addition also attended the Evidence collection-, Criminalistic expert-, Fingerprint comparison-, DNA evidence recovery- and Forensic Biology

Based on the responses provided by the participants in both Samples A and B, they are of the opinion that they received sufficient crime scene investigation and crime scene processing related formal training and development, as well as on-the-job-training to function effectively in the processing of serious crime scenes in informal settlement areas. The training and development profiles of both Samples A and B are based on the set prescribed requirements by the SAPS to function effectively in the processing of serious crime scenes in informal settlement areas. The following sub-theme focuses on the involvement of Detectives and LCRC members in processing of serious crime scenes.

6.5.1 The involvement of detectives and LCRC members in the processing of serious crime scenes

The participants in Samples A and B, were asked the question: "What does your involvement in the processing of serious crime scenes entail?" This was an open-ended question, and the participants could provide their own answers to the question. No choices were provided from which they could choose. The participants provided more than one answer in their responses.

All the participants in Sample A indicated that they attend to serious crime scenes at the local police station, after such crime has been reported to the police. These participants indicated that they are performing Detective duties on a 24-hour basis at the DSC at the police station. The participants further indicated that, amongst others, they are responsible for conducting preliminary investigation at serious crime scenes, which includes the processing of these serious crime scenes. All the participants described their roles and responsibilities similar as prescribed in the SAPS policy on Crime Scene Management, National Instruction 1 of 2015 (SAPS, 2015:2).

The responses of the participants also indicate there are fundamental elements that adhere with the roles and responsibilities of first responders to crime scenes, as explained by authors such as Benson et al., (2010:22), Lochner and Zinn (2016:111), Gardner and Krouskup (2019:51) and Geldenhuys (2017:47). These scholars acknowledge that the roles and responsibilities of the first responder consists of the assessment, control and protection of the crime scene.

All the participants in Sample B mainly explained duties and responsibilities on serious crime scenes similar as prescribed by the SAPS policy on Crime Scene Management, National Instruction 1 of 2015 (SAPS, 2015:2). All these participants indicated that besides the actions required and prescribed by the SAPS policy, they are further required to be conversant with the guidelines contained in the Crime Scene Investigation Quality Management, Standing Operating Procedure (SOP) regarding Crime Scene Management issued on 1st April 2019, by the Division Forensic Services, Criminal Record Centre of the SAPS (SAPS, 2019:1). The purpose of this SOP is to provide guidelines specific to LCRC members to ensure that crime scenes are

thoroughly processed, accurately documented and that the integrity of items with potential evidential value is unquestionable.

Based on the feedback provided by all participants in Sample B, they are of the opinion that they are acquainted with the purpose of their involvement in the processing of serious crime scenes and understand exactly what is expected of them. All the participants indicated that they process serious crime scenes diligently on what they were trained to apply during the different training courses they attended, their experience, on the job training and observations on how senior experienced colleagues approach the processing of serious crime scenes. The next theme relates to the current procedure that is being applied by the participants during the processing of serious crime scenes in informal settlements.

6.6 THEME 2: CURRENT METHOD ON THE PROCESSING OF SERIOUS CRIME SCENES IN SUBURBAN-AND INFORMAL SETTLEMENT AREAS

This theme focused on establishing whether the participants are conversant with standard and suggested methods to process serious crime scenes, and know precisely what is required of them. The researcher considers it important to determine whether the participants were acquainted with the SAPS policy on crime scene management, in particular, the instructions regarding the processing of serious crime scenes. It was the researcher's intention to establish whether the training and development of crime scene investigation and crime scene processing related training courses added value to the effective processing of serious crime scenes.

For the researcher, it was also significant to determine whether the participants were mindful of the importance to approach the processing of crime scenes in an organised and systematic way. To address the specific theme and sub-themes, the following questions were posed to the participants:

> "Briefly explain the current procedure you followed when processing serious crime scene?"
> "On which policy, instruction or organisational guidelines is this current procedure based on?"
> "In your experience does your colleagues at the police station or LCRC Unit follow the same procedure when processing serious crime scenes?"
> "Do you think there is a necessity for a policy regarding serious crime scene processing in informal settlements?"

6.6.1 Current procedure followed when processing serious crime scenes

The participants in Samples A, B, C and D were asked the question: "Briefly explain the current procedure that you follow when processing serious crime scenes". This was an open-ended question, and participants were free to respond based on their own ideas. They were not provided with any options from which to select plausible answers.

- Seventeen participants in Sample A explanation's mentioned aspects including, condoning, securing, controlling, searching, preservation and the collection of evidence on serious crime scenes.
- Four-teen participants in Sample B explanation's mentioned aspects including, briefing from first responder, a walk thru the crime scene, identify exhibits, photograph the crime scene before, identify, preserve, and collect evidence on crime scene.
- One participant in Sample A mentioned observation, assessment, identification, preservation, collection of evidence and exhibits on serious crime scenes.
- One participant in Sample B mentioned the interviewing of the first responder to the crime scene, assess crime scene, take video of undisturbed crime scene, take photo of undisturbed crime scene, collect physical evidence on crime scene.
- Two participants in Samples C and D explained that the current procedure followed in their respective countries is based on an internal SOP guideline within the Policing agencies.

In the view of the researcher, the participants have a good understanding of the procedure to follow when processing serious crime scenes. All the participants in Sample A indicated that they attend to serious crime scenes, after such serious crime is reported to the SAPS. These participants indicated that they are responsible for conducting preliminary investigation at serious crime scenes, which includes the processing of serious crime scenes.

The participants in Sample A and B described their roles and responsibilities as prescribed in the SAPS policy on Crime Scene Management, National Instruction 1 of 2015 (SAPS, 2015:2). This policy was discussed in Chapter 4 of this study. The participants in Sample C and D described their roles and responsibilities similar as

prescribed in the SOP guidelines in the respective countries. The responses of the participants are supported by the views Houck et al. (2012:59), who explains that once the crime scene has been stabilised, it should be secured to prevent people from entering the area, by means of cordoning of the crime scene area, to limit of public access and protect evidence on the crime scene from contamination.

In addition to the actions prescribed by the SAPS policy on crime scene management, the participants in Sample B further mentioned that they were fully conversant with the guidelines contained in the Crime Scene Investigation Quality Management, SOP regarding Crime Scene Management, issued and implemented on 1st April 2019 by the Division Forensic Services, Criminal Record Centre of the SAPS. The purpose of this SOP is to provide additional guidelines to LCRC members to ensure that crime scenes are thoroughly processed, accurately documented and that the integrity of items with potential evidential value is unquestionable.

Based on the feedback provided by participants in Samples A and B, they are of the opinion that they are acquainted with the purpose of their involvement in the processing of serious crime scenes and understand exactly what is expected of them. All the participants indicated that they process serious crime scenes diligently according to their training during the relevant training courses attended. These participants further mentioned that in addition they use their experience, on the job training and observations on how experienced colleagues approach the processing of serious crime scenes. Furthermore, these participants expressed the view that the processing of serious crimes scenes in informal settlements differ substantially from processing serious crime scenes in suburban neighbourhoods due to the enormous difference in infrastructural- and environmental physical conditions between these areas.

South Africa's racial divisions have resulted in unequal urban settings, with the Group Areas Act (1950) being a key part of the erstwhile apartheid legislation. This led to the forced removal of African and non-white citizens from city centers, creating poor and side lined settlements (Jürgens et al., 2013:256). The goal was, in fact, to settle African people as far as possible from white residential areas, and dividing these settlements from the city centre by means of natural and physical barriers (Smit et al., 2016:199; Jürgens et al., 2013:257). The rapid urbanization has led to the spread of informal

settlements globally, with governments failing to ensure adequate planning for infrastructure and service delivery.

In addition, one of the participants from Sample A emphasised that:

> "The physical condition in suburban areas is totally opposite than physical conditions in informal settlements. Informal settlements have no access roads to and between housing structures, no proper constructed planned housing structures, no individual house addresses to locate crime scene addresses, alleyways and paths between housing structures". (Participant A4).

The responses of both participants confirm the importance of guidelines regarding working procedures in policing agencies globally. These responses further emphasise that guidelines influence the effectiveness performance. These international participants indicated that they are in favour of guidelines that regulates the processing of crime scenes. The following discussion explores the importance and relevance of the procedure on crime scene processing to be followed in the processing of serious crime scenes.

6.6.2 Policy instruction or organizational guideline regulating current procedure

The Sample A, B, C and D participants were asked the following open-ended question: "On which policy or guideline is the current procedure that you follow based, when processing a serious crime scene?" Similar to the previous questions posed to them, the question allowed participants to respond freely and according to their own thoughts. They were not provided with any options from which to select possible answers or responses. The participants' responses are indicated below:

- All eighteen participants, in Samples A indicated that the current procedure used are based on the SAPS policy, on crime scene management as well as several crime scene processing and crime scene investigation related training courses attended by them in enhancing their knowledge and skills in the processing of crime scenes.
- All fifteen participants in Sample B that the current procedure is based on the SAPS policy on crime scene management, guidelines in the Crime Scene Investigation Quality Management, SOP regarding Crime Scene Management,

213

issued and implemented on 1st April 2019, by the Division Forensic Services, Criminal Record Centre of the SAPS as well as crime scene management and crime scene processing training courses attended.

The two participants in Samples C and D mentioned that the current procedure which they followed is based on SOP internal guidelines, on crime scene processing within their respective countries. These participants also indicated that they attended courses related to crime scene processing and crime scene investigation nationally internationally in order to enhance their knowledge and skills in this regard.

The researcher asserts that the viewpoints conveyed by the participants closely parallel those documented in the literature (Hlophe et al., 2020:52; Gehl & Plecas, 2016:51; Lochner & Zinn, 2015:7). These authors are all in agreement with the provisions of the SAPS policy on crime scene management, National Instruction 1 of 2015, regarding the procedure to be followed after the SAPS received information, in respect of a crime and the subsequent dispatching of such information to a patrol officer in the vicinity of the crime scene location to attend immediately to such crime scene. The following discussion relate to the utilisation of procedures by SAPS personnel when processing serious crime scenes.

6.6.3 Utilization of same procedure by SAPS members when processing serious crime scenes

The participants in Sample A and B were asked the following open-ended question: "In your experience does your colleagues at the police station or LCRC Unit follow the same procedure when processing serious crime scenes?" Similar to the preceding questions directed at the participants, this question required participants to express themselves openly, based on their individual perspectives. No predefined choices were given to the participants for potential answers or responses.

Sample A responses are listed below:

- Fifteen participants indicated that their colleagues at the police stations, follows the same procedure, when processing serious crime scenes.
- One participant mentioned that some colleagues sometimes doing as they pleased.

- One participant suggested that colleagues do not always follows the same procedure.
- One participant stated that in his opinion he does not think that his colleagues follow the same procedure.

The participants of Sample B responses are listed below:

- Thirteen participants mentioned that their colleagues at LCRC Units, follows the same procedure, when processing serious crime scenes.
- One participant stated that colleagues do not always follows the same procedure.
- One participant intimated that, sometimes the volume of serious crime scenes to attend to is too much to handle by individual LCRC members for a certain period to follow procedure.

The majority of the participants in both Sample A and B indicated that their colleagues at the police station and LCRC Units are following the same procedure when processing serious crime scenes. Only five individual participants out of thirty-three participants responded slightly differently. The fact that most of these participants indicated that colleagues follow the same procedure shows that there is consistency in terms of complying and adhering to instructions described in the SAPS policy on crime scene management, National Instruction 1 of 2015 (SAPS, 2015:2). The following discussion focuses on the necessity for the existence of a policy on crime scene processing.

6.6.4 The necessity for a policy about crime scene processing

The Sample A, B, C and D participants were asked the following open-ended question: "Do you think there is a necessity for a policy regarding serious crime scene processing in informal settlements?" This question was asked in order to determine whether guidelines exist for the processing of serious crimes in informal settlements. The participants were free to respond based on their own ideas. Participants were not supplied with any choices from which to select likely responses. The participants highlighted the critical importance and advantages, why the need exists to have a policy on the processing of crime scenes.

The participants of Sample A have provided the following responses:

- Five participants mentioned that there is need for a procedure to guide and assist SAPS members when processing crime scenes,
- Four participants stated that there should be prescribed procedure guidelines to follow when processing crime scenes.
- Four participants indicated that a policy guide and advise SAPS members on how to process crime scenes correctly.
- Three participants indicate that guidelines assist some colleagues step by step on what do when processing crime scenes.
- Two participants indicate that policy guidelines enable investigators to secure and control crime scenes.

The Sample participants' responses are listed below:

- Five participants mention that to ensure police stations operate and conduct crime scene processing in the same way.
- Four participants state that it will assist detectives in solving crime and will improve the performance of detectives on crime scenes.
- Three participants suggest that to manage and control crime scenes effectively.
- Three participants mention that a policy will stipulate and regulate certain standards requirements for the processing of crime scenes.

The participants in Sample A and B indicated that they expressed the need for a procedure, policy, or guidelines to guide serious crime scene processing in informal settlements. The participants also explain that guidelines aim to maintain uniformity and improve SAPS performance in serious crime scene processing.

Meanwhile, the Sample C and Sample D (international) participants agreed that evidence from crime scenes requires specific standards for court presentation. They emphasised the importance of procedural guidelines for effective crime scene processing, stating that orderly application of methods and procedures is crucial for effective performance of responsibilities. Participants emphasised the importance of global guidelines for policing agencies, particularly those regulating crime scene processing, highlighting their influence on effectiveness and performance. Participants

in Sample C and D indicated that their countries' crime scene processing is governed by internal standard operating procedures (SOP) guidelines.

It was the participants' belief that a policy guideline is needed for handling crime scenes, aligning with the SAPS policy on crime scene management and internal SOP guidelines in two selected international countries. The principles of crime scene management are set out in the SAPS policy and support the views of Lochner and Zinn (2016:34), who emphasise the complexity of processing crime scenes. The views align with literature and align with SAPS policy and internal SOP guidelines. The responses of these participants are in relation with the intension of the SAPS policy, on crime scene management to regulate the management of crime scenes in the SAPS (SAPS, 2015:2).

Sample C and D, comprising international participants, provided the following responses, each in turn:

> "Yes, because the production of evidence collected during crime scene processing has specific standards requirements when presenting this evidence in a court of law. It therefore means that procedural guidelines, in which ever form will direct a prescribed way to conduct the processing of crime scenes." (Participant C1)

> "Yes. The orderly application of methods and procedures initiate an orderly way of approach. Prescribe guidelines for procedures are normally implemented in an organisation to get responsibilities performed effectively. Certain type of guiding standards is thus important for the processing of crime scenes". (Participant D1)

The responses of both participants confirm the importance of guidelines regarding working procedures in policing agencies globally. These responses further emphasise that guidelines influence the effectiveness performance. These international participants indicated that they are in favour of guidelines that regulates the processing of crime scenes.

Participants from Sample C and D indicated that in their respective countries, the processing of crime scenes is governed by internal SOP guidelines established and enforced by their policing agencies. Their responses regarding the need for a policy guideline for processing crime scenes mirror the explanations given by participants in Sample A and B in the preceding discussion. These participants' responses are

aligned with the SAPS policy on crime scene management and the internal SOP guidelines that oversee crime scene management in the SAPS and policing agencies of two selected international countries, respectively.

The principles of crime scene management and the different phases of handling crime scenes is set out in the SAPS policy National Instruction,1 of 2015, on crime scene management (SAPS, 2015:2) and are supported by the views of Lochner and Zinn (2015:7), who explain that the management of a crime scene is a complex activity that consists of numerous stages and actions. The need for a policy on crime scene processing are further emphasised by Lochner and Zinn (2015:7) and (Gardner & Krouskup, 2019:51), who explain that although these procedures or standard operating procedures (SOP) may differ in various police agencies in different countries, the aim and goals remain the same.

The researcher believes that the opinions expressed by all participants closely align with those documented in the literature, demonstrating correlation with the perspectives of both international and national authors. Additionally, the views appear consistent with the SAPS policy on crime scene management and the internal SOP guidelines of policing agencies in two selected international countries.

The following discussion relate to the infrastructural and environmental physical conditions that affect serious crime scenes in suburban and informal settlement areas.

6.7 THEME 3: INFRASTRUCTURAL AND ENVORINMENTAL PHYSICAL CONDITIONS THAT AFFECT SERIOUS CRIME SCENES IN SUBURBAN AND INFORMAL SETTLEMENT AREAS

This theme aimed at investigating the experiences of participants in Samples A, B, C, and D regarding the infrastructural and environmental conditions in both suburban and informal settlement areas. In this regard, it was also the researcher's intention to determine whether serious crime scenes are processed more efficiently in well-developed infrastructural and environmental settings compared to informal settlement areas. Understanding of the factors contributing to challenges in informal settlements and how these challenges impact the effectiveness of crime scene processing is crucial for the researcher. To address this theme and its sub-themes, the following questions were posed to the participants:

- "Please explain the differences between infrastructural- and environmental physical conditions in suburban- and informal settlement areas?"
- "Please explain whether serious crime scenes in suburban areas are more effectively processed than in informal settlement areas?"
- "Please explain the barriers and challenges confronted with when processing serious crime scenes in informal settlement areas?"
- "Please explain the impact and influence of challenges and barriers towards the effectiveness of crime scene processing in informal settlement areas?"

6.7.1 The difference between infrastructural and environmental physical conditions in suburban areas and informal settlement areas

The participants in Samples A, B, C and D were asked the question: "Please explain the difference between infrastructural-and environmental physical conditions in suburban- and informal settlement areas". This was an open-ended question, and participants were free to respond based on their own ideas. They were not provided with any options from which to select possible answers. The participants in Samples A, B, C and D submitted several responses, which are reflected thus:

The participants from Samples A, B, C, and D emphasised the importance of ideal infrastructural and environmental conditions for conducting effective and accurate crime scene processing. The participants began by addressing the physical conditions in suburban areas before discussing the physical conditions in informal settlement areas. The Sample A participants' responses in this regard, are as follows:

- Seven participants mentioned aspects such as, existence of well-planned infrastructure such as roads, planned built housing structures, planned layout which includes individual house numbers, availability of water- and sanitation supply infrastructure, availability of energy- and electrical infrastructure, easy and prompt accessibility in responding to serious crime scenes without delays, safe and secured conditions that pose no risks and threats SAPS personnel.
- Six participants indicated aspects such as maintenance of healthy and hygienic environmental conditions, measures implemented regarding the safety and security risk to SAPS personnel, no risk of congestion of bystanders and onlookers as a result of overpopulation and high-density, availability of CCTV footage for information, communities are organised in neighbourhood watches and private

security companies, evidence on serious crime scenes are easily identifiable as the layouts are neat and clean, evidence on serious crime scenes are easily observed, identified, preserved, and collected.

- Three participants indicated aspects such as suitable waste disposal practices, physical conditions of serious crime scenes are suitable and favourable for the effective processing of crime scenes, no shortages regarding infrastructural-and environmental conditions exist, surfaces of objects and evidence where traceable clues are suitable for examination and lifting of fingerprints in these areas.

- Two participants indicated aspects such as controllable and cooperative community members and no congestion of people, challenges regarding crowd control are minimal, the risk of contamination of evidence is minimise on serious crime scenes, environmental conditions such as pollution, filthiness, unhygienic conditions and health risks are minimised and limited to SAPS personnel and inhabitants.

Evidently, the Sample A participants emphasised the importance of the infrastructure and environmental conditions required to effectively ensure correct crime scene processing. The Sample participants' responses were captured thus:

- Six participants indicated aspects such as, sufficient road infrastructure which enables easy accessibility to serious crime scenes, pre-planned built housing structures with visible house numbers, availability electrical infrastructure, no risks and threats to the safety and security of SAPS personnel.

- Four participants indicated aspects such as appropriate safety and security measures to SAPS personnel, presence of roads, evidence on serious crime scenes is easily observed, identified, preserved, and collected, surfaces of objects and evidence where traceable clues are suitable for the lifting of fingerprints and appropriate waste disposal management.

- Three participants indicated aspects such as suitability and favourable physical conditions for the effective processing of serious crime scenes, easy accessibility, and prompt response to serious crime scenes without delays, suitable solid waste disposal management and surfaces of objects and evidence are suitable for the lifting of fingerprints.

- Two participants indicated aspects such as controllable and cooperative community members, minimise difficulties regarding crowd control, minimise the risk of contamination of evidence on serious crime scenes, environmental conditions such as pollution, filthiness, unhygienic conditions causing health risks are limited to SAPS personnel.

The majority the participants in Sample B indicated that all the infrastructure and environmental conditions in suburban areas are helpful in the effectiveness in the processing of serious crime scenes. The participants highlighted the significance and necessary required standard infrastructural and environmental conditions to accomplish effective and correct crime scene processing.

Sample C and D, consisting of international participants, provided the following responses, each in turn:

> "Environmental and structural conditions in well-developed influence the effectiveness of serious crime scene processing in suburban areas. It is easier and faster to respond to serious crime scenes in developed areas than in underdeveloped areas. Features such as roads, electricity, structural designs, and terrains may influence the ease with which serious crime scenes is attended and processed". (Participant C1)

> "Sufficient road infrastructure assists in faster access and response to crime scenes. Vehicles can easily access and be park at the crime scene location. There is no need to carry seized evidence for long distances to parked vehicles, far away from crime scene locations and risk contamination of evidence. Safety and security risks as well as health risks are minimised. Physical conditions and environments affect the improvement of crime scene processing". (Participant D1)

Participants from Sample C and D, constituting the international cohort, provided responses in tandem with the previously discussed answers from Samples A and B. The direct responses from these international participants, included above, further clarify the considerations related to infrastructural and environmental conditions crucial for successful and accurate crime scene processing.

Reflected below are the responses of participants from Sample A regarding the physical conditions in informal settlement areas:

- Nine participants mentioned aspects such as, absence or unsuitable roads create accessibility difficulties, absence of streets between unplanned illegal housing

structures, housing structures are linked by narrow alleyways, no planned individual housing structured numbers which causes difficulties in locating serious crime scene structure addresses, unplanned and illegal, inadequately constructed housing structures ,inappropriate or no water- and sanitation supply infrastructure, inappropriate or no energy and electrical infrastructure

- Four participants indicated aspects such as dangerous and hazardous physical conditions are created by exposed, illegal electrical connections, risk to the safety and lives of SAPS personnel and residents, inappropriate or no environmental management measures to maintain healthy and hygienic environmental conditions.

- Three participants indicated aspects such as inappropriate or no measures in place to ensure the safety and security risk for SAPS personnel, risk or threat exists to the lives or property of SAPS personnel for being mugged, robbed, injured whist on the way to locate serious crime scenes on foot.

- Two participants indicated aspects such as overpopulation and high densities of people which increases the risk of overcrowding of people such as by bystanders and onlookers, increase the risk of contamination on serious crime scenes, absence of Close Circuit Television footage result in weakening the obtaining and collection of possible evidence and information.

The participants in Samples B responded as follows:

- Seven participants indicated aspects such as community members are not cooperative in providing information, absence of community groupings such as neighbour watch in an organised manner, identification of evidence on serious crime scenes are difficult to identify as the layout of these areas are not conducive for proper processing of serious crime scenes, sometimes a part of or the whole serious crime scene is in these physical conditions, physical conditions are unhealthy and unhygienic surroundings where refuse are dumped, inappropriate waste disposal, inhabitants disposes of solid waste in their immediate living surroundings.

- Three participants indicated aspects such as evidence on serious crime scenes are not easily observed, identified, preserved, and collected, surfaces of objects and evidence found on the crime scenes are rough unsuitable for the lifting of fingerprints, uncontrollable community that create crowd control difficulties as they

interfere, tamper of remove evidence on crime scenes, which increase the risk of contamination.

- Three participants indicated aspects such as hostile community members towards SAPS personnel, SAPS members are frightened because of intimidation, environmental characteristics in informal settlement areas such as pollution, filthiness, unhygienic conditions cause a health risk to SAPS personnel as well as the inhabitants, undeveloped areas are mostly densely populated, exposed to natural hazards such as wind, rain and the sun which may affect the crime scenes.

- Two participants indicated aspects such as state vehicles must be parked far away from crime scene and exhibits need to be carried for long distances to vehicle, which increase the risk of contamination, darkness due to lack of electricity, construction of improper dwelling structures is constructed in an unplanned layout, which makes it difficult to locate the crime scenes promptly.

The majority the participants in Sample A and B revealed that all the infrastructure and environmental physical conditions in informal settlement areas does not contribute to the effective processing of serious crime scenes in informal settlement areas. The participants emphasised that certain required standard in infrastructural and environmental conditions, is necessary to accomplish effective and accurate crime scene processing in informal settlement areas. Participants from Samples A, B, C, and D emphasised the significance of ideal infrastructural and environmental physical conditions for effective crime scene processing, informal settlement areas.

The physical infrastructural and environmental physical conditions mentioned by Brown (2015:9) and UN-Habitat (2015b), which define informal settlements as residential areas lacking basic services, infrastructure, and compliance with building regulations, are also supported by Mathur (2014:1) and Brown (2015:248). The latter authors explain that urban poverty is multidimensional, encompassing income and consumption deficits, vulnerability to health, education, social security networks, and empowerment, with informal settlements being temporary, basic dwellings lacking city infrastructure.

Participants in Sample C and D, representing the international cohort, offered responses consistent with the previously discussed answers from Samples A and B. Their responses provide additional clarity on infrastructural and environmental

conditions necessary for achieving effective and precise crime scene processing in informal settlement areas.

The two international participants in Samples C and D responded as follows:

> "Undeveloped informal settlement areas are mostly densely populated, exposed to natural hazards such as wind, rain and the sun which may affect crime scenes. Underdeveloped informal settlement areas are difficult to access due to poor road networks and darkness during night-time due to absence or lack of electricity. The way housing structures are constructed in undeveloped informal settlement areas makes it difficult to reach and respond to crime scenes promptly. There is no coordination in developing these informal settlement areas and anyone will build where they want to build". (Participant C1)

> "Accessibility is challenging in informal settlement areas which result in delays in responding and attending to crime scenes in time. Informal settlement areas are overcrowded and densely populated. The is a lack of electricity in informal settlement areas which causes challenging during night-time to process crime scenes". (Participant D1)

The researcher contends that the perspectives expressed by participants align closely with those documented in both international and domestic literature, demonstrating a correlation with the views of authors from both realms. The findings from Samples A, B, C, and D collectively indicate a connection between the physical conditions in informal settlement areas and the responses received. Patel (2013:32) notes the absence of inadequacy of basic infrastructure in informal settlements, encompassing water, sanitation, waste management, drainage, electricity, roads, and transport. UN-Habitat (2015b) highlights the lack of formal access to basic services for dwellers, resulting in various challenges, including insufficient infrastructure.

Environmental issues disproportionately impact on the urban poor due to substandard and overcrowded housing, as well as deficiencies in water, sanitation, drainage, healthcare, and garbage collection (Baker, 2008:9). UN-Habitat (2015d) furthermore underscores informal settlements' characteristics, such as substandard housing, non-compliance with building regulations, insufficient basic services, inadequate healthcare, and a lack of public amenities. Informal settlements are typified by deteriorating housing, with inhabitants experiencing deprivation in areas such as access to clean water, secure tenure, sanitation, and a suitable living environment.

The researcher compiled and summarised the differences in infrastructural and environmental physical conditions between suburban and informal settlement areas based on the literature research conducted and the significant contributions made by participants in Samples A, B, C, and D. These differences were found to be either identical or similar and are presented in Table 6.2 below for ease of reference:

Table 6.2: **The difference between infrastructural and environmental physical conditions in suburban areas and Informal Settlement areas**

Suburban areas	Informal Settlement areas
The roads can be easily accessed without any difficulties because of suitable and sufficient road infrastructure in these areas.	The absence or unsuitable roads create accessibility difficulties to and within these areas because of unsuitable and insufficient road infrastructure.
The existence of suitable, available, and well-designed streets to and between pre-approved, planned built housing structures in these areas.	Unsuitable, inaccessible, unplanned or absence of streets between unplanned illegal housing structures. Some of these areas are linked by narrow alleyways between informal housing structures.
Accurate pre-determined and well-planned allocated house numbers that indicates individual home addresses which are easily identifiable from a distance.	There are no planned individual housing structured numbers to indicate individual home structure addresses which, causes difficulties identify individual home structure addresses.
Planned, authorised, pre-approved, build residential housing structures.	Unplanned and illegal temporarily housing structures that are inadequately constructed, usually of waste material such as corrugated iron sheets, plastic, wood and other kinds of waste that is used for the construction of these temporary housing structures.
Appropriate water- and sanitation supply infrastructure available in these areas.	Inappropriate or no water- and sanitation supply infrastructure do not exist in these areas.
Appropriate energy- and electrical infra-structure are available in these areas.	Inappropriate or no energy- and electrical infrastructure do not exist in these areas.
Safe and secured physical conditions regarding electrical infrastructure which pose no risks and threats to the lives of SAPS personnel and residents in these areas	Dangerous and hazardous physical conditions are created by exposed, illegal electrical connections, which is a life-threatening risk to the safety and lives of SAPS personnel and residents of these informal settlement areas.
Appropriate environmental management measures exist to maintain healthy and	Inappropriate or no environmental management measures exists to maintain

Suburban areas	Informal Settlement areas
hygienic environmental conditions in these areas.	healthy and hygienic environmental conditions in these areas.
Appropriate measures regarding the safety and security risk when SAPS personnel respond and attend to serious crime scenes. There exists no or a reduced risk or threat to the lives or property of SAPS personnel for being mugged, robbed, injured, or even killed whist on the way to a serious crime scene in these areas.	Inappropriate or no measures are in place to ensure the safety and security risk when SAPS personnel respond and attend to serious crime scenes. The risk or threat exists to the lives or property of SAPS personnel for being mugged, robbed, injured, or even killed whist on the way to attend serious crime scenes in these areas.
There are no overpopulation and high-density of people and that eliminate the risk of congestion of bystanders and onlookers and decrease the risk of contamination on serious crime scenes in these areas.	There is overpopulation and high densities of people which increases the risk of overcrowding of people such as by bystanders and onlookers, which increase the risk of contamination on serious crime scenes in these areas.
Close Circuit Television footage is normally available in these areas which add value regarding obtaining of information and clues for evidence collection that assists in strengthening information and clues on serious crime scenes.	The absence of Close Circuit Television footage can result in weakening the obtaining and collection of possible evidence and information on serious crime scenes. Community members are not cooperative to assist in providing information due to fear of harm on their lives in these areas.
The presence and existence of communities organising themselves in a manner to co-operation and mobilise as neighbourhood watches and private security companies adds value regarding criminals and criminal activities/incidents in these areas.	The absence or non-existence of community groupings in civil society that operates in an organised manner causes the unavailability information regarding criminals and or criminal activities/incidents in these areas.
The identification of objects/exhibits/ evidence on serious crime scenes are easily identifiable as the layout of these areas are neat and taken care of by either the owners or the local government which resulted in serious crime scene surfaces covered with short grass, paving, brick paving, concrete or concrete slabs and brick blocks in these areas. Objects/exhibits/evidence on serious crime scenes are as a result easily observed, identified, preserved, and collected. Appropriate waste disposal practices exist in these areas as inhabitants disposes of solid waste in appropriate containers. Objects/exhibits/evidence on serious crime scenes are easily observed,	The identification of objects/exhibits/ evidence on serious crime scenes are difficult to identify as the layout of these areas are not conducive for proper processing of serious crime scenes because of physical conditions of the immediate surroundings of serious crime scenes. Sometimes a part of or the whole serious crime scene is in these physical conditions. These physical conditions are unhealthy and unhygienic surroundings where refuse, wastewater, and urine flow uncontrollably. Inappropriate waste disposal practices worsen the physical conditions in these areas as inhabitants disposes of solid waste in their immediate

Suburban areas	Informal Settlement areas
identified, preserved, and collected because of these physical conditions.	living surroundings. Objects/exhibits/ evidence on serious crime scenes are not easily observed, identified, preserved, and collected because of these physical conditions.
The location and physical conditions of serious crime scenes are suitable and favourable for the effective processing of crime scenes in these areas as there are no infrastructural-and environmental inade-quacies that impacting negatively on the processing of serious crime scenes in these areas.	The location and physical conditions are unsuitable and unfavourable and negatively affect the processing of serious crime scenes in these areas because of the inadequacies that impacting negatively on the processing of serious crime scenes in these areas.
The surfaces of objects and evidence where traceable clues might be found such as fingerprints, on the crime scenes are suitable for the lifting of fingerprints in these areas.	The surfaces of objects evidence found on the crime scenes are as a result their physical condition and roughness unsuitable for the lifting of fingerprints in these areas.
Controllable community members cooperate when crowds and bystanders gather and minimise difficulties regarding crowd and minimise the risk of contamination of evidence on crime scenes.	Uncontrollable community members cause crowd control difficulties as they interfere, tamper of remove evidence on crime scenes, which increase the risk of contamination.
They cooperate on friendliness of community members towards SAPS personnel enhance the effectiveness of crime scene processing as SAPS members are not intimidated and free of fear.	The hostility and displeasure and unfriendliness of community members towards SAPS personnel influence the effectiveness of crime scene processing as SAPS members are frightened of because of intimidation
Environmental conditions in these areas such as pollution, filthiness, unhygienic conditions causing health risks are limited to SAPS personnel as well as the inhabitants.	Environmental characteristics in informal settlement areas such as pollution, filthiness, unhygienic conditions cause a health risk to SAPS personnel as well as the inhabitants.
Controlled environments are easy to apply and adhere with the provisions. Crime scene is mostly protected against natural hazards such as wind, rain and the sun.	Undeveloped areas are mostly densely populated, exposed to natural hazards such as wind, rain and the sun which may affect the crime scene.
Road infrastructure create accessibility to and from crime scenes using a vehicle and minimise or remove contamination and health risks	State vehicles must be parked far away from crime scene and exhibits need to be carried to vehicle, which increase the risk of contamination, risks of fluids ext., that create a health risks.
Well-constructed houses, roads and electricity supply make it easy when	While underdeveloped areas are difficult to access due to poor road networks, the darkness due to lack of electricity.

Suburban areas	Informal Settlement areas
attending to crime scenes as these environments are easily accessible.	
The planning of pre-approved built housing. Structures with planned layout and road infrastructure, street names, house numbers make it easy to locate specific crime scene locations. Development in these areas is done in an organised and planned legal way.	The construction of improper dwelling structures is constructed in an unplanned layout in undeveloped areas, which makes it difficult to locate the crime scenes promptly. There is no coordination in developing these areas as anyone creates illegal and unplanned dwelling structures where they want to.
On the other hand, in suburbs, people are well up, and there is some level of education with roads them. They tend to understand and comprehend what to in an event that a serious crime has occurred with regards to preserving crime scenes.	The people who stay there, unemployed and from marginalised groups. Therefore, their conducts, in most cases compromises the crime scenes.

(Source: Compiled by researcher)

The summarised findings in Table 6.2 highlight the participants' observations regarding disparities in infrastructural and environmental conditions between suburban and informal settlement areas. These distinctions suggest significant differences in these contexts. According to all participants, these divergent conditions play a crucial role in the handling of serious crime scenes. The consensus emphasises the detrimental effects of infrastructural and environmental challenges in informal settlements on the processing of serious crime scenes.

The researcher believes that the perspectives shared by all participants align consistently with existing literature, demonstrating a correlation with the views of both international and national authors on infrastructural and environmental physical conditions in informal settlement areas. The impact of these conditions on the effectiveness of processing serious crime scenes is evident in both suburban and informal settlement areas. Consequently, it is imperative to delve into a thorough examination of how these physical conditions affect and influence the processing of serious crime scenes in the ensuing discussion.

6.7.2 The influence of physical conditions on the effectiveness of the processing of serious crime scenes in suburban areas and in informal settlement areas

The participants in Samples A, B, C and D were asked the following open-ended question, "Please explain whether serious crime scenes in suburban areas are more effectively processed than in informal settlements?" Participants were free to answer this open-ended question in their own words according to their thoughts and ideas no alternative answers were provided to the participants from which to choose plausible responses. The participants could provide their own answers to the question. No choices were provided from which they could choose. All the participants in Samples A, B, C and D submitted various responses, which are stated below:

The participants in Sample A highlighted various conditions that assist and contribute to the conditions in suburban areas that influences improved effective processing of serious crime scenes than in informal settlement areas. The responses are listed below:

- Seven participants highlighted several key aspects related to well-designed streets connecting planned housing structures with easily identifiable individual house numbers. They emphasised the importance of having essential infrastructure, including water supply, sanitation facilities, and energy and electrical systems. Additionally, they stressed the significance of sufficient road infrastructure for easy accessibility and prompt responses to serious crime scenes. The focus was also on maintaining safe and secure physical conditions that pose no risks to both SAPS personnel and residents.

- Six participants brought attention to aspects of appropriate environmental management that ensures healthy and hygienic conditions. They discussed measures for safety and security, including the absence of overpopulation and high-density that could lead to congestion during investigations. Other points included the presence of CCTV footage, community mobilisation through neighbourhood watches and private security companies, and the cleanliness of serious crime scenes, making the identification, observation, preservation, and collection of evidence more straightforward.

- Three participants highlighted aspects such as suitable waste disposal practices, the favourable physical conditions of serious crime scenes for effective processing, and the absence of infrastructural and environmental inadequacies negatively impacting crime scene processing. They emphasised the importance of surfaces in these areas being conducive for lifting fingerprints and the overall suitability of conditions for evidence handling.

- Two participants focused on the significance of having a controllable and cooperative community to minimise difficulties in crowd control. They stressed the importance of limiting risks of evidence contamination on serious crime scenes and ensuring that environmental conditions, such as pollution and unhygienic surroundings, do not pose health risks to SAPS personnel and inhabitants.

The participants in Sample B indicated contributing factors in physical conditions in suburban areas that improve processing of serious crime scene activities to be more effective than in informal settlement areas. The participants in Samples B responded as follows:

- Six participants indicated aspects such as, sufficient road infrastructure, easy accessibility to serious crime scenes, well-designed streets to and between built housing structures with identifiable house numbers, energy- and electrical infrastructure are available, safe, and secured physical conditions that pose no risks and threats SAPS personnel.

- Four participants indicated aspects such as suitable measures regarding the safety and security risk to SAPS personnel, absence of roads, evidence on serious crime scenes is easily observed, identified, preserved, and collected, surfaces of objects and evidence where traceable clues are suitable for the lifting of fingerprints in these areas, suitable waste disposal management practices exist.

- Three participants indicated aspects such as physical conditions of serious crime scenes are suitable and favourable for the effective processing of crime scenes, easy accessibility and prompt response to serious crime scenes without delays, suitable waste disposal practices, surfaces of objects and evidence where traceable clues are suitable for the lifting of fingerprints in these areas.

- Two participants indicated that crowds are not hostile in behaviour, and therefore control of bystanders and onlookers are not challenging to prevent and minimise

contamination on crime scenes. Unhygienic conditions are limited in these areas thus limiting health risks to SAPS personnel.

The majority of participants in Sample A and B revealed that the infrastructure and environmental conditions in informal settlement areas do not contribute to the effective processing of serious crime scenes in informal settlement areas. The participants emphasised the significance and necessary required standard in infrastructural and environmental conditions, to accomplish effective and accurate crime scene processing in informal settlement areas.

Brown (2015:248) explains that Informal settlements are temporary, basic dwellings in residential areas lacking basic services, resources, and city infrastructure. This correlates with the views of Mitlin and Patel (2011:4) and Tilaki (2011:162), who explain that informal settlements often exist in environmentally sensitive areas and have significantly different facilities and quality of life compared to nearby cities. The perspective by Brown (2015:248) is also supported by Smit et al. (2016:200), who is of the view that residents of low socioeconomic settlements face societal challenges such as poverty, unemployment, lack of infrastructure, inadequate housing, and crime, creating a cycle of poverty that residents rarely escape.

Participants from Sample C and D, representing the international cohort, provided responses that align with the previously discussed answers from Samples A and B. Their contributions offer additional clarity and emphasis, enhancing the understanding of infrastructural and environmental conditions necessary for achieving effective and accurate crime scene processing in informal settlement areas. In their respective responses, the international participants in Sample C and Sample D stated:

> "Controlled environments are easy to apply and adhere with the provisions of crime scene processing guidelines. There are well-constructed planned houses, access roads are adequate and electricity supply make it easy when attending to crime scenes as these environments are easily accessible". (Participant C1)

> "Suburban areas are easy to comply and follow with prescribed guidelines during the processing of crime scenes. The housing structures are planned, and road infrastructure are sufficient to respond and attend to crime scenes immediately". (Participant D1)

There were similarities in the participants' responses in relation to emerging viewpoints in the literature insofar as the physical conditions are concerned. The researcher is swayed that the views stated by the participants were regularly comparable to those found in the literature in relation to the influence of these conditions on the processing of serious crime scenes in suburban areas and in informal settlement areas. The researcher believes that the beliefs stated by all participants clearly associate with those acknowledged in the literature, displaying correlation with the perspectives of both international and domestic authors. The following discussion focuses on the barriers and challenges crime scene processing personnel are confronted with when processing serious crime scenes in informal settlements.

6.7.3   The barriers and challenges confronted when processing serious crime scenes in informal settlements

The participants of Samples A and B, were asked the following question, "Please explain the barriers and challenges confronted with when processing serious crime scenes in informal settlements?" This was an open-ended question, and the participants could provide their own answers to the question. No choices were provided from which they could choose. In this regard, the Sample A participants' responses are listed below:

- Nine participants indicated barriers and challenges in crime scene processing, including inadequate roads, lack of lighting, and unsafe housing structures. Other issues included inadequate electrical infrastructure, hazardous physical conditions, high densities, state vehicles need be parked far away from crime scene locations because of a lack of accessibility, difficulties in locating specific crime scene locations, darkness during night time due to the absence of electricity.
- Five participants indicated barricades and encounters lack of roads, lacking safety measures, water and sanitation infrastructure, poorly constructed housing structures, hygiene management, high densities, absence neighbourhood watch community formations, lack of solid waste management, overcrowding increase the risk of contamination on serious crime scenes.
- Four participants indicate challenges in processing serious crime scenes due to unsuitable physical conditions, rough surfaces unsuitable for lifting of fingerprints, uncontrollable community members, tamper of remove evidence on serious crime

scenes, hostility towards SAPS personnel, and environmental factors like pollution and unhygienic conditions, which pose health risks to SAPS personnel.

The responses of the participants of Samples B are listed below:

- Seven participants reported encountering barriers and challenges in processing serious crime scenes, including difficulty in observing, identifying, preserving, and collecting evidence, unsuitable physical conditions, and uncontrollable community members. These issues can lead to contamination of evidence, difficulty in accessing housing structures, and the need for state vehicles to be parked far away. Additionally, the hostile behaviour of community members and environmental conditions, such as pollution and unhygienic conditions, pose health risks to SAPS personnel.

- Five participants indicated challenges in processing serious crime scenes due to undeveloped areas, densely populated areas, exposure to natural hazards, unhealthy conditions, unhygienic surroundings where refuse, wastewater are constantly prevailing, unsuitable waste disposal practices which worsen the surrounding of physical conditions, inhabitants dispose solid waste in their immediate living surroundings, and difficulty in identifying and collecting evidence.

- Three participants mentioned challenges in locating crime scenes in underdeveloped areas due to environmental factors like pollution, unhygienic conditions, dense population, natural hazards, parking distances, the carrying of crime scene processing equipment and seized evidence on foot using alleyways and footpaths, difficulties in accessing underdeveloped areas due to lack of road networks, darkness, and improper housing structures, which can cause difficulties in locating crime scenes.

The majority of the participants in Sample A and B highlighted the challenges faced during the processing serious crime scenes in informal settlement areas, emphasising the importance of adequate infrastructure and environmental conditions. The participants mentioned that barriers and challenges in crime scene processing, including inadequate roads, lack of lighting, unsafe constructed housing structures, inadequate electrical infrastructure, hazardous physical conditions, and high densities. The participants further mentioned safety measures, water and sanitation infrastructure, hygiene management, overcrowding, uncontrollable community

members, tampering with evidence, hostility towards SAPS personnel, and environmental factors such as pollution and unhygienic conditions. In addition, the participants stated that these factors increase the risk of contamination and contamination on serious crime scenes in informal settlement areas.

The UN Habitat (2016a) and the UN Habitat (2022a) state that a lack of safe living environments, and basic services, expose inhabitants to numerous dangers and vulnerabilities. These views correlate with those of Abunyewah et al. (2018:45), who mentioned that some of the characteristics of informal settlements include the presence of mainly temporary housing structures such as makeshift housing structures which deviate from standard building regulations. The informal settlement characteristics are further emphasised by Monney et al. (2013:728), who mentioned that the lack of basic and critical social services, poor housing facilities, and unsafe environments further exacerbate issues in informal settlements. In this context, O'Regan & Pikoli (2014:30-31) had stated that informal settlements in Khayelitsha in Cape Town have limited access to roads and a dense population.

The researcher believes that the opinions of all participants are congruent with the dominant literature perspectives, which are also in alignment with the perspectives of both international and national authors.

Participants in Sample C and D, representing the international cohort, provided responses consistent with those discussed in Samples A and B. Their contributions provide additional clarity on the factors influencing the processing of serious crime scenes, as reflected in the excerpts below:

> "Undeveloped informal settlement areas are mostly densely populated, exposed to natural hazards such as wind, rain and the sun which may affect crime scenes. Underdeveloped informal settlement areas are difficult to access due to poor road networks and darkness during night-time due to absence or lack of electricity. The way housing structures are constructed in undeveloped informal settlement areas makes it difficult to reach and respond to crime scenes promptly. There is no coordination in developing these informal settlement areas and anyone will build where they want to build". (Participant C1)

> "Accessibility is challenging in informal settlement areas which result in delays in responding and attending to crime scenes in time. Informal settlement areas are overcrowded and densely populated. The is a lack of

electricity in informal settlement areas which causes challenging during night-time to process crime scenes". (Participant D1)

The following discussion relates to the impact and influence of barriers and challenges on the effectiveness of crime scene processing in informal settlements.

6.7.4   The impact and influence of barriers and challenges on the effectiveness of crime scene processing in informal settlements

In addition to the initial three questions posed to the participants regarding infrastructural and environmental conditions in suburban and informal settlement areas, a supplementary question was presented in respect of Theme 3. This question was directed at participants from Samples A and B, and sought to explore insights into the impact and influence of barriers and challenges on the effectiveness of crime scene processing in informal settlements.

The participants were afforded the option of responding in their own words, without any predefined alternatives being provided. It is worth noting that some participants provided more than one answer. The continuous themes that emerged from their responses provided further support and clarification for their initial answers. The participants' themes are presented in Table 6.3 overleaf.

Table 6.3:   **Participants summarised themes on the impact and influence of barriers and challenges on the effectiveness of crime scene processing in informal settlements**

SAMPLE A	SAMPLE B
Infrastructure and environmental challenges:	**Impact of barriers and challenges on policing:**
• Stormwater management, absence of roads, environmental decline, inadequate basic services, insecure housing shelters, and unhealthy environments (14 Participants).	• The absence of streets, lack of housing structure numbers, insufficient sanitation facilities, and inadequate street lighting, create fear among police members (11 Participants).
• Everyday challenges in informal settlements encompass inadequate access to healthcare, poor drainage, lack of street lighting, absence of footpaths, use of open spaces as waste dumpsites, no electricity or running water in homes, absence of sanitation facilities, and no street names or dwelling structure numbers (12 Participants).	• Overcrowding in high-density settlements poses challenges for policing, requiring more manpower and creating difficulties in crowd control around serious crime scenes (10 Participants).
	• Overcrowding also increases the risk of evidence contamination and removal by bystanders and onlookers, especially in

SAMPLE A	SAMPLE B
	the absence of proper sanitation services (10 Participants).
Safety risks and work challenges for police: • The lack of access roads planned pathways, and the need for police to park vehicles far from crime scenes contribute to challenges in locating and responding promptly to serious crime scenes, especially at night (13 Participants). • Night-time work poses higher risks for police members, including the risk of being attacked, mugged, injured, or fatally killed by criminals while approaching crime scenes on foot (15 Participants).	**Environmental dangers and health risks:** • Insufficient infrastructure and vulnerable natural or constructed spaces in informal settlements expose residents to environmental dangers like fires, flooding, and toxic pollution (11 Participants). • Adverse environmental conditions, including limited access to clean water and basic sanitation services, pose dangerous health and safety risks for both residents and police personnel (10 Participants).
Electrical hazards and housing conditions: • Police members fearing electrocution due to illegal and hazardous exposed electric connections in informal settlements (11 Participants). • The main problems with housing structures include the use of substandard building materials, often consisting of industrial by-products, scrap, or unwanted materials. These structures lack proper ventilation and are constructed from one room without windows (16 Participants).	**Impact of rainfall patterns:** • Conditions worsen during the rainy season, with heavy rains leading to flooding, endangering the health and safety of inhabitants and police personnel (12 Participants). • Challenges related to inadequate drainage systems, slippery access roads, and the spread of waste during heavy rains make it difficult to process serious crime scenes in these conditions (11 Participants).
Overcrowded and unhygienic living conditions: • Overcrowded living conditions, with housing structures accommodating seven or eight people from the same family (14 Participants). • Inadequate housing conditions expose inhabitants to hardship, insecurity, and dangers, particularly during extreme weather conditions (15 Participants).	**Unsafe and weak dwelling structures:** • Unsafe and weakly constructed informal dwelling structures are unreliable in withstanding flood conditions, posing risks for police personnel during the processing of serious crime scenes (13 Participants). • The informal settlement population faces a higher burden of negative environmental conditions due to limited access to environmental resources and inadequate infrastructure (13 Participants).
Occupational dangers for police personnel: • Police personnel invading limited spaces during the processing of serious crime	

SAMPLE A	SAMPLE B
scenes in overcrowded conditions can be dangerous for both the police and residents (14 Participants).	

(Source: Responses from the participants)

The majority of the participants in Sample A and B highlighted the challenges faced by SAPS personnel in processing serious crime scenes in informal settlement. The participants indicated these barriers and challenges impact and influence the effectiveness of crime scene processing in informal settlements. areas, highlighting the importance of adequate infrastructure and environmental conditions for effective crime scene processing.

Baker (2008:8 & 9) explained that living in high density informal settlements exposes the poor to disaster, health, and environmental risks. Baker (2008:8 & 9) further explained that the urban poor often live in unsafe areas near solid waste dumps and industrial sites, are prone to diseases such as respiratory and diarrheal due to inadequate water, sanitation, and indoor pollution. These viewpoints are supported by Abunyewah et al. (2018:24), who stated that informal settlements, often located in flood-prone areas, are characterized by poor housing with temporary structures, making them unequipped to handle climate change-related adverse events.

Abunyewah et al. (2018:45), highlight further that informal settlements are characterised by features such as global challenges in improving living conditions in densely populated communities, with around one in seven living in poor quality, overcrowded housing lacking basic services. Despite the predictable permanence of informal settlements in South Africa, there is still a significant lack of infrastructure and services in these areas (UN DESA, 2014:1). This view coheres with that of Satterthwaite (2016:2), who asserts that there are challenges in improving living conditions in informal settlements. The researcher is convinced that the opinions stated by all participants were mostly like those found in the literature and that there is correlation with the views of international -and national authors.

Based on the participants' responses, it is evident that informal settlements in South Africa exhibit specific physical conditions, appearances, and characteristics.

Participants, drawing from their daily experiences and observations in formal settlements, assert that these surroundings adversely impact the processing of serious crime scenes. The unauthorised and unplanned invasion, location, and development of housing structures without official approval result in a lack of provision for infrastructural and environmental services in these informal settlements. These inadequate surroundings present various challenges to SAPS personnel when processing serious crime scenes, ultimately having a negative and detrimental effect on the effectiveness and execution of crime scene processing in informal settlement areas. The following discussion examines the effectiveness and practicality of the SAPS policy on crime scene management in informal settlements.

6.8 THEME 4: PRACTICALITY AND INADEQUACY OF THE SAPS POLICY ON CRIME SCENE MANAGEMENT IN INFORMAL SETTLEMENT AREAS

It was the researcher's intention to determine whether the guidelines in the SAPS policy on crime scene management is practical and inadequate to be applied in informal settlements during the processing of serious crime scenes in informal settlements. For the researcher it was also significant to establish how the infrastructural and environmental physical conditions influenced the application and adherence to the provisions of the SAPS policy in informal settlements.

To address the specific theme and sub-themes, the following questions were posed to the participants:

- "Are the guidelines in the SAPS policy on crime scene management practical and adequate to be applied in informal settlements during the processing of serious crime scenes in informal settlements?"
- "How does the infrastructural-and environmental physical conditions impacting and influence the application and adherence with the provisions of the SAPS policy in informal settlements?"

6.8.1 The impracticality and inadequacy of the SAPS policy on crime scene management in informal settlements

The participants in Sample A and B were asked the following open-ended question: "Are the guidelines in the SAPS policy on crime scene management practical and

inadequate to be applied in informal settlements when processing of serious crime scenes in informal settlements?" These participants were given the opportunity to respond freely to an open-ended question, allowing them to express their thoughts without predefined alternatives.

- Seven participants expressed that the SAPS policy on crime scene management is impractical or insufficient when applied in informal settlements for processing serious crime scenes. These participants pointed out that the physical conditions in these areas lack necessary infrastructure and face environmental challenges, making it challenging to follow the SAPS policy guidelines. The absence or inadequacy of infrastructural and environmental conditions hinders practical application and compliance with the SAPS policy when processing serious crime scenes in informal settlements.
- Five participants noted that the instructions in the SAPS policy cannot be implemented or adhered to by SAPS personnel due to the impact of infrastructural and environmental conditions on processing serious crime scenes in informal settlements. These participants highlighted the creation of extraordinary appearances in unsafe informal settlement areas, marked by various health and safety hazards, environmental degradation, pollution, and inadequate infrastructural and environmental conditions.
- Eight participants expressed that the SAPS policy on crime scene management is impractical or insufficient when applied in informal settlements for processing serious crime scenes. These participants pointed out that the physical conditions in these areas lack necessary infrastructure and face environmental challenges, making it challenging to follow the SAPS policy guidelines. The absence of inadequacy of infrastructural and environmental conditions hinders practical application and compliance with the SAPS policy when processing serious crime scenes in informal settlements.
- Five participants noted that the instructions in the SAPS policy cannot be implemented or adhered to by SAPS personnel due to the impact of infrastructural and environmental conditions on processing serious crime scenes in informal settlements. These participants highlighted the creation of extraordinary appearances in unsafe informal settlement areas, marked by various health and

safety hazards, environmental degradation, pollution, and inadequate infrastructural and environmental conditions.

- Five participants emphasised the impracticality of applying and adhering to the SAPS policy on crime scene management in the complex conditions that negatively impact the processing of serious crime scenes in informal settlements. These participants pointed out that these conditions directly impede SAPS personnel when handling serious crimes scenes in informal settlements.

The participants in Sample B responses are listed below:

- Six participants observed that the SAPS policy on crime scene management is inadequate for implementation and effective application in informal settlements during crime scene processing. They underscored that the infrastructural and environmental conditions in these areas present challenges to applying the policy, with inadequate physical conditions obstructing SAPS personnel. Additionally, these participants identified specific health and safety risks that further impede crime scene processing in informal settlements.

- Five participants echoed concerns about the insufficiency of the SAPS policy on crime scene management for implementation and effective application in informal settlements. They specified that poor health and safety conditions pose hazardous risks to both community members and SAPS personnel during the processing of serious crime scenes. Expressing feeling threatened, unsafe, and intimidated by hostile community attitudes in these areas, they emphasized how these conditions directly negatively influence and obstruct the processing of serious crime scenes. These participants suggested that such conditions not only disrupt thoroughness and effectiveness but also hinder adherence to policy instructions.

- Four participants reiterated that the SAPS policy on crime scene management is insufficient for implementation and effective application in informal settlements. They argued that infrastructural and environmental conditions, including extraordinary appearances in informal settlements, negatively impact the processing of serious crime scenes. Emphasizing the hindrance caused by these conditions, they highlighted the overall impact on the effectiveness of crime scene processing in informal settlements.

The responses of the participants in Sample A and Sample B focused on the practicality and adequateness of SAPS policy guidelines on crime scene management and processing of serious crime scenes in informal settlements. The participants in Sample A and Sample B indicated that the practical application and adequateness of SAPS policy guidelines in informal settlements is not congruent with the processing of serious crime scenes due to the infrastructural and environmental conditions.

Two participants, one from both Sample A and Sample B, representing the SAPS, provided responses that align with the previously discussed answers from Samples A and B. Their contributions offer additional clarity and emphasis, enhancing the understanding of infrastructural and environmental conditions that hinders the practical application and inadequateness of SAPS policy's guidelines in informal settlements when processing serious crime scenes in informal settlement areas. The two SAPS participants in Sample A and Sample B responded as follows:

> "No, the SAPS policy guidelines are more user friendly for suburban areas than informal settlement areas". (Participant A10)

> "No, infrastructural and environmental conditions in informal settlement areas does not allow the effective application and adherence to the SAPS policy". (Participant B4)

Drawing from the responses of all participants in Samples A and B regarding infrastructural and environmental conditions, which encompass extraordinary appearances in informal settlements, the participants uniformly indicated that these conditions seem to impede and disrupt the processing of serious crime scenes negatively. The subsequent discussion delves into the inadequacy of the SAPS policy to address specific conditions in informal settlements.

6.8.2   The inadequacy of SAPS policy to provide for specific conditions in informal settlements

The participants in Sample A and Sample B were asked the following question: "How does the infrastructural-and environmental physical conditions influence the application and adherence with the provisions of the SAPS policy in informal settlements?" This was an open-ended question, and the participants could provide

their own responses to the question. No options were provided from which the participants could select their respective responses.

The Sample A participants' responses are listed below:

- Ten participants underscored the deficiency in the SAPS policy on crime scene management, noting its failure to account for the unique infrastructural and environmental conditions prevalent in informal settlement areas. They identified issues such as illegal and unplanned structural designs, hazardous health and safety risks, and unsafe conditions affecting both inhabitants and SAPS personnel during crime scene processing. These specific conditions were highlighted as hindrances to effective crime scene processing, emphasising that the SAPS policy does not address them.
- Four participants proposed that SAPS should integrate specific physical appearances and conditions found in informal settlement areas into its policy guidelines. They argued that such inclusion and detailed descriptions would improve the processing of serious crime scenes by addressing and mitigating challenges and obstacles unique to these environments.
- Additionally, four participants brought attention to the inadequate infrastructural and environmental conditions in underdeveloped informal settlement areas. They pointed out that these conditions adversely affect the processing of serious crime scenes, creating challenges for SAPS personnel. According to these participants, the current conditions in informal settlement areas neither support nor facilitate the effective processing of serious crime scenes.

Furthermore, the responses of the participants in Sample B are listed below:

- Six participants noted that, unlike suburban areas, informal settlements lack advantages, favourable conditions, and support for effective processing of serious crime scenes. The participants indicated that informal settlements are characterized by poor living conditions, substandard services, and inadequate health and safety conditions. The highlighted physical conditions include the absence of basic services such as adequate drinking water and sanitation, overcrowded living areas, and structurally unsafe housing structures.

- Five participants emphasised the unfavourable and unhelpful nature of conditions in informal settlement areas for enhancing the effective processing of serious crime scenes. They pointed out irregular structures, low-cost and non-permanent dwellings, and high population density in these areas. These participants stressed that the overcrowded nature of informal settlements poses direct and indirect health risks to the communities and SAPS personnel during the processing of serious crime scenes.

- Four participants highlighted how overcrowding exacerbates health risks related to insufficient water supply and poor sanitation systems, especially in informal settlements. The participants emphasised that these physical conditions in informal settlements pose challenges that hinder the processing of serious crime scenes. These participants stated that these conditions have a negative impact on the effective processing of serious crime scenes in terms of compliance and adherence to the SAPS policy on crime scene management.

The participants in Samples A and B highlighted the inadequacy of the SAPS policy on crime scene management in informal settlements due to issues like illegal structural designs, hazardous health risks, and unsafe conditions. The participants highlighted irregular structures, low-cost dwellings, and high population density. Overcrowding in these areas exacerbates health risks due to insufficient water supply and poor sanitation systems (Mikati et al., 2018:481; Schlosberg, 2013:37). These conditions hinder the effective processing of serious crime scenes and the adherence to SAPS policy on crime scene management. The participants suggested integrating these conditions into policy guidelines to improve the processing of serious crime scenes in underdeveloped areas.

The two international participants in Sample C and Sample D were asked the following question: "How does the infrastructural-and environmental physical conditions influence the application and adherence with the provisions of the SOP internal guidelines in informal settlements?" Similar to other questions asked previously, this was an open-ended question, and the participants could provide their own responses to the question. No options were provided from which they could select their own respective responses.

The participants in Samples C and D indicated that all the infrastructure and environmental conditions were not provided for, in the internal SOP guidelines in their respective countries The responses highlighted the significance to provide for the specific and unique infrastructural and environmental physical conditions in informal settlements areas. Sample C and D, consisting of international participants, provided the following responses, each in turn:

> "Environmental and structural conditions in well-developed influence the effectiveness of serious crime scene processing in suburban areas. It is easier and faster to respond to serious crime scenes in developed areas than in underdeveloped areas. Features such as roads, electricity, structural designs, and terrains may influence the ease with which serious crime scenes is attended and processed". (Participant C1)

> "Sufficient Road infrastructure assists in faster access and response to crime scenes. Vehicles can easily access and be park at the crime scene location. There is no need to carry seized evidence for long distances to parked vehicles, far away from crime scene locations and risk contamination of evidence. Safety and security risks as well as health risks are minimised. Physical conditions and environments affect the improvement of crime scene processing". (Participant D1)

Participants from Sample C and Sample D, constituting the international cohort, provided responses in alignment with the previously discussed answers from Samples A and B. The direct responses from these international participants, included above, further clarify the non-provision of specific guidelines for unique infrastructural and environmental physical conditions in informal settlements areas.

The participants in Sample C and D, who are international participants, provided the following response respectively:

> "The existing guidelines fails to really address the exceptional infrastructural and environmental conditions in informal settlements. The SOP guideline on crime scene management overlook unique infrastructural and environmental conditions in informal settlements, overlooking challenges like unplanned structural layout, unique characteristics, insufficient infrastructure, hazardous health risks, and substandard services". (Participant C1)

> "The current SOP guidelines does not adequately provide for the uniqueness in infrastructural and environmental conditions in informal settlements. SOP guidelines omit infrastructural and environmental conditions, leading to challenges like inadequate roads, delayed response times, health and safety risks, substandard services, and overcrowded informal settlements". (Participant D1)

The responses from these participants closely mirrored those of participants in Sample A and Sample B. These consistent responses indicate that the challenges and difficulties experienced in informal settlements in their respective countries are also prevalent in South Africa. The following discussion focuses on suggestions for enhancing the efficiency of processing serious crime scenes in informal settlements.

6.9 THEME 5: SUGGESTIONS FOR IMPROVING EFFECTIVENESS IN THE PROCESSING OF SERIOUS CRIME SCENES IN INFORMAL SETTLEMENT AREAS

It was the researcher's intention to establish whether there is a need for specific guidelines in the SAPS policy regarding the processing of serious crime scenes in informal settlements. For the researcher, it was important to establish whether the SAPS policy on crime scene management, provide for specific and adequate guidelines on the processing of serious crime scenes in informal settlements. The researcher also intended to establish which specific elements or conditions regarding the infrastructural-and environmental physical conditions that should be considered and amended in the SAPS policy on crime scene management, to enhance the effectiveness of serious crime scenes processing in informal settlements.

For the researcher it was significant to determine the best practices that are considered to be practical and implementable in ensuring that serious crimes scenes in informal settlements are effectively processed. To address the specific theme and sub-themes, the following questions were put to the participants:

- "Does the SAPS policy on crime scene management, provide for specific guidelines on the processing of serious crime scenes in informal settlement areas and are there a necessity for specific guidelines?"
- "Which specific elements or conditions need to be considered for inclusion or amendment in the SAPS policy on crime scene management, to enhance the effectiveness of serious crime scenes processing in informal settlement areas?"
- "Briefly explain what best practices the Police Service in your country implement to ensure that serious crimes scenes in informal settlement areas are effectively processed?"

6.9.1 The inadequacy of SAPS Policy on crime scene management to provide for specific conditions in informal settlement areas

The Sample A and B participants were asked the following open-ended question: "Does the SAPS policy on crime scene management offer specific guidelines for processing serious crime scenes in informal settlement areas, and do you perceive a necessity for such guidelines?" This question allowed participants to articulate their individual responses without predefined choices provided by the researcher. Some participants provided multiple answers. The responses from these participants were analysed and are comprehensively presented in Table 6.4 below, offering an overview of the themes that emerged.

Table 6.4: Participant's responses pertaining to guidelines for processing serious crime scenes in informal settlement areas

SAMPLE A	SAMPLE B
Inadequacy of current SAPS Policy: • Participants noted that the existing SAPS policy on crime scene management lacks specific guidelines tailored for processing serious crime scenes in informal settlement conditions (14 Participants). • Emphasis was placed on the appropriateness of the current guidelines for well-developed suburban areas with sufficient infrastructural and environmental conditions (14 Participants).	**Inadequacy of current SAPS Policy:** • Participants criticised the SAPS policy on crime scene management for absence specific guidelines for processing serious crime scenes in informal settlement conditions (12 Participants). • The participants argued that the current guidelines are suitable for suburban areas with adequate infrastructural and environmental conditions (13 Participants).
Necessity for specific guidelines in Informal Settlements: • Participants expressed a clear necessity for specific guidelines when processing serious crime scenes in informal settlement areas due to unique challenges (13 Participants). • Specific conditions such as illegal unplanned structural design, health and safety risks, and the absence of infrastructural conditions were highlighted as factors requiring tailored guidance (14 Participants).	**Necessity for specific guidelines in Informal Settlements:** • Participants argued that the absence of these specific guidelines for these conditions negatively affects the processing of serious crime scenes in informal settlements (11 Participants). • Participants stated that processing of serious crime scenes is a complex task involving illegal, unplanned structural design, health and safety risks, and inadequate infrastructure, which require specific guidance (12 Participants).
Impact of absent Infrastructural Conditions:	**Impact of absent Infrastructural Conditions:**

SAMPLE A	SAMPLE B
• The absence or lack of infrastructural and environmental physical conditions in informal settlement areas was identified as a significant hindrance to the processing of serious crime scenes (11 Participants). • Participants emphasised that these specific conditions negatively affect the effectiveness of crime scene processing in informal settlements (11 Participants).	• Inadequate infrastructural and environmental conditions hinder the processing of serious crime scenes (14 Participants). • The effectiveness of crime scene processing in informal settlements is negatively impacted by specific conditions (10 Participants).
Call for SAPS Policy modification: • Participants suggested that SAPS should consider incorporating specific policy guidelines that address the infrastructural and environmental conditions unique to informal settlements (14 Participants). • The belief is that such guidelines would enhance the overall effectiveness of crime scene processing in informal settlement areas, providing valuable assistance to SAPS personnel in overcoming challenges and obstacles (13 Participants).	**Call for SAPS Policy modification:** • Participants indicated that SAPS should consider including specific policy guidelines based on these conditions to enhance the effectiveness of crime scene processing in informal settlements (12 Participants). • Directives are believed to enhance the efficiency of crime scene processing in informal settlement areas (11 Participants). • SAPS personnel will be provided with support to overcome any obstacles or challenges in processing serious crime scenes (10 Participants).

(Source: Responses from participants)

The participants highlighted the inadequacy of the current SAPS policy on crime scene management, noting its lack of specific guidelines for processing serious crime scenes in informal settlements, as opposed to well-developed suburban areas. The participants emphasised the necessity for tailored guidelines in informal settlement conditions, highlighting unique challenges such as illegal structural design, health and safety risks, and the absence of infrastructural and environmental conditions. The participants stated that inadequate infrastructural and environmental conditions in informal settlements significantly hinder effective crime scene processing, thereby affecting overall efficiency. The participants advocated for a modification of the SAPS policy to include specific guidelines for informal settlements, aiming to improve crime scene processing effectiveness and assist SAPS personnel in overcoming challenges in these areas.

Participants from Sample C and D, constituting the international cohort, provided responses that resonate with the previously discussed answers from Samples A and B. The direct responses from these international participants, included above, further clarify the non-provision of specific guidelines for unique infrastructural and environmental physical conditions in informal settlements areas.

The participants in Sample C and D, who are international participants, provided the following response, in turn:

> "The existing guidelines fails to really address the exceptional infrastructural and environmental conditions in informal settlements. The SOP guideline on crime scene management overlook unique infrastructural and environmental conditions in informal settlements, overlooking challenges like unplanned structural layout, unique characteristics, insufficient infrastructure, hazardous health risks, and substandard services". (Participant C1)

> "The current SOP guidelines does not adequately provide for the uniqueness in infrastructural and environmental conditions in informal settlements. SOP guidelines omit infrastructural and environmental conditions, leading to challenges like inadequate roads, delayed response times, health and safety risks, substandard services, and overcrowded informal settlements". (Participant D1)

The following discussion relates to specific elements and conditions to be considered for possible inclusion in SAPS policy on Crime Scene Management.

6.9.2 Specific elements and conditions to be considered for possible inclusion in SAPS Policy on crime scene management

The Sample A and B participants were asked the following open-ended question: "Which specific elements and conditions need to be considered for inclusion in the SAPS policy on crime scene management to enhance the effectiveness of serious crime scenes processing in informal settlements?" This question provided participants the latitude to express their views without predetermined options. Some participants provided multiple responses.

The responses were thoroughly analysed and are presented comprehensively in Table 6.5 below, summarising the emerged themes regarding specific elements and conditions that should be incorporated into the SAPS policy to improve the effectiveness of serious crime scenes processing in informal settlements.

Table 6.5: **Responses concerning specific elements and conditions required for inclusion in the SAPS crime scene management policy**

SAMPLE A	SAMPLE B
Challenges and conditions in Informal Settlements: • Congestion, overcrowding, and high population density (11 Participants). • Structural design of housing and lack of roads (10 Participants). • Inaccessibility for emergency services, including the police, ambulances, and fire engines (12 Participants). • Lack of street names, streetlights, water and waste management, narrow roads, and basic services (13 Participants). • Inequalities based on location, limited access to water, sanitation, transport availability, affordability, and lack of basic infrastructure (10 Participants).	**Challenges in infrastructure and accessibility:** • Structural design of housing structures impacts emergency service accessibility (10 Participants). • Absence or lack of roads and navigable access routes hinder vehicle movement (11 Participants). • Lack of street names, streetlights, waste management, and narrow, inaccessible roads (11 Participants). • Absence or lack of basic services and pollution contribute to inequalities in location and access to water and sanitation (12 Participants).
Purpose of specific guidelines: • The intention of specific guidelines is to regulate, direct, and support members dealing with difficulties and specific conditions during the processing of serious crime scenes in informal settlements (14 Participants). • Members involved in crime scene processing should comply and adhere to the set standards outlined in specific guidelines based on challenging infrastructural and environmental physical conditions in informal settlement areas (11 Participants).	**Vulnerabilities and risk factors:** • Lack of basic infrastructure and susceptibility to natural disasters (12 Participants). • Limited or inadequate access to public services and substandard housing (12 Participants). • Absence or lack of adequate lighting in public spaces, including streets, and the lack of street names and house structure numbers (10 Participants).
Impact on emergency services: • Issues such as congestion, overcrowding, absence or lack of roads leading to inaccessibility, and the unavailability of navigable access routes for vehicles negatively impact the ability of emergency services (police, ambulances, and fire engines) to reach informal settlements effectively (12 Participants).	**Impact on Crime Scene Processing:** • All infrastructural and environmental physical conditions in informal settlements obstruct the processing of crime scenes (12 Participants). • Participants emphasise the need for specific guidelines considering these conditions to assist and guide SAPS members when processing serious crime scenes in informal settlement areas (11 Participants).

(Source: Responses from the participants

Participants from Sample A and Sample B highlighted a range of challenges associated with crime scene processing in informal settlements. These challenges encompassed issues such as congestion, overcrowding, inadequate infrastructure, and inequalities based on location. The participants emphasised the necessity for specific guidelines tailored to the unique conditions of informal settlements. These guidelines are envisioned to regulate, direct, and support law enforcement personnel dealing with the complexities of processing serious crime scenes in these areas.

In addition, the impact of these challenges on emergency services, including issues like inaccessibility due to lack of roads, was underscored. The participants' responses also shed light on vulnerabilities and risk factors in informal settlements, emphasising the need for policy considerations to guide law enforcement effectively. Overall, the participants stressed the importance of addressing these infrastructural and environmental conditions in order to enhance the efficiency of crime scene processing in informal settlements.

One participant from Sample A, representing the SAPS, provided a response that align with the previously discussed responses from Samples A and B. This contribution offers additional clarity and emphasis of specific elements and conditions that need to be considered for inclusion in the SAPS policy guidelines on crime scene management. The SAPS participants in Sample A responded as indicated below:

> "The identifying physical evidence on serious crime scenes is challenging due to environmental conditions like access roads, lack of solid waste management, congestion by onlookers and bystanders, crowds, poorly constructed housing structures, unidentifiable crime scene address locations, health and safety risks". (Participant A9)

The following discussion focuses on the improvement on the effectiveness of processing serious crime scenes in informal settlements.

6.9.3 Improvement on the effectiveness of processing serious crime scenes in informal settlements

Participants from Sample A and Sample B highlighted additional considerations beyond specific guidelines for inclusion in the SAPS policy, as discussed in the preceding section. These supplementary aspects aim to further enhance the effectiveness of processing serious crime scenes in informal settlements. Some

participants provided multiple answers. The responses from these participants have been thoroughly analysed and are presented in Table 6.6 below, providing an overarching view of the emergent themes.

Table 6.6:   Responses concerning additional considerations beyond specific guidelines for inclusion in the SAPS policy

SAMPLE A	SAMPLE B
Resource provision and urgent action: • Participants emphasised the need for SAPS management to prioritise the provision of suitable and adequate resources to informal settlement areas (10 Participants). • These resources include personnel, crime scene investigation and processing equipment, fuel-driven generators for electricity, and vehicles tailored for uneven, muddy, and rough terrains (13 Participants). • Urgency in raising infrastructural and environmental conditions to relevant government departments was highlighted as crucial for overcoming hindrances to SAPS operational functions (10 Participants). • Intensive training interventions for SAPS members involved in processing serious crime scenes in informal settlements were deemed essential (13 Participants). • Community involvement and partner-ships were emphasised, particularly in addressing challenges related to bystanders, onlookers, community behaviour, crowd control, and the preservation, collection, protection, contamination, and removal of evidence from serious crime scenes (11 Participants).	**Resource prioritisation for informal settlements:** • Participants emphasised the need for SAPS management to prioritise the supply of appropriate and sufficient resources to informal settlement areas (9 Participants). • Resources mentioned include personnel, crime scene investigation and processing equipment, fuel-driven generators for electricity, and specialised vehicles for irregular terrains (11 Participants). • High-density inhabitants in informal settlements using non-sewer sanitation pose environmental risks that worsen in conditions of overcrowding (12 Participants). • Insufficient collection, storage, and disposal of solid wastes lead to health dangers, spreading opportunistic diseases, particularly when human excrement mixes with other organic wastes (11 Participants). • Rainfall patterns in informal settlements, especially during the rainy season, exacerbate physical conditions, with sporadic heavy rains causing flooding and considerably affecting the processing of serious crime scenes (10 Participants).
Safety concerns and challenges: • Police officers in informal settlements often feel unsafe and insecure due to the lack of streetlights, insufficient sanitation facilities, and street flood lighting (12 Participants).	**Challenges in processing serious crime scenes:** • Participants identified difficulties related to surfaces on objects and exhibits in serious crime scenes in informal settlements (11 Participants).

SAMPLE A	SAMPLE B
• Overcrowding in these areas makes policing more challenging, requiring increased manpower (14 Participants). • Overcrowding contributes to uncontrollable crowds, heightening the risk of evidence contamination and removal from serious crime scenes (15 Participants). • Non-sewer sanitation, exacerbated in crowded areas, poses environmental harm and increases health risks (14 Participants). • Rainfall patterns affect the processing of serious crime scenes, causing difficulties with surfaces on objects and exhibits identified as evidence (13 Participants). • Participants suggested the need for temporary shelters or shields to protect outdoor crime scenes against contamination (14 Participants). • The absence of streetlights, housing structure numbers, insufficient sanitation facilities, and street flood lighting, especially at night, creates fear among police members, impacting the effective processing of serious crime scenes (13 Participants).	• Crime scene protection measures, such as temporary shelters or tents, were suggested to safeguard outdoor crime scenes against contamination from natural elements (12 Participants). • SAPS members involved in processing serious crime scenes were highlighted to require intensive training to address challenges specific to informal settlements (13 Participants). • Community awareness campaigns on crime scene control were recommended to educate residents on preserving serious crime scenes and allowing police to perform their duties without interruption or intimidation (11 Participants).

(Source: Responses from the participants)

The participants in the study emphasised the critical need for SAPS management to prioritise the provision of appropriate and adequate resources to informal settlement areas. These resources encompass personnel, crime scene investigation equipment, fuel-driven generators, and specialised vehicles suitable for challenging terrains. Urgency in elevating infrastructural and environmental conditions was emphasised in order to overcome hindrances to SAPS operational functions. Intensive training for SAPS members handling serious crime scenes in informal settlements was deemed essential.

Community involvement and partnerships were highlighted as factors for addressing challenges related to bystanders, crowd control, and evidence preservation. Safety concerns in informal settlements, including inadequate lighting, insufficient sanitation,

and overcrowding, were identified as factors impacting police officers' sense of security. Challenges in processing serious crime scenes in these areas were outlined, including difficulties with surfaces, environmental risks, and the impact of rainfall patterns. Recommendations included resource prioritisation, training interventions, and community awareness campaigns to enhance policing effectiveness in informal settlements.

The international participants in Sample C and Sample D provided direct responses clarifying enhanced crime scene processing in informal settlements, in line with previous discussions from Samples A and B. Meanwhile, participants in Sample C and Sample D emphasised the need for enhanced crime scene processing in informal settlements, stating the following:

> "The continuous training of scene of crime members, the supply of relevant equipment such as rough terrain vehicles, flashlights and many more that maybe relevant to successfully attend to these crime scenes. Furthermore, there must be coordinated efforts from the team that is involved in the processing and investigation on the crime scene and as well as members from the public". (Participant C1)

> "Guidelines need to be customized to accommodate the management of crime scenes in those environments. The continuous training of police members and supplying appropriate equipment, police members roles must be clarified, sensitising members of the public   not to disturb and intimidate police members". (Participant D1)

The following discussion relates to best practices to enhance the processing of serious crimes scenes in informal settlements.

6.9.4   Best practices to ensure effective processing of serious crime scenes in informal settlements

Participants from Sample A, B, C, and D were asked to respond to the following open-ended statement: "Briefly explain the best practices implemented by the SAPS/Police Service in your country to ensure effective processing of serious crime scenes in informal settlements." This question allowed participants to furnish their individual responses without predefined options. Some participants provided multiple responses. The collected responses underwent analysis and are systematically presented in Table 6.7 below, providing an encompassing overview of the emerging themes.

Table 6.7: Responses concerning best practices implemented to ensure effective processing of serious crime scenes in informal settlements

SAMPLE A	SAMPLE B
Disparity in infrastructural conditions: • Participants noted that the current SAPS policy on crime scene management is designed for suburban, well-developed areas and may not effectively address the unique challenges posed by infra-structural and environmental conditions in informal settlements (10 Participants). • The racial history of residential segregation in South Africa was highlighted, indicating a distinction between suburban and informal settlement areas (12 Participants). • Informal settlement areas were described as lacking basic needs and services, making the application of the current SAPS policy impractical and challenging (13 Participants).	**Challenges in applying current SAPS Policy in informal settlements:** • Participants highlighted that the current SAPS policy, designed as best practice, faces challenges when applied to informal settlement areas (11 Participants). • The absence or underdeveloped nature of infrastructural and environmental conditions in informal settlements impedes effective crime scene processing (11 Participants). • Despite efforts to follow SAPS guidelines, participants emphasised the im-practicality of the current policy in the context of informal settlement challenges (12 Participants).
Current policy application in informal settlements: • Participants acknowledged that the SAPS current policy serves as a guide for members during serious crime scene processing (14 Participants). • However, they emphasised that the undeveloped and challenging infrastructural and environmental conditions in informal settlements differ significantly from suburban areas (13 Participants). • Despite attempts to adhere to SAPS guidelines, participants highlighted the impracticality of applying the current policy in informal settlement areas due to the unfavourable physical conditions (12 Participants).	**Guidance through National Instruction 1 of 2015:** • Participants noted that they are guided by National Instruction 1 of 2015 and the SAPS policy on crime scene management for serious crime scene processing (11 Participants). • They acknowledged the attempt to adhere to these guidelines but emphasised the challenges arising from the lack of infrastructure and environmental conditions in informal settlements (12 Participants). • Participants expressed a belief that the current policy is more suited for suburban areas with well-developed infrastructure, while informal settlement conditions pose significant challenges (10 Participants).
	Impact of physical conditions in informal settlements: • The physical conditions in informal settlements were identified as a major factor impacting the processing of serious crime scenes (11 Participants). • Participants stressed the need for continuous training and development,

SAMPLE A	SAMPLE B
	especially in the unique context of informal settlements (13 Participants).
	• The absence or lack of favourable infrastructure and environmental conditions in informal settlements was reiterated as a significant impediment to effective crime scene processing (10 Participants).

(Source: Responses from the participants)

In essence, the discussion brought attention to the disparity between the existing SAPS policy tailored for affluent neighbourhoods and the unique challenges presented by the infrastructure and environmental factors in informal settlements. Participants underscored the necessity for customised guidelines that acknowledge the specific intricacies of handling crime scenes in informal settlement areas. To summarise, the focal point was on the incongruence between the current SAPS policy for suburban settings and the demands imposed by the distinct conditions of informal settlements, with a call for specialised guidelines and ongoing training to effectively address the nuances of serious crime scene processing in such areas.

Participants in Sample C and Sample D, representing the international cohort, offered responses consistent with those discussed in Samples A and B. Their contributions provide additional clarity on the best practices to ensure effective processing of serious crime scenes in informal settlements. The participants in Sample C and Sample D responded as follows:

> "Regular refresher training courses are conducted for members involved in crime scene investigation and processing, both locally and internationally, and SOP guidelines are regularly revised". (Participant C1)

> "The continuous training of police and serious crime investigators on crime scene investigation and processing environments, enhancement of social media groups for sharing information about crime scene investigation and processing environments, as well as reviewing and improving SOP guidelines, is ongoing". (Participant D1)

The following discourse revolves around a researcher-created conceptual Standard Operational Procedure (SOP) guideline with the objective of enhancing the effectiveness of processing serious crime scenes in informal settlement areas.

6.10 RESEARCHER'S CONTRIBUTION: DEVELOPED CONCEPTUAL STANDARD OPERATIONAL PROCEDURE GUIDELINES CONCERNING THE PROCESSING OF SERIOUS CRIME SCENES IN INFORMAL SETTLEMENT AREAS

The research problem in this study is fundamentally premised on the improper/ incorrect processing of serious crime scenes in informal settlements by SAPS members attached to the Detective Services. The solution to this problem can actually make a difference in their performance if these detective members could be more effective and efficient during the processing of serious crime scenes in informal settlement areas. The SAPS policy on crime scene management currently in use, National Instruction 1 of 2015, is not considerate and mindful in its directions and policy procedures to the infrastructural-and environmental physical conditions and other impractical obstruction experienced by SAPS personnel in informal settlement areas when the processing of serious crime scenes in South Africa.

This SAPS policy can only be applied and complied with in well- developed suburban areas, which are suitably planned regarding infrastructural- and environmental physical conditions. This SAPS policy does not make provision or consider the inaccessible, underdeveloped, unstructured infrastructural- and environmental physical conditions which causes difficulties that impacts negatively on the processing of serious crime scenes in informal settlement areas. The difference in compliance and adherence to the same policy in suburban areas and in informal settlement areas can possibly be attributed to the fact that this policy can be applied more practically and constructively on the processing of serious crime scenes in suburban areas rather than in informal settlement areas because of the difference in physical conditions.

In order to deliver an effective and efficient processing of serious crime scenes function in informal settlement areas, the SAPS needs to have a structured and documented operational procedure that is standardised to all Detective Services Sections at all local police station levels in South Africa. The Standard Operating Procedure will benefit the processing of serious crime scenes in informal settlement areas, by following a set of standardised guidelines, includes:

- Standardised processing of serious crime scenes guideline, which enables a consistent approach towards the processing serious crime scenes in informal settlement areas.

- Common methodologies that delivers the best methods to complete the various stages of serious crime scene processing in informal settlements.

- Development of best practice that identifies and encourages improved and better ways of processing serious crime scenes in informal settlements areas.

- Develop improved ways of conducting crime scene processing in informal settlement areas, with increased emphasis on professionalism and management supervision.

- Professional standards that brings recognised processes, procedures, supervision and minimum standards in the processing of serious crime scenes in informal settlement areas.

The existing SAPS policy on crime scene management delineates eleven phases for processing crime scenes in South Africa, encompassing various types of crimes without differentiating between their severity (SAPS, 2015). The infrastructural and environmental conditions prevalent in informal settlement areas significantly impede the effective processing of serious crime scenes in these regions and warrant inclusion as policy guidelines. This study specifically focused on non-residential robbery (business robbery), residential robbery (house robbery), and vehicle robbery (hi-jacking) in informal settlement areas. However, it is crucial to extend the scope to incorporate other categories of serious crime scenes, as they demand prompt and specialised responses from the SAPS. Conversely, minor crime scenes can be approached with a more routine methodology. Therefore, the researcher recommends the addition of the following crime categories as "Serious Crime" in the SAPS policy on crime scene management:

- murder; rape and sexual crime; robbery; serious assault; kidnapping; corruption; arson; as well as all acts of terrorism, piracy, human trafficking, and drug trafficking.

Within the scope of this study, the SOP guideline aims to establish qualified standards that encompass recognised procedures, supervision, and minimum criteria for processing serious crime scenes in informal settlement areas. Enhancing the emphasis on effective management and supervision is crucial, holding SAPS

managers and supervisors accountable for their duties and responsibilities during the processing of serious crime scenes in these settings. The research problem identified in this study revolves around the inadequate processing of serious crime scenes in informal settlements by detectives in the SAPS. The proposed solution entails enhancing the effectiveness and efficiency of detectives in processing crime scenes in these areas. The existing SAPS policy on crime scene management overlooks the unique challenges encountered in informal settlements, such as poor infrastructure and environmental conditions. Tailored for well-developed suburb areas, this policy fails to address the specific difficulties encountered in informal settlement areas.

The variance in policy compliance between suburban and informal settlement areas can be attributed to the more practical application in suburban areas owing to their superior physical conditions. To address this, the SAPS necessitates a standardised and documented operational procedure for processing serious crime scenes in informal settlements. This Standard Operating Procedure will furnish guidelines for consistent and effective processing, encompassing common methodologies, best practices, improved techniques, and professional standards. The current SAPS policy on crime scene management has delineated eleven phases, as illustrated in Figure 6.6 overleaf, outlines the implementation steps of the Standard Operational Procedure within the SAPS.

1.	Reporting of serious crimes at the Police station
2.	Activation of crime information to patrol officer to respond to serious crime scene
3.	Responding and arrival on serious crime scene by first responder
4.	Controlling and evaluation of serious crime scene by first responder
5.	Handing over of control of serious crime scene activities to crime scene commander
6.	Planning of walk through the serious crime scene with the relevant role players and the evaluation of the situation
7.	Investigation and processing of both the gathering of all physical evidence and information.
8.	Debriefing by conducting a final review of the serious crime scene and the completed activities with all role players

9.	Restoring of the serious crime scene by the crime scene commander and the investigating officer to remove any items or equipment used during the processing of the serious crime scene
10.	Releasing to the serious crime scene to the owner or accompanied by the crime scene commander after the crime scene processing is concluded
11.	Evaluation and determination whether the serious crime scene has appropriately been processed by the crime scene commander and the investigating officer

Figure 6.6: **An illustration of implementation steps of the standard operational procedure** (Source: Compiled by researcher)

Figure 6.6 illustrates the implementation steps of Standard Operational Procedure within the SAPS. This SOP guideline is an adjunct to the prevailing crime scene processing guidelines within the SAPS policy on crime scene management, along with other pertinent directives and guidelines governing crime scene processing. The researcher formulated this SOP guideline with the aim of enhancing the efficiency of SAPS personnel during the processing of serious crime scenes in informal settlement areas. Its development was guided by an extensive review of relevant literature and insights derived from interviews with study participants.

The current SAPS policy on crime scene management lacks specific guidelines addressing the infrastructural and environmental physical conditions in informal settlement areas, factors that detrimentally affect the processing of serious crime scenes in these regions. Consequently, the inclusion of this SOP guideline is imperative and warrants consideration by the SAPS for potential integration into the existing policy on crime scene management. The operational steps to be followed during the processing of serious crime scenes in informal settlement areas are elucidated in Table 6.8 below.

Table 6.8: **Operational steps in the conceptual SOP guideline for processing serious crime scenes in informal settlement areas**

Step1: Reporting of serious crime incident
Reporting of serious crime

- The call taker, police officer in the vicinity of the criminal incident, or police officer who are approached by a complainant at a police station must obtain all the necessary information accurately and as detailed as possible.
- The information must be captured on the computerised system and dispatch the information via radio request for the nearest patrol vehicle to respond to the serious crime scene immediately.

Location of informal settlement areas

- Informal settlement areas are located long distances away from SAPS police stations, which are normally situated in suburban areas or in the "townships" neighbouring these informal settlement areas.
- Sometimes the mobile devices are also robbed during the commission of the serious crime which make the reporting of the incident to the SAPS difficult.
- The complaint can alternatively be reported in person by the complainant to the police station.
- The personal reporting is time delaying and the prompt response to the serious crime scene is not possible due to the time delay. The time delay creates the risk of contamination on evidence on the serious crime scenes in informal settlement areas.

Obtaining of sufficient and appropriate information

- The call taker or police officer who receive the complaint must obtain all the necessary information accurately and detailed.
- The complainant must be requested to provide a Global Positioning System (GPS) location of the specific serious crime scene location since there are no street names and housing structure numbers in informal settlement areas to indicate specific address locations.
- The obtained information must be captured on the SAPS computerised system and immediately be despatched via police radio to a patrol vehicle to respond to the serious crime scene.

Good recordkeeping

- The police officer who receives the complaint at a police station must record the complaint details in the Occurrence book (OB).
- A police officer at the CSC will write out the complaint in the form of obtaining a sworn statement which will be signed by the complainant.
- A police case docked will be opened record, and the signed statement is filed in the case docket and the case docket will be handed to Detective members in the DSC, to conduct the preliminary investigation, which includes processing of the serious crime scene.

Step 2: Activation of serious crime information to first responder

Activation to serious crime scene by dispatcher

- The activation by the dispatcher, who received information regarding a serious crime, activating and dispatching such crime information to a patrol officer in the vicinity of the reported serious crime scene to respond to the serious crime scene immediately.
- The dispatcher must activate the SAPS member who is nearest to the serious crime scene and provide all relevant information to such member.

GPS location of specific crime scene address

- There are no street names and housing structure numbers in informal settlement areas and thus required an alternative way to locate and respond to a reported serious crime scene in these areas.
- The dispatcher must request the complainant to provide a GPS location of the specific crime scene to be able to despatch and activate members to the serious crime scenes in informal settlement areas.
- The researcher acknowledges that GPS information is often unavailable due to the lack of smartphones technologies among crime victims and complainants in informal settlements areas.

Road infrastructure challenges and difficulties

- First responders to serious crime scenes in informal settlements experience challenges and difficulties with the absence or the lack of access roads to and between housing structures in informal settlements.
- These challenges lead to a delay in locating serious crime scenes and thus influence the response time to serious crime scenes in informal settlement areas.
- The delay also causes the attendance to the serious crime scene being delayed and resulting that control and securing of such serious crime scene take place much later as expected.

Physical conditions that impact on Policing services

- The absence or lack of infrastructure currently in informal settlements makes it difficult for police to patrol these informal settlements and to respond to emergencies or to access serious crime scenes immediately and without any difficulties.
- These informal settlements are characterised by unstructured roads that are mostly of soil and gravel that turns into muddy roads when it rains. The absence of access roads force informal inhabitants to move around using alleyways or footpaths created by the spaces left in between housing structures.

- The absence of roads causes difficulties for SAPS personnel such as detectives as well as members of the Local Criminal Record Centre (LCRC) when trying to access serious crime scenes in these informal settlements.
- SAPS personnel are forced to park vehicles a distance from the actual serious crime scenes as a result of no access roads.
- State motor vehicles is parked in an unsafe area and is unattended distances away from the serious crime scenes.
- The SAPS personnel are left with no other means to move around by using the narrow alleyways or footpaths in between housing structures to access serious crime scenes.
- The SAPS personnel must carry the crime scene investigation equipment walking on foot to the serious crime scenes as the streets and alleyways are very narrow to be accessed with a motor vehicle through the narrow spaces.
- SAPS personnel are risking their safety and lives in carrying crime scene processing equipment by hand in the dark and dangerous alleys and pathways to serious crime scene locations, which made personnel vulnerable to criminal acts such as mugging and robbing.
- During night-time the absence of street lighting creates challenges and make it difficult to trace and locate a specific address where serious crime scenes are located.
- The physical conditions regarding the absence of access roads in informal settlements worsen during the night-time.

Parking of vehicles long distances away from serious crime scenes

- As soon as it becomes evident to the first responder that the parking of state vehicles far away from the actual serious crime scene is not possible, the first responder must inform the dispatcher must be informed to provide support and assistance based on the situation.
- This absence of roads causes difficulties for SAPS personnel such as detectives as well as members of the Local Criminal Record Centre (LCRC) when trying to access serious crime scenes in these informal settlements.
- SAPS personnel are forced to park vehicles a distance from the actual serious crime scenes because of no access roads.
- State motor vehicles is parked in unsafe areas and is unattended distances away from the serious crime scenes.

Using of unsafe alleyways and footpaths

- The SAPS personnel are then left with no other means to move around by using the narrow alleyways or footpaths in between housing structures to access serious crime scenes.

- These personnel must than carry the crime scene investigation equipment walking on foot to the serious crime scenes as the streets and alleyways are very narrow to be accessed with a motor vehicle through these narrow spaces.
- SAPS personnel are risking their safety and lives in carrying crime scene processing equipment by hand in these dark and dangerous alleys and pathways to the crime scenes which made them vulnerable to criminal acts such as mugging and robbing.
- During night-time the absence of street lighting creates a challenge in making it difficult in tracing and locating a specific serious crime scene address.

Step 3: Responding and arrival on serious crime scene

Challenges and difficulties before arrival at serious crime scene

- The first responders to serious crime scenes must report his or her arrival on the serious crime scene to the dispatcher.
- The first responders to serious crime scenes must provide a situational report to the dispatcher on challenges and difficulties experience from the moment they are informed the serious crime incident because they battle to locate the serious crime scene location.
- The SAPS personnel parked the state vehicle distances away from serious crime scenes because of inaccessible road infrastructure and are as a result forced to walk on foot using alleyways and foot paths carrying crime scene processing equipment through dark and dangerous alleyways in informal settlement areas.

Challenges in locating the exact serious crime scene

- The challenges and difficulties to locate serious crime scene address include the absence of street names and unnumbered housing structures.
- These physical conditions in these informal settlement areas delay the arrival of SAPS personnel to immediately attend to serious crime scenes to control and secure serious crime scenes.
- The delay in the immediate attending to serious crime scenes increase of the risk of contamination of evidence on serious crime scene or the removal of evidence from these serious crime scenes.

Physical conditions of unplanned layout of housing structures

- The physical conditions such as the unplanned layout of housing structures are not conducive to be easily accessed in these areas without encountering difficult challenges and risking conditions for SAPS members, who are expected to process serious crime scenes in informal settlements effectively under these physical conditions.

- During night-time the physical conditions creates an even more dangerous conditions as the surroundings in these informal settlement areas are not conducive for the effective processing of crime scenes.
- The type of material that is normally used for the construction of these shacks or shelters such as cardboard, scrap wood wooden boards and plastic increase the risk of fire threats.
- The housing structures in informal settlements are unstable constructed with unreliable scrap material, which creates the risk that it might collapse unexpectedly during the processing of crime scenes.
- The absence or lack of ventilation in housing or business structures is normally caused by the absence or insufficient windows, which occurs when crime is committed indoors.

Energy generation risk in the absence of electricity network

- During night-time informal settlement inhabitants make fires to cook food using various energy methods to prepare food such as paraffin, coal, firewood, oil, petroleum, gas illegally connected electricity extra.
- During wintertime the situation of energy demand is much higher as the inhabitants also need to warm themselves against the cold element of nature and therefore make open fires to ease the cold.
- These various methods of energy generating by informal settlements inhabitants create shack fires risks and led to numerous shacks being destroyed in the past.
- These risks created by the physical conditions such as shack fires that can occur before or during the serious crime scenes processing process are obstructing and influencing crime scene processing by detective personnel negatively.

Risks and threats by SAPS personnel using alley ways between housing structures

- Footprints of possible suspects that lead to and from the serious crime scenes can be destroyed since there are no alternative routes to be taken to the serious crime scenes.
- The exposed electric wires which are illegally connected by the informal settlement's dwellers create the risk of fatalities, electrical shocks to SAPS personnel.
- The risk of possible mugging of crime scene investigation and processing equipment for SAPS personnel whilst walking on foot to the crime scene also exists.

Step 4: Controlling and evaluation of serious crime scene

Difficulties and challenges in controlling serious crime scenes

- The first responder to the serious crime scene must execute all the duties of the Crime Scene Commander until the serious crime scene is handover to the Crime Scene Commander on arrival.
- The control of serious crime scenes in informal settlements is difficult and challenging as the first responder need to deal with the safe securing of the serious crime scene until the arrival of the Crime Scene Commander.
- It is difficult to protect and maintain the integrity of the serious crime scene and control bystanders and onlookers to prevent contamination and destruction of evidence on serious crime scenes in informal settlements because of overcrowding and density in these informal settlements.
- First responder needs to assess the situation and inform the dispatcher to provide assistance and support needed.

Overcrowding

- Overcrowding disrupts and obstructs on proper serious crime scene processing and after an assessment of the situation is made, the dispatcher must be informed to provide support to control crowd at the serious crime scenes.
- Overcrowding, in informal settlements results from the lack of space within the alternative space sourced for housing structures.
- Overcrowding resulting in bystanders and onlookers gathering on the serious crime scenes and it is normally the responsibility of the SAPS to manage and control these crowds.
- It is difficult in informal settlement areas to barricade, prevent people from walking to and from their housing structures whilst processing a serious crime scene.
- The bystanders and onlookers gathering on the serious crime scenes contaminate the crime scene by toughing and removing exhibits on the serious crime scene.
- It is challenging to handle many onlookers and to control large numbers of people and to ensure that large crowds can still use alleyways whilst the investigation is still in progress on the serious crime scenes.
- With a limited number of crime scene processing personnel, it is challenging and difficult to contain and control bystanders and onlookers on serious crime scenes in these conditions in informal settlement areas.
- Unemployment also plays a role in the numbers of bystanders and onlookers as there be many unemployed persons who may be present at such a serious crime scene in informal settlements, even in the middle of a weekday.

Overcrowded housing structures

- Many informal settlement structures are overcrowded, with five and more persons sharing a one-room structure.
- This one room structures are normally used for cooking, sleeping, and living.
- The high population density is contributed by aspects such as traditional customs and extended families that must consist of households with five persons or more.
- Multi-purpose use of housing structures affects crime scene processing as it led to more contamination of the serious crime scene because people are forced to have to continue to use a room where a serious crime was committed before SAPS arrives or before the conclusion of the serious crime scene processing.

Limited space in and around the serious crime scenes

- Detective personnel always have difficulties in controlling the crowds of bystanders and onlookers more so on serious crime scenes in informal settlement areas with limited space in and around the serious crime scenes.
- Prescribed crime scene processing principles cannot be followed because of people who is part of the household present on the serious crime scenes that cannot be moved to other rooms inside the housing structure, which is a one roomed structure.
- Crowds and bystanders first need to be removed from serious crime scenes before the actual processing of a serious crime scene can commence but is more difficult since there is limited space to move them too.
- These crowds and bystanders normally contaminate crime scenes, by touching and removing exhibits as they have to use the same alleyways next to or even having no alternative route than through the serious crime scenes.
- These crowds and bystanders can be due to the conflict and high levels of stress easily become hostile towards to detectives and police personnel.
- These crowds are therefore difficult to control and can be a challenge to manage under such hostile conditions posting a danger and threat to the safety and security of detective personnel, LCRC members and inhabitants of informal settlements, during the processing of serious crime scenes in informal settlements.
- SAPS personnel that are busy doing the serious crime scene processing can get agitated out of fear for their own safety and security in such a hostile situation can get anxious and losing focus in doing the serious crime scene processing correctly and effectively.

Absence of formal access to electricity

- SAPS personnel cannot utilise crime scene processing equipment that is dependent on electrical power to be effective in the processing of serious crime scenes.

- The dispatcher needs to be informed to provide support and assistance based on the situation.
- The absence of formal access to electricity, households in informal settlements use alternative energy carriers which include candles, paraffin, wood, coal for cooking and other energy needs.
- In many instances, use of alternative fuels is problematic because of inadequate regulation and enforcement in these informal settlement areas in respect of consumer standards and safety regulations.
- This physical condition of the absence of electricity in informal settlements obstructs and influences the processing of serious crimes scenes.
- The SAPS personnel experience difficulties in seeing and identifying evidence in the form of exhibits and objects whilst processing serious crime scenes in bad light by using hand torches.
- The serious crime scene processing equipment can therefore not effectively be utilised in the absence of electricity and thus impacting negatively on the value and integrity of the crime scenes.

Step 5: Handing over of control of serious crime scene

Continuity and control of serious crime scenes
- The serious crime scene must be hand over by the first responder to the Crime Scene Manager for the processing of the serious crime scene.
- The continuity and control of serious crime scenes cannot be ensured in informal settlements because of the physical conditions and overcrowding in informal settlements.
- It is difficult in informal settlements to barricade, prevent people from walking to and from their housing structures whilst processing serious crime scenes.
- The bystanders and onlookers gathering on the serious crime scenes contaminate the serious crime scenes by touching and removing exhibits on these serious crime scenes.
- The overcrowding of people in informal settlements disrupt and obstructs effective and proper serious crime scene processing and creates and increase the risks of contamination of evidence on serious crime scenes in informal settlements.

Step 6: Planning and walk through the serious crime scene

Influence by the limited space on planning
- The planning consists of a walk through on the serious crime scene by the Crime Scene Commander and relevant role players.
- The walk through includes an evaluation of the situation to consider appropriate action on the serious crime scene.
- The planning on serious crime scenes in informal settlements is influenced by the limited space in informal settlements housing structures.

- The housing- or business structures are normally consisting of one room structures.
- Many informal structures are overcrowded, with five or more persons staying in a one room structure.
- These individuals utilised this one room structures as a place to prepare food, as a dining room, as a living room and as a bedroom to sleep.
- The multi-purpose use of these housing structures affects the processing of serious crime scenes as the presence of people of the household are forced to continue to use the housing structure where the crime was committed before the arrival of the SAPS or before the completion of the processing of the serious crime.
- This means that when the housing structure became a serious crime scene all these individuals should be accommodated or to be inconvenienced especially during night-time.

Step 7: Investigation and processing of serious crime scene

Unsafe and hazardous housing structures
- The investigation and processing activities includes the gathering of all physical evidence and relevant information.
- The Crime Scene Commander is responsible for managing various aspects of the crime scene investigation process, including the processing of serious crime scenes.
- Detective personnel and SAPS members of the LCRC cannot perform serious crime scene processing duties, in informal settlements effectively as a result of the infrastructural- and environmental physical conditions when processing serious crime scenes.
- These SAPS personnel are disturbed and or obstruct by these conditions that contributes to risks and realities that are prevalent in informal settlement areas.
- These contributing risks and realities are factors and conditions such as the poor quality and bad construction of housing structures that are hazardous and unsafe to inhabitants and SAPS personnel.
- There are limited and restricted space for movement in these housing structures for SAPS personnel, as well as for the movement of crime scene investigation equipment.
- There are no or insufficient ventilation in this one room housing structures.
- The are no wastewater management and solid waste management.
- These factors disturb and or obstruct the processing of serious crimes, especially the investigation and processing where vital information and evidence must be collected on serious crime scenes in informal settlements.

Step 8: Debriefing session

Utilisation of best practices to overcome future obstacles

- The debriefing includes the conducting of a final review of
    - the serious crime scene and the completed activities with all
    - relevant role players during a debriefing session by the
    - Crime Scene Commander
- The infrastructural-and environmental physical conditions in informal settlements influence and hinders the effectiveness of the processing of serious crime scenes in informal settlement areas negatively.
- The difficulties and challenges encountered that impact negatively on the processing of serious crime scenes must be included in the debriefing session.
- Possible best practices used to overcome obstacles and challenges encountered during the processing of serious crime scenes in informal settlements can be used for future application in the same or similar situations when processing serious crime scenes in informal settlements.

Step 9: Restoring of serious crime scene

Unhygienic environmental and hazardous living conditions
- During the restoring, the Crime Scene Commander and the Investigating Officer are responsible for removing any items or equipment used during the crime scene attendance and processing.
- The unhygienic living conditions and environmental hazards prevalent in informal settlements have a detrimental impact on the well-being and health of SAPS personnel.
- These conditions and surroundings impeding on the SAPS personnel's ability to effectively perform their duties on effectiveness during the processing of serious crime scenes in informal settlement areas.
- The physical environment in these settlements characterised by unhygienic conditions such as, contaminated groundwater and a proliferation of flies, heightens the risk of contamination.
- SAPS personnel consequently experience pressure to expedite serious crime scene processing to prevent further deterioration of conditions, inadvertently leading to the unintentional oversight of crucial information and evidence.
- This pressure to expedite compromises the integrity of the serious crime scene processing.
- Despite these challenging circumstances, SAPS personnel face tremendous pressure to uphold the effectiveness and integrity of crime scene processing, even within informal settlements where adverse physical environmental conditions hinder the restoration of serious crime scenes.

Step 10: Releasing of serious crime scene

Multi-purpose utilisation of housing structures
- It is important the Crime Scene Commander overseeing the release of the crime scene and concluding the processing of the serious crime scene.

- The Crime Scene Commander holds a crucial responsibility of ensuring that all aspects are effectively executed that the crime scene should be released after the crime scene processing is concluded.
- The multi-purpose utilisation of one roomed housing structures disturbs the processing of serious crime scenes as the presence of residents of the family are required to stop continue to use the housing structure from the time it becomes a serious crime scene.
- All the inhabitants of the household need to be accommodated or be inconvenienced especially if the serious crime was committed during night-time.
- The inconveniencing of the inhabitants of this one roomed housing structure is always challenging to these families.
- There are normally more than five people staying in a specific housing structure, which is used to prepare food, to eat meals and to sleep in the very same one roomed housing structure.
- When investigators are satisfied that they have thoroughly documented the crime scene and associated evidence, and that they have recognised and collected where appropriate every relevant item, the crime scene can be released.
- Once a serious crime scene has been released, it is usually not possible to go back and collect anything else, because there is no longer a direct chain of custody from the original serious crime scene and evidence collected after a crime scene is released could be ruled inadmissible by a court.
- Serious crime scenes can only be released when it is certain that all the facts, evidence and information have been collected obtained and the physical conditions in informal settlements does allow it.
- During night - time without electricity and no proper lights it is difficult to observe and identify objects and exhibits in and around serious crime scenes before releasing serious crime scenes.

Step 11: Evaluation

Uncertainties surrounding the thoroughness of attention to essential elements
- The Crime Scene Commander and the Investigating Officer have a combined responsibility to ensure that several key aspects are attended to in order to effectively process a serious crime scene.
- They must assess and determine whether the serious crime scene has been appropriately processed.
- The presence of difficult infrastructural-and environmental physical conditions in informal settlements hampers the processing of serious crime scenes, giving

> rise to uncertainties surrounding the thoroughness of attention paid to essential elements.
>
> - These adverse physical conditions in informal settlement areas pose obstacles and have a negative impact on the successful processing of crime scenes.
> - Ensuring adequate processing of serious crime scenes in informal settlements is essential, yet achieving a definite determination is often unattainable.
> - Additionally, environmental factors within these settlements play a significant role, as they can exert substantial influence and contamination on serious crime scene evidence.
> - Variables such as wind, sunlight, extreme heat, rain, snow, and temperature fluctuations have the potential to cause damage to serious crime scenes in informal settlement areas.

(Source: Concept developed by researcher)

The SAPS managers and supervisors at Provincial, District, and Police Station levels play a collective role in the context of managing and supervising the processing of serious crime scenes in informal settlements. This ensures the provision of necessary assistance, guidance, and supervision to SAPS personnel engaged in processing serious crime scenes in informal settlements.

6.10.1.1 Basic key roles in the processing of serious crime scenes in informal settlement areas

Key roles in the processing of serious crime scenes in informal settlement areas are designated to senior police commissioned officers, acting as managers and supervisors. Emphasising the importance of effective management and supervision, SAPS managers and supervisors should be held accountable for their duties and responsibilities during the processing of serious crime scenes in these areas. The fundamental roles critical to the processing of serious crime scenes in informal settlement areas at police stations include the Occurrence Book, investigator, Duty Officer, Detective Service Commander, Station Commander, District Commissioner, and Provincial Commissioner. Each role is sequentially involved in the processing, with specific responsibilities outlined for each position.

- **Occurrence Book (OB) Writer**

The OB Writer is normally the first police contact with a victim or third party who is reporting a crime, and they are normally located in the Client Service Centre (CSC) at

a police station. The OB Writer is responsible for recording the details of all crimes and incidents reported for the local police station in the OB at the police station. The OB is the primary record document used for recording details of all crimes and incidents.

- **Investigator**

The investigator is normally an experienced Detective officer who is based in the local DSC at the police station and has a primary responsibility for the preliminary investigation of reported crime, which includes the processing of serious crime scenes.

- **Duty Officer**

The Duty Officer is a commissioned officer who is on call for a period of seven days for a specific police station area and is responsible for visiting the specific station on certain intervals during after-hours and is also expected to visit all serious crime scenes within the policing precinct. The duty officer is an experienced officer who is responsible for managerial oversight of the effective running of the police station including during after-hours.

- **Detective Service Commander**

The Detective Service Commander is responsible for the management and supervision of all criminal investigations within the police station precinct, which includes the processing of serious crime scenes in informal settlement areas.

- **Station Commander**

The Station Commander is in overall command and supervision of the local police area and the police station and is directly responsible and accountable for all police investigations and police activity including the processing of serious crime scenes in informal settlement areas.

- **District Commissioner**

The District Commissioner is in overall command of a District and is directly responsible and accountable of all policing activity, including the processing of serious crime scenes in informal settlement areas in the district.

- **Provincial Commissioner**

The Provincial Commissioner is in overall command of a Province and is directly responsible and accountable of all policing activity, including the processing of serious crime scenes in informal settlement areas in the province. For the purposes of this SOP these roles are also referred to as Police managers and supervisors.

All the afore-mentioned individual role players are instrumental in ensuring that the processing of serious crime scene in informal settlement areas are effectively processed. The SAPS managers and supervisors have the responsibility of managing and supervising police operational activities such as the processing of serious crime scenes in informal settlement areas effectively. Apart from the managerial and supervisory role of SAPS managers and supervisors the SAPS also on a weekly basis assigns commissioned officers as duty officers on the different levels such as national, provincial, district and police station, to visit serious crime scenes in a specific area. These officers are assigned as Duty Officers, who is on call for a period of seven days on a 24- hour basis for a specific police station area. The duty officer is an experienced officer who is responsible for managerial oversight of the effective running of the police station including during after-hours.

Drawing upon the literature and participant responses, the researcher has developed a conceptual Standard Operating Procedure (SOP) guideline with the aim of enhancing the SAPS's effectiveness in processing serious crime scenes within informal settlement areas. The proposed SOP provides explicit directions and detailed instructions to ensure consistent and efficient handling of such crime scenes. By fostering uniformity within the SAPS, this guideline is developed to also significantly improve the processing of serious crime scenes in informal settlement areas throughout South Africa.

6.11   CHAPTER SUMMARY

The aim of this chapter was to examine the processing of serious crime scenes in informal settlements in South Africa. The research methodology enhanced the promotion of trustworthiness and the identification of emerging themes. The study evaluated the training and development provided to participants in the processing of serious crime scenes, focusing on their competency level and effectiveness.

The study further examined the current method of processing serious crime scenes in urban and informal settlement areas by also highlighting the impact of infrastructural and environmental conditions on serious crime scenes in suburban and informal settlement areas. However, the study revealed disparities in infrastructural and environmental conditions between suburban and informal settlement areas, affecting the processing of serious crime scenes.

The study's findings also highlighted the need for improved infrastructure and environmental conditions for crime scene processing by evaluating the practicality and effectiveness of the SAPS policy on crime scene management in informal settlements. Copious participant responses reflected on the inadequacy of current practices, which is largely induced by to the inherent infrastructural and environmental challenges in informal settlement areas, which were not even user-friendly. The study reveals disparities in infrastructural and environmental conditions between suburban and informal settlement areas, which significantly impact the processing of serious crime scenes. The study suggests a thorough examination of these physical conditions to improve crime scene processing effectiveness in informal settlements.

Based on the participants' responses, the study also evaluates the practicality and effectiveness of the SAPS policy on crime scene management in informal settlements, and concludes that suburban areas have more user-friendly guidelines than the informal settlement areas. A conceptual Standard Operating Procedure (SOP) guideline has been developed by the researcher specifically for the SAPS, with the aim of improving the efficiency of processing serious crime scenes within informal settlement areas. This SOP offers explicit directives and comprehensive instructions crucial for the consistent and efficient handling of serious crime scenes within the SAPS.

The overarching goal is to establish uniform practices across the SAPS when addressing serious crime scenes in informal settlement areas in South Africa. The SOP guidelines recommend strategies for navigating and overcoming challenges posed by obstructive infrastructural and environmental conditions during the processing of serious crime scenes in these areas. Therefore, this envisioned SOP guideline seeks to enhance the effectiveness of processing serious crime scenes

within the SAPS in informal settlement areas by providing clear directions and detailed instructions, fostering uniformity in practices.

CHAPTER 7: RESEARCH FINDINGS, RECOMMENDATIONS AND CONCLUSION

7.1   INTRODUCTION

This chapter basically presents the findings, recommendations and conclusions relating to the entire study in the context of its research problem, research aim, research objectives, as well as the research questions as outlined variously in Chapter 1. This research was motivated by the constant increase in serious crimes cases, as evident in the crime statistics of the SAPS from the respective periods between the 2013/ 2014 and 2011 to 2021 financial years. The constant increase of serious crimes and incorrect processing of serious crime scenes could be a possible indication that emphasises the problem in terms of the processing of serious crime scenes in informal settlement areas and the increase in serious crime statistics in relation to this specific research.

As formulated in Chapter 2, the methodological framework of this study was based on the qualitative research design approach. This approach incorporated literature reviews and conducting interviews with the selected participants as a means of data collection to distinguish the opinions of the participants regarding the problem being researched. The interview meetings with the relevant research participants were used to explore their experiences regarding the processing of serious crime scenes in formal settlement areas. The researcher applied an integrated data gathering approach according to which data from literature, documentary sources, interviews and the researcher's personal experience was integrated in order to obtain a better understanding of the problems that detectives experienced during the processing of serious crime scenes in informal settlement areas in particular. The information was then categorised and classified in order to make sense of its meanings. This information was subsequently integrated and summarised in order to present an accurate, detailed, and suitable interpretation of the research and its associated processes.

In Chapters 3, 4, 5 and 6, a review was conducted of the relevant international and local South African literature in order to acquire an understanding of the research rationale and related views that explain, clarify, or provide insight into the concepts

and problems under investigation (Aurini et al., 2016:33). The review also enabled the researcher's broader understanding of the current situation of the processing of crime scenes in South Africa. In that regard, the South African legal framework regarding criminal investigation and procedures was explored for a contextual discussion and explanation of the processing of serious crime scenes in informal settlements.

International experiences concerning the processing of crime scenes were compared to the South African context to address the similarities and differences in the context of this study. In addition to the reviewed literature, both the international and local South African experiences were obtained from interview-based engagements with selected participants. These experiences were used as a foundation to describe and explain the future application of the findings emanating from this research.

7.2   RESEARCH AIM AND OBJECTIVES

This research aimed to assess the processing of serious crime scenes in informal settlements by detectives, aiming to recommend enhanced, realistic, practical, feasible, and viable procedures for such contexts. Through a comprehensive analysis of the processing of serious crime scenes in informal settlements, the study sought to gain a profound understanding of the involved procedures, employing explorative, descriptive, and explanatory steps and phases. Accordingly, the fundamental aim of the study was: To explore and assess the processing of serious crime scenes by detectives in the Gauteng Province informal settlements.

The research also sought to furnish the SAPS management with practical guidelines, procedures, and recommendations for improvements in the processing of crime scenes in informal settlement areas. In order to realise the aim of this research, the following objectives were developed:

- To describe and explore the best practices used during the processing of crime scenes.
- To determine what the existing policy of the SAPS, National Instruction 1 of 2015, regarding the processing serious crime scenes entails.
- To determine the physical conditions that complicate and influence the non-compliance and non-adherence of the SAPS policy requirements by detectives when processing serious crime scenes in informal settlements.

- To determine and assess the present procedure followed by detectives during the processing of serious crime scenes in suburban areas and in informal settlements (to establish the scientific reasons for a difference in the processing of serious crime scenes by detectives in suburban areas and informal settlements notwithstanding one policy on crime scene processing currently in use by the SAPS).
- To determine new knowledge on the aspects that negatively impact and obstructing the processing of serious crime scenes in informal settlements.
- To develop practical guidelines, procedures, and recommendations for the SAPS on crime scene processing of serious crime scenes in informal settlements.

Based on its objectives, the study recommended an original interest to the processing of serious crime scenes in informal settlements. This, in turn, contributes to the body of knowledge with the intention to influence the SAPS' legal framework concerning the processing of serious crime scenes in informal settlements.

7.3   RESEARCH QUESTIONS

For the purpose of providing direction and structure to the study, enhancing understanding of the research problem, enabling the researcher to contribute to possible solutions, and accomplishing the objectives of this study, the following research questions were formulated and answered in this study:

- What are the best practices used during the processing of crime scenes?
- What does the existing policy of the SAPS, National Instruction 1 of 2015, regarding the processing serious crime scenes entails?
- What are the physical conditions that complicate and influence the non-compliance and non-adherence of SAPS policy requirements by detectives when processing serious crime scenes in informal settlements?
- What is the present procedure followed by detectives during the processing of serious crime scenes in suburban areas and in informal settlements?
- What is the present procedure followed by detectives during the processing serious crime scenes in suburban areas? (Why are detectives following different methods in the processing of serious crime scenes in suburban areas and informal

settlements in the existence of one policy on the processing of serious crime scenes in the SAPS?)

- What new knowledge became known and how can it be used on the aspects that negatively impact and obstructing the processing of serious crime scenes in informal settlements?

- What practical guidelines, procedures and recommendations can be offered to the SAPS concerning the processing of serious crime scenes in informal settlements?

7.4   RESEARCH FINDINGS

The research findings, which are based on the information obtained from both international and national sources, as well as from the responses of participants interviewed in this study. As such, these research findings are reported below in order to answer the specific research questions in this study.

7.4.1   Processing of crime scenes

The findings in this regard were intended to answer the first research question, namely: "What are the best practices used during the processing of crime scenes?" This study found that the literature review emphasises the systematic, meticulous, and scientific nature of crime scene processing, highlighting its essential role in major criminal investigations (Baxter, 2015:7).

The review reveals further that crime scene processing involves the thorough examination and evaluation of a crime scene to recover physical evidence and document its condition. Significantly, the study underscores that crime scene processing is instrumental in locating and recovering evidence vital for establishing elements of an offense, offering valuable insights for individual investigative steps within an overall plan (Zinn & Dintwe, 2016:12). The literature identifies key aspects of crime scene processing, including the discovery, collection, identification, preparation, analysis, and preservation of evidence.

This study found that the literature review underscores the importance of processing every crime scene with specific goals to guide the investigator effectively. These goals, aimed at keeping the crime scene investigator on the right pathway, include avoiding rushing the investigation, eliminating mistakes, and minimising omissions while

maintaining a neutral and open-minded approach (Gardner & Krouskup, 2018:1). The end goal of crime scene processing, as revealed in the literature, is the collection of evidence in a pristine condition. Crime scene technicians are advised to follow six recommended basic steps, which involve assessing, observing, documenting, searching, collecting, and analysing (SAPS, 2015:2). Additionally, the literature review highlights that the ultimate objective of crime scene investigation is to identify, recover, and document physical evidence through a systematic and careful collection of facts, clues, and physical evidence.

Based on the reviewed literature, this study found that a crime scene is defined as the area or surroundings where an act resulting in a crime occurred. The review also unveiled that the working definition of a crime scene extends to any location where evidence may be discovered to help explain the sequence of events, and a single crime scene can encompass multiple locations (Monckton-Smith et al., 2013:1). Furthermore, the literature indicates that a crime scene not only signifies proof that a crime has taken place, but also serves as the initial focal point of a criminal investigation by containing evidence connecting suspects to the crime. In the South African context, the literature characterises the scene of the crime as a "field laboratory," emphasising its role in housing items of dispute for subsequent laboratory tests (SAPS, 2015:17).

Informed by the literature review, the study found that crime scenes can be naturally categorised into various types, including primary, secondary, indoor, outdoor, and mobile/conveyance (James et al., 2014:42). The review also highlighted that the crime scene is the location where all types of evidence related to the criminal activity can be found, leading to the classification of these crime scenes based on the origin of the initial criminal activity. The literature provided a comprehensive description of these five different types of crime scenes, both on an international scale and within the context of South Africa. The data obtained from participants indicated a consensus among the majority, aligning with the classification presented in the literature.

This study found that, according to the literature review, evidence in a judicial context is defined as any logically proven or disproven fact, encompassing oral and written statements, documents, and objects (Lyle, 2012:28; Palmiotto, 2013:164). Evidence plays a crucial role in legal investigations, serving to establish facts in court. The

literature highlights that evidence can take the form of oral or physical proof and can be categorised as direct, circumstantial, testimonial, and physical evidence. Additionally, the establishment and purpose of the SAPS, as revealed in the literature, are rooted in the law and regulated by legal provisions, including the Constitution (Act 108 of 1996), the South African Police Service Act (Act 68 of 1995), and the Directorate for Priority Crime Investigation (Hawks). The objectives of the SAPS encompass crime prevention, investigation, maintaining public order, citizen protection, and law enforcement.

The literature further details the SAPS Act, addressing powers, duties, and functions of SAPS members, regulations, and national orders. The Criminal Procedure Act (Act 51 of 1977) regulates the criminal justice process, consisting of pre-trial, trial, sentencing, and remedies after judgment stages. Police officials, as outlined in the literature, play a crucial role in the pre-trial process, exercising powers such as searching, seizing, arresting, and using force. It is emphasised that evidence obtained in a manner violating the Bill of Rights may be excluded at trial (Hoctor, 2017:169). Various types of evidence, including testimonial, demonstrative, circumstantial, physical, and documentary, are detailed in the literature.

This study found that, based on the reviewed literature, physical evidence is defined as tangible objects that the court can examine to establish connections and determine proof beyond a reasonable doubt (Ogle, Jr. & Plotki, 2018:4). Not always visible to investigators, physical evidence comprises objects linked to the commission of a crime or tort, with virtually any physical object capable of becoming evidence in a criminal investigation. The literature emphasises that physical evidence manifests as specific items discovered at crime scenes, collected for analysis, and presented during court proceedings (Ware, 2021:16). Importantly, physical evidence is regarded as inherently truthful, representing what it is without deception.

This study found further that physical evidence holds paramount importance in criminal trials as it is tangible, irrefutable, and subject to scientific analysis, providing undisputed facts. The literature review emphasises the value of physical evidence in crime investigations, as it possesses the capacity to establish the elements of a crime, identify individuals involved, connect suspects with victims, exonerate the innocent, support victim testimony, and potentially elicit confessions (Baxter, 2015:225).

Furthermore, the literature review underscores the crucial role of physical evidence in answering investigative questions related to responsibility, motive, time, location, reason, and method of a crime. Physical evidence is deemed essential in establishing associations between crime scenes, offenders, victims, and discovery, with investigative values at both face value and location levels. The tangible nature of physical exhibits allows juries to visually inspect and touch objects, constituting a significant advantage in some cases (Olge & Plotkin, 2018:46).

This study found that the literature emphasises the fundamental principle that every contact leaves a trace, allowing crime scene investigators to confirm the presence of physical evidence at each crime scene. The literature suggests that an empty scene results only from human errors or a lack of proper tools, assuming the use of appropriate investigative equipment. Furthermore, the study reveals that the Locard principle, a longstanding and validated method of crime investigation, continues to be employed and has never been discredited (Lochner & Zinn, 2015:13). The literature underscores the Locard's principle's argument that individuals invariably leave traces at a crime scene, asserting that perpetrators will inevitably bring, leave, and deposit something indicative of their presence.

This study found that the literature underscores the significance of contamination, defined as the detrimental alteration of evidence that can compromise the integrity of the original exhibit or crime scene, potentially leading to the loss of crucial evidence (Gehl & Plecas, 2016:113). Accordingly, various factors contributing to evidence contamination at crime scenes were identified, including police interference, suspects covering up evidence, victims handling evidence, animals transferring or removing it, weather-related contamination, and investigators failing to adhere to proper procedures, resulting in cross-contamination or contamination of exhibits during investigations.

The literature further highlights three challenges for investigators posed by crime scene contamination: preventing contamination, controlling ongoing contamination, and documenting known contamination (Fisher, 2013:86; Manamela et al., 2016:103). The study emphasises the potential for contamination during crime scene collection and stresses the importance of controlling it to preserve forensic integrity. Careful

packaging, handling, and storage of evidence are deemed essential to prevent breakage, spoilage, and damage. The literature also acknowledges the role of weather conditions and uncontrolled activities in contributing to contamination (Wamukoya, 2019:3).

This study found that the literature underscores the essential requirement for evidence to be admissible in court, necessitating a meticulously documented chain of custody. This chain involves recording the evidence's discovery, location, preservation, and security after recovery. Emphasis is placed on the importance of maintaining a continuous and documented chain of evidence, meticulously tracking its custody from discovery to disposal (Jordaan, 2015:380). Additionally, the literature stresses the need for an unbroken chain of custody throughout the entire process, from the initial gathering phase to its eventual presentation in court. The chronological sequence of evidence is highlighted, ensuring a comprehensive record of every individual or activity that has maintained custody or interacted with the confirmed evidence, ultimately ensuring its preservation and admissibility in court.

On the strength of its reviewed literature, the study established that crime scene processing is largely based on the systematic and scientific process employed by law enforcement investigators to document and preserve locations of criminal activity for evidence recovery (Van der Watt, 2015:163). It encompasses tasks such as identifying witnesses and suspects, generating information for investigative plans, and preserving evidence. While the literature primarily addresses well-developed suburban areas, it implies the need for a more practical approach in informal settlements. The research suggests that crime scene processing procedures exhibit greater effectiveness in developed suburban areas. It further highlights the methods involved in crime scene processing, indicating that well-developed suburban areas tend to have more efficient procedures for assessing, observing, documenting, searching, collecting, and analysing physical evidence (da Cruz et al., 2019:19).

This study found that the Detective Service within the SAPS plays a pivotal role in the thorough investigation and detection of all reported crimes, leading to the identification and successful prosecution of offenders. The research underscores the vital importance of crime scene processing in the overall crime investigation process. It further indicates that the Division Detective Service, operating within the SAPS, is

tasked with overseeing crime investigations, with members attached to this division at the police station level being responsible for conducting crime scene processing (SAPS, 2017:2).

7.4.2   South African Police National Instruction Guidelines

The findings in this regard focused on answering the second research question, namely: "What does the existing policy of the SAPS, National Instruction 1 of 2015, regarding the processing serious crime scenes entails?" This study found that the SAPS Detective Service operates with varying levels of accountability, spanning national, provincial, district, and police station levels, particularly in the realm of crime investigation. These levels of accountability are detailed and expounded upon in the subsequent findings of this study.

This study found that the National Commissioner, reporting to the Minister of Police, serves as the responsible Head and Accounting Officer of the SAPS. The Deputy National Commissioner for Crime Detection, in turn, is answerable to the National Commissioner for overseeing the Detective Service in crime investigation (SAPS, 2020:np). Meanwhile, the Divisional Commissioner for the Detective Service and Forensic Services is accountable to the Deputy National Commissioner, Crime Detection, ensuring effective and efficient functioning of all Detective Service components and units. This research highlights the role of the Divisional Commissioner Detective Service in managing activities, maintaining uniformity, and upholding policy standards within the Detective Service. Additionally, the Component Head of Crime Investigation Service is responsible for the efficient functioning of Detective Service components at SAPS police stations. The investigation of crime, including the processing of serious crime scenes in informal settlements, is revealed to be integral to SAPS investigation activities.

This study further found that the current SAPS policy, National Instruction 1 of 2015, implemented in that year, has replaced the previous SAPS Policy on Crime Scene Management, 2 of 2005 (SAPS, 2015:2). The research indicates that while the current policy references the management of crime scenes, the organisational directives for processing crime scenes during investigation remain largely similar. Furthermore, the study reveals that the previous Detective Policy 2 of 2005 on crime scene

management was repurposed into the current SAPS policy, National Instruction 1 of 2015, without undergoing any revision or amendment; it was simply assigned a new National Instruction number in 2015.

This study found that SAPS Policy, National Instruction 1 of 2015, governs crime scene management, ensuring the proper control, documentation, investigation, and preservation of evidential value. It identifies eleven phases for processing crime scenes, a consensus among international and domestic authors, applicable to various crime scenes reported to the SAPS (SAPS, 2015:2). However, the research notes a gap in addressing crime scenes in informal settlements, suggesting that these phases, while beneficial for well-developed suburban areas, may not be practical in underdeveloped areas due to infrastructural and environmental conditions. The literature indicates an agreement between international authors and SAPS policy on the eleven phases, including reporting, activation, responding, controlling, planning, investigation, processing, debriefing, restoring, releasing, and evaluation. While the research reveals similarities between SAPS policy guidelines and international literature, it also highlights the policy's lack of specific guidelines for processing serious crime scenes in informal settlement areas.

This study found that the SAPS Detective Service Policy, National Instruction 12 of 2017 delineates the duties and responsibilities of the Detective Service across various levels namely national, provincial, district, and local police station levels (SAPS, 2017:2). The research also uncovered specific National Instructions issued by the SAPS, such as the National Instruction 3 of 2011, the National Instruction 8 of 2017, the National Instruction 13 of 2017, and the National Instruction 1 of 2015. Collectively, all of these National Instructions play a crucial role in crime investigation, particularly in the management of crime scenes, encompassing the processing of crime scenes within the SAPS.

7.4.3   Informal settlements in the context of crime scene processing

The findings in the above regard aimed at answering the third research question, namely: "What are the physical conditions that complicate and influence the non-compliance and non-adherence of SAPS policy requirements by detectives when processing serious crime scenes in informal settlements?" The study found that

informal settlements pose significant challenges to policing in general, and crime scene processing in particular. Such challenges are propelled by factors such as population growth, migration, affordable housing scarcity, weak governance, economic vulnerability, discrimination, marginalisation, conflict, natural disasters; as well as climate change (Niva et al., 2019:1; Parnell & Seto, 2018:1).

The literature suggests that municipalities are increasingly tasked with managing public basic services in informal settlement areas (Patel, 2013:32). Furthermore, the research indicates that urbanisation and housing present global challenges for governments, with infrastructural and environmental conditions in informal settlements deemed disheartening and depressing for inhabitants, a consensus among international and domestic authors (World Cities Report, 2020:24).

This study found that global informal settlements encounter challenges such as inadequate housing, limited resources, vulnerability to climate change, discrimination, and heightened exposure to disease and violence, as highlighted in the literature. Poorly planned urbanisation contributes to spatial inequalities, economic hardship, and substandard living conditions, establishing informal settlements as dominant residential forms in numerous countries as urban populations continue to grow (World Cities Report, 2020:24).

This study concurs with the literature that global challenges in housing affordability persist, resulting in insufficient housing options and informal settlements for low-income households, as indicated in the literature (World Cities Report, 2020:24). Recommendations from the literature emphasise the need for governments to apply the following: implement rights-based policies, integrate people and systems; provide affordable housing; promote participatory data collection and prioritise land management; employment diversity; and infrastructure reintegration in informal settlements to address issues like inadequate social services, substandard housing, and unsafe environments (Monney et al., 2013:728; World Cities Report, 2020:26). The literature further outlines eight challenges for inclusive engagement with excluded groups in developing countries, including household income limitations, state investment capacity, political will, basic data deficiencies, limited participation space, a vision for inclusive cities, and international support (Ziblim et al., 2013:4).

The research indicates that South Africa's urbanisation and housing challenges contribute to poverty and insecure housing, leading to the emergence of informal settlements (Kanyane & Ilorah, 2015:4). These settlements, influenced by illegality, poverty, and social stress, adversely impact crime scene processing, particularly in complex crimes like vehicle hijacking, residential robberies, and business robberies. Notably, the SAPS crime scene management policy prioritises developed suburban areas, overlooking the challenges in underdeveloped informal settlements.

South Africa's housing crisis, particularly in informal settlements, persists despite progressive legal and policy frameworks, influenced significantly by apartheid (Kanyane & Ilorah, 2015:4). These settlements continue to grapple with insufficient housing, basic services, and inadequate poverty alleviation policies, despite government initiatives. The literature also highlights the South African government's utilisation of diverse frameworks, such as the Constitution of the Republic of South Africa (No 108 of 1996), the Housing Act (No. 107 of 1997), the Breaking New Ground initiative (2004), the National Development Plan (2012), and the White Paper on Policing (2016), to address the challenges of informal settlement growth and enhance poverty livelihoods.

However, there is criticism concerning the housing crisis, despite its recognition by the Constitution (Act 108 of 1996) and various other legal and policy instruments (Tissington, 2011:8). Section 26 mandates government provision of housing and social and economic development (South Africa, 1996). However, informal settlements significantly deviate from these provisions, facing challenges such as health risks, environmental degradation, pollution, deforestation, and the absence of provisions for cooperative governance in upgrading informal settlements (World Cities Report, 2020:16).

This study found that the literature unveils insights into the Housing Act of 1997 in South Africa, delineating national housing policy and sustainable development principles (Mikati et al., 2018:481). The Act mandates municipalities to guarantee residents' access to adequate housing, prevent unsafe conditions, and deliver efficient services. The Act prioritises the needs of the poor and aims to reduce social exclusion by emphasising on factors such as non-discriminatory, pro-poor, racially integrated,

and participatory approaches to upgrading informal settlements (Mikati et al., 2018:481).

In this study, it was found that the literature highlights the National Development Plan (2012) proposed ambitious goals to eradicate poverty and reduce inequality in South Africa by 2030 (Department of Human Settlements, 2016). The plan focuses on building an inclusive economy, expanding services, stabilising the economy, and fostering effective leadership. Described in the literature, the plan addresses various facets, including tackling inefficiencies, creating sustainable environments, addressing urban inefficiencies, resolving housing issues, building safer communities, and strengthening the Criminal Justice System (South Africa, 1977).

The study further established that the literature elucidates the NDP Vision 2030, which aims to transform South Africa's spatial economy and society by integrating capabilities, opportunities, and employment (Cirolia, 2017:443-444). The literature identifies five key priorities within this vision, including strengthening the criminal justice system, fostering a professional Police Service, demilitarising the Police Service, enhancing prison rehabilitation efforts, and implementing a safety integrated approach. Additionally, the literature suggests that recruitment processes should attract competent professionals through a two-track system. Furthermore, a 2007 Review of the South African criminal justice system recommends a comprehensive seven-point plan to modernise the system, incorporating elements such as a new coordinating and management structure, increased cooperation, and public involvement in the fight against crime (National Planning Commission 2021).

7.4.4 Best practices in the processing of serious crime scenes in informal settlements

The findings in the above regard were intended to respond to research questions number four to number seven as articulated in Section 1.6, all of which are indicated as follows:

- What is the present procedure followed by detectives during the processing of serious crime scenes in suburban areas and in informal settlements?
- What is the present procedure followed by detectives during the processing serious crime scenes in suburban areas? (Why are detectives following different methods

in the processing of serious crime scenes in suburban areas and informal settlements in the existence of one policy on the processing of serious crime scenes in the SAPS)?

- What new knowledge became known and how can it be used on the aspects that negatively impact and obstructing the processing of serious crime scenes in informal settlements? and

- What practical guidelines, procedures and recommendations can be offered to the SAPS concerning the processing of serious crime scenes in informal settlements?

7.4.4.1 The involvement of detectives and LCRC members in the processing of serious crime scenes

The interview-based engagement with the participants established that participants engaged in 24-hour detective duties at local police stations, and are responsible for conducting preliminary investigations, including the processing of serious crime scenes (see Section 6.4.2 in Chapter 6). The responses from these participants align closely with the roles and responsibilities of first responders, involving the assessment, control, and protection of crime scenes (Dutelle, 2017:55; Geldenhuys, 2017:47). Additionally, the research highlights that participants diligently carry out their duties on serious crime scenes, adhering to the SAPS policy on crime scene management and Standard Operating Procedure (SOP) guidelines provided by the Division Forensic Services, Criminal Record Centre. The participants exhibit familiarity with the purpose of their involvement, understanding the expectations regarding the processing of serious crime scenes, and rely on a combination of formal training, practical experience, on-the-job training, and insights gained from experienced colleagues.

7.4.4.2 Current procedure followed when processing serious crime scenes

In this study, it was found that participants exhibit proficiency in processing serious crime scenes and conducting preliminary investigations (see Section 6.5.1 of Chapter 6). They demonstrate competence in their roles and responsibilities, aligning with the SAPS policy on Crime Scene Management, National Instruction 1 of 2015 (SAPS, 2015:2). Particularly, Sample B participants show a high level of familiarity with the Division Forensic Services' Crime Scene Investigation Quality Management Standard Operating Procedure (SOP) guidelines, ensuring meticulous crime scene processing, accurate documentation, and the preservation of evidential value item integrity.

The research underscores that participants bring extensive experience and training to the processing of serious crime scenes. Notably, the study reveals significant differences in processing serious crime scenes between informal settlements and suburban areas, attributed to varying infrastructural and environmental conditions. Furthermore, the research sheds light on South Africa's historical racial divisions, notably the Group Areas Act, resulting in marginalised settlements facing infrastructural and environmental injustices, limited service access, and substandard physical conditions. Participants from different sample groups emphasise the global importance of policing agency guidelines, particularly in regulating crime scene processing. The study indicates strong support among participants for guidelines aimed at enhancing the efficiency of crime scene processing. Collectively, the participants' responses concur with the views expressed by Houck et al. (2012:59), who explain that the crime scene should be secured or cordoned off in order to prevent intruders from entering the area, which also limits the public's access and protects crime scene evidence from being contaminated.

7.4.4.3 Policy instruction or organisational guidelines regulating current procedure

This study reveals that participants in Sample A rely on the SAPS policy for crime scene management and actively engage in training courses to enhance their crime scene processing and investigation skills (see Section 6.5.2 in Chapter 6). The research highlights that these participants adhere to both SAPS policy on crime scene management and the Crime Scene Investigation Quality Management Standard Operating Procedure (SOP) guidelines. Additionally, they regularly attend crime scene management training courses to stay updated and improve their proficiency. Furthermore, the study brings to light that international participants follow internal SOP guidelines for crime scene processing and actively participate in international training courses to enhance their skills in this domain. The researcher emphasises that participants' perspectives align with National Instruction 1 of 2015, reinforcing the SAPS policy on crime scene management.

7.4.4.4 The need for a policy about crime scene processing

This study reveals that participants advocate for guidelines in serious crime scene processing within informal settlements to ensure uniformity and enhance SAPS performance. International participants agree that court presentation standards for serious crime scene evidence require procedural guidelines for effective processing (see Section 6.5.4 in Chapter 6). Emphasising the significance of global policing agency guidelines, participants believe a policy guideline is necessary, aligning with SAPS policy and internal SOP guidelines internationally. Their perspectives align with literature, international and national authors, SAPS policy, and internal SOP guidelines of policing agencies in the selected countries.

7.4.4.5 The difference between infrastructural and environmental physical conditions in suburban areas and informal settlement areas

This study underscores the significance of optimal infrastructural and environmental conditions for effective crime scene processing in both suburban and informal settlement areas. Participants from various samples stress the need for standardised infrastructure and environmental conditions in suburban settings (see Section 6.6.1 in Chapter 6). Informal settlements, lack in essential services, infrastructure, and building regulations, exert a significant impact on income, consumption, health, education, social security, and empowerment in urban locales (Brown, 2015:9; UN-Habitat, 2015a).

The research identifies the challenges posed by the unreliable nature of GPS coordinates in informal settlements due to the constant movement of housing and businesses, as well as regular relocations of serious crime victims and complainants. Disparities in infrastructural and environmental conditions between suburban and informal settlements are unveiled, influencing crime scene processing. Insights from international participants contribute to understanding the physical conditions necessary for effective crime scene processing in informal settlements. These findings align with literature from both international and domestic perspectives, emphasising the inadequacy of basic infrastructure, substandard housing, and environmental issues, particularly affecting the urban poor (UN-Habitat, 2022a).

7.4.4.6 The influence of physical conditions on the effectiveness of the processing of serious crime scenes in suburban and informal settlement areas

This study reveals that factors in suburban areas contribute to more effective processing of serious crime scenes compared to informal settlements, where infrastructure and environmental physical conditions are less optimal (see Section 6.6.2 in Chapter 6). The research underscores the necessity for standardised infrastructural and environmental conditions to ensure precise crime scene processing, particularly in areas characterised by limited resources and societal challenges. Physical conditions emerged as a significant factor influencing crime scene processing in both suburban and informal settlement areas, shedding light on the challenges faced by SAPS personnel. The insights provided by international participants enhance the understanding of infrastructural and environmental conditions, aligning with existing literature. The findings establish a strong correlation between participants' beliefs and perspectives regarding the impact of physical conditions on processing serious crime scenes in suburban and informal settlement areas.

7.4.4.7 Barriers and challenges experienced in processing serious crime scenes in informal settlements

This study exposes the challenges associated with processing serious crime scenes in informal settlements, attributed to insufficient infrastructure and environmental obstacles. These barriers encompass inadequate roads, lighting, unsafe housing, electrical infrastructure, hazardous conditions, high population densities, safety concerns, and environmental factors. Section 6.7.1 in Chapter 6 attests to the participant's actual views regarding barriers and challenges experienced in processing serious crime scenes in informal settlements. The following participant extracts from Section 6.7.1 bear testimony:

> "No, the SAPS policy guidelines are more user friendly for suburban areas than informal settlement areas" **(**Participant A10)

> "No, infrastructural and environmental conditions in informal settlement areas does not allow the effective application and adherence to the SAPS policy". (Participant B4)

The identified issues resonate with the perspectives of both international and national authors. Valuable insights from international participants further contribute to a comprehensive understanding of the factors influencing the processing of serious crime scenes in informal settlements.

7.4.4.8 The impact and influence of barriers and challenges on the effectiveness of crime scene processing in informal settlements

This study underscores the challenges associated with processing serious crime scenes in informal settlements, underscoring the critical role of adequate infrastructure and environmental conditions. Table 6.3 in Section 6.6.4 of Chapters provides evidence of the participants' views regarding the impact and influence of barriers and challenges on the effectiveness of crime scene processing in informal settlements. Identified barriers encompass inadequate roads, insufficient lighting, unsafe housing structures, hazardous physical conditions, and high population densities, elevating the risk of contamination on serious crime scenes.

Various literature perspectives corroborate that informal settlements face vulnerability due to factors such as inadequate safe environments, basic services, temporary housing, and limited social services, intensified by poor housing and restricted road access (Abunyewah et al., 2018:24; Mitlin & Satterthwaite, 2016:2; Schaider et al., 2019:3). To that effect, the research findings align with both literature and the perspectives of international participants, enhancing our understanding of the factors influencing the processing of serious crime scenes in these areas.

7.4.4.9 The impracticality and inadequacy of the SAPS Policy on crime scene management in informal settlements

This study reveals that participants scrutinised SAPS policy guidelines for crime scene management, attributing concerns to infrastructural and environmental challenges. The participants contributed insights into the impediments posed by inadequate infrastructural and environmental conditions in informal settlements, particularly affecting the practical implementation of SAPS policy guidelines when processing serious crime scenes (see Section 6.7.1 in Chapter 6). In support of perspectives presented in literature, the research emphasises that infrastructural and environmental conditions in informal settlements pose substantial hindrances to the effective

processing of serious crime scenes (Boyle, 2023:1; Drivdal, 2016:22; Kanyane & Ilorah, 2015:4).

7.4.4.10 The inadequacy of SAPS Policy to provide for specific conditions in informal settlement areas

This study highlights participants' criticism of the SAPS policy on crime scene management, particularly for its lack of specific guidelines addressing physical conditions in informal settlements, including issues like illegal structural designs and hazardous health risks (see Section 6.8.1 in Chapter 6). The research underscores the necessity of incorporating considerations for unsafe conditions in informal settlements into crime scene management policies to enhance the processing of serious crime scenes in underdeveloped areas (Brown-Luthango et al., 2017:493; SAPS, 2015:20). Additionally, the international participants echoed the need to address unique infrastructural and environmental physical conditions in informal settlements, as internal SOP guidelines often fall short in providing adequate guidance for these challenges. The study reveals those international participants, like their South African counterparts, encounter difficulties and challenges in processing serious crime scenes in informal settlements.

7.4.4.11 The inadequacy of SAPS Policy on crime scene management to provide for specific conditions in informal settlement areas

This study reveals participants' criticism of the current SAPS policy for lacking sufficient guidelines in processing serious crime scenes in informal settlements, specifically citing challenges such as illegal structural designs, health risks, and inadequate conditions (see Section 6.7.2 in Chapter 6). The participants advocate for policy modifications to improve the effectiveness of crime scene processing, emphasising the need to address these challenges. The research further indicates that international participants share similar perspectives to those of SAPS participants, highlighting the absence of specific guidelines for the unique infrastructural and environmental physical conditions in informal settlements.

The following participant statements provide evidence of the need for addressing specific infrastructural issues that limit effective crime scene processing in informal settlement areas:

"The existing guidelines fails to really address the exceptional infrastructural and environmental conditions in informal settlements. The SOP guideline on crime scene management overlook unique infrastructural and environmental conditions in informal settlements, overlooking challenges like unplanned structural layout, unique characteristics, insufficient infrastructure, hazardous health risks, and substandard services." (Participant C1)

"The current SOP guidelines does not adequately provide for the uniqueness in infrastructural and environmental conditions in informal settlements. SOP guidelines omit infrastructural and environmental conditions, leading to challenges like inadequate roads, delayed response times, health and safety risks, substandard services, and overcrowded informal settlements." (Participant D1)

7.4.4.12 Specific elements and conditions to be considered for possible inclusion in SAPS Policy on crime scene management

This study reveals that participants identified challenges in crime scene processing in informal settlements, including congestion, overcrowding, inadequate infrastructure, and location inequalities (see Section 6.8.2 and Table 6.5 in Chapter 6). As shown in Table 6.5, the participants in Sample A and Sample B emphasised the need for specific guidelines and effective policy guidance that consider the physical conditions of informal settlement areas. Furthermore, these participants highlighted vulnerabilities and risk factors in these areas, underlining the importance of comprehensive policy guidance for processing serious crime scenes. One participant specifically identified elements for inclusion in crime scene management policy guidelines, aligning with the concerns expressed by other participants.

7.4.4.13 Improvement on the effectiveness of processing serious crime scenes in informal settlements

This study found that participants highlighted the necessity for SAPS management to provide adequate resources, including personnel, crime scene investigation equipment, and specialised vehicles, to informal settlement areas (see Table 6.6 in Section 6.8.3 of Chapter 6). These participants also stressed the importance of improved infrastructural and environmental conditions, intensive training for SAPS members, community involvement, and addressing safety concerns and challenges in processing serious crime scenes. International participants echoed these sentiments, aligning with the perspectives of their South African counterparts.

Additionally, the research indicates that local police station duty officers are well-equipped to manage and supervise serious crime scenes in informal settlement areas. These duty officers play a crucial role in coordinating preliminary investigations, processing serious crime scenes, addressing infrastructure and environmental challenges, and providing additional resources when necessary. These assertions are based on the following participant statements in Section 6.8.3 of Chapter 6:

> "Guidelines need to be customized to accommodate the management of crime scenes in those environments. The continuous training of police members and supplying appropriate equipment, police members roles must be clarified, sensitising members of the public   not to disturb and intimidate police members." (Participant D1)

> "Furthermore, there must be coordinated efforts from the team that is involved in the processing and investigation on the crime scene and as well as members from the public." (Participant C1)

7.4.4.14 Best practices to ensure effective processing of serious crime scenes in informal settlements

This study found that participants emphasised the disparity between SAPS policy for affluent neighbourhoods and the unique challenges posed by the infrastructure and environmental conditions in informal settlements (see Table 6.7 in Section 6.8.4 of Chapter 6). The research highlighted the incongruence between the SAPS policy for affluent neighbourhoods and the distinct challenges related to infrastructure and environmental factors in informal settlement areas. Participants stressed the need for specific guidelines tailored to the processing of serious crime scenes in informal settlement areas, acknowledging the complexities of this process. To that effect, the Sample C and Sample D stated:

> "Regular refresher training courses are conducted for members involved in crime scene investigation and processing, both locally and internationally, and SOP guidelines are regularly revised." (Participant C1)

> "The continuous training of police and serious crime investigators on crime scene investigation and processing environments, enhancement of social media groups for sharing information about crime scene investigation and processing environments, as well as reviewing and improving SOP guidelines, is ongoing." (Participant D1)

In the above regard, the study revealed that international participants shared best practices for processing serious crime scenes in informal settlements, aligning with the responses from South African participants. For the SAPS to enhance the efficiency

and effectiveness of serious crime scene processing in informal settlement areas, it is imperative to establish a structured and standardised operational procedure applicable to all Detective Services Sections at various local police station levels as proposed by the SAPS, (2017:2). The implementation of a SOP could significantly benefit the processing of serious crime scenes in informal settlement areas (SAPS, 2014:2).

The study identified a critical gap in the processing of serious crime scenes within informal settlement areas by detectives in the SAPS. The existing SAPS policy on crime scene management, designed for well-developed suburban areas, overlooks the unique challenges faced in informal settlements, including poor infrastructure and environmental conditions. This oversight results in a disparity in policy compliance between suburban and informal settlement areas, where practical application is hindered by the inferior physical conditions in informal settlements.

This study found that the proposed solution involves the implementation of a SOP guideline, tailored to the specific needs of informal settlement areas (see Section 6.9). Through an integration of literature and participant insights, the researcher has developed a conceptual SOP guideline to augment the SAPS's efficacy in processing serious crime scenes within informal settlement areas. The proposed SOP offers clear directives and detailed instructions, aiming to promote uniform and efficient handling of such crime scenes. Designed to enhance consistency within the SAPS, this guideline is envisioned to bring about significant improvements in the processing of serious crime scenes in informal settlement areas across South Africa. Detailed operational steps for processing serious crime scenes in informal settlement areas are outlined in Table 6.8 in Chapter 6 of this study for consideration.

7.5   RECOMMENDATIONS

By their nature and intention, recommendations are basically a reflection of the researcher's own propositions and analytic input that is intended to contribute to development and improvement in a particular field of study, especially in cases where gaps have been noticed (Adhabi & Anozie, 2017:88; Creswell, 2018:37). In that regard, the recommendations in this section are largely in response to the following research question as articulated in Section 1.6 of Chapter 1:

- What practical guidelines, procedures and recommendations can be offered to the SAPS concerning the processing of serious crime scenes in informal settlements?

Based on the findings of this study regarding SAPS policies on crime scene management, the following recommendations are proposed:

- It is recommended that SAPS should undertake a comprehensive review and revision of its crime scene management policies. This process should include input from relevant stakeholders and address any gaps identified, especially in the context of processing serious crime scenes in informal settlements. This recommendation emanates from the study's revelation that the current SAPS policy (i.e., National Instruction 1 of 2015) is a repurposed version of the 2005 Detective Policy.
- The study indicates that the SAPS policy lacks specific guidelines for processing serious crime scenes in informal settlements despite its comprehensive nature. Accordingly, it is recommended that SAPS incorporates guidelines tailored to the unique infrastructural and environmental conditions of informal settlements. This inclusive approach would enhance the effectiveness of crime scene processing in underdeveloped areas.
- It is recommended that the SAPS should invest in training programs for its personnel in order to ensure effective implementation of revised policies. This training should cover the unique challenges posed by crime scene processing in both suburban and informal settlement areas. Additionally, awareness programs should be initiated to inform officers about the revisions and updates to the SAPS policies.
- The SAPS should establish a system for continuous policy evaluation and adaptation to stay abreast of evolving challenges and best practices in crime scene management. Regular assessments will enable the SAPS to address emerging issues and refine its policies accordingly.
- The study identifies specific National Instructions crucial for crime investigation and scene management. In that regard, it is recommended that the SAPS should foster collaboration and information sharing among its divisions and other relevant entities in order to ensure a cohesive and coordinated approach to crime scene management.

By implementing these recommendations, the SAPS would be able to enhance its crime scene management policies, address specific challenges in informal settlements, and ensure a more effective and inclusive approach to crime investigation across diverse settings.

Based on the study's findings regarding challenges in informal settlements, the following recommendations are proposed:

- Government and other relevant (inter-governmental/inter-departmental) authorities should adopt an integrated policy approach to address challenges in informal settlements. This includes implementing rights-based policies, integrating people and systems, and prioritising affordable housing, participatory data collection, and infrastructure development. Policymakers should consider the unique needs and vulnerabilities of inhabitants in informal settlements.
- Community participation and empowerment should be increased in order to enhance the effectiveness of interventions. In that regard, governments should actively involve residents in decision-making processes, ensuring that their perspectives, needs, and concerns are taken into account when formulating and implementing policies.
- Prioritising infrastructure development in informal settlements is crucial. Accordingly, government should focus on improving basic services, including water, sanitation, and electricity. Additionally, there should be a concerted effort to integrate informal settlements into the broader urban planning framework, ensuring that they are not marginalised but rather part of a comprehensive, inclusive urban development strategy.
- There should be increased international cooperation and support, considering that the challenges in informal settlements are a global phenomenon. This involves collaboration between nations, sharing best practices, and providing assistance, especially in addressing common issues such as housing affordability, climate change vulnerability, and inadequate social services.
- Government should invest in comprehensive data collection and research initiatives to better understand the specific challenges faced by informal settlements. This information is essential for evidence-based policymaking and targeted interventions that address the unique conditions of each settlement.

By implementing these recommendations, governments and relevant stakeholders would be able to work towards creating sustainable, inclusive, and resilient solutions for the challenges faced by informal settlements globally.

Based on the findings relating to housing policies and development initiatives in South Africa, the following recommendations are proposed:

- The South African government should conduct a comprehensive review of the implementation of housing-related provisions in the Constitution (Act 108 of 1996). This review should focus on identifying gaps and challenges in translating constitutional mandates into tangible improvements for informal settlements. Special attention should be given to cooperative governance provisions to enhance the upgrading process and ensure the well-being of informal settlement residents.
- Building on the principles outlined in the Housing Act (No 107 of 1997), municipalities should actively work towards fulfilling their mandates to provide access to adequate housing, prevent unsafe conditions, and deliver efficient services. Prioritising non-discriminatory, pro-poor, racially integrated, and participatory approaches is crucial. Local authorities should implement practical strategies to upgrade informal settlements, considering the unique needs of residents and aiming to reduce social exclusion.
- To achieve the ambitious goals outlined in the National Planning Commission 2012 of the South African government should align housing policies and development initiatives with the priorities outlined in the NDP. Strategies for tackling inefficiencies, creating sustainable environments, resolving housing issues, and strengthening the Criminal Justice System should be integrated into existing and future housing policies. This alignment will contribute to the broader national objectives of poverty eradication and reduced inequality.
- Targeted interventions should be anchored on the NDP Vision 2030's emphasis on transforming South Africa's spatial economy and society. Prioritising key areas such as strengthening the criminal justice system, demilitarising the Police Service, and implementing a safety integrated approach is essential. Recruitment processes should align with the vision, attracting competent professionals through a two-track system, and incorporating recommendations from the 2007 Review of the South African Criminal Justice System.

By addressing these recommendations, the South African government would be able to work towards more effective, inclusive, and sustainable housing policies and initiatives that improve the living conditions of residents in informal settlements.

Based on the findings related to crime scene processing in South Africa, the following recommendations are proposed:

- The SAPS should prioritise the adoption and implementation of systematic, meticulous, and scientific crime scene processing protocols. Emphasising the critical role of crime scene processing in major criminal investigations, the SAPS should invest in training programs and resources to ensure personnel are well-equipped to handle various aspects of the process, such as discovery, collection, identification, preparation, analysis, and preservation of evidence. Additionally, the study recommends a continuous review and enhancement of existing crime scene management policies to align with international best practices and adapt to the unique challenges posed by diverse environments, including informal settlements. This proactive approach will contribute to the overall effectiveness of crime scene investigations, aiding in the successful resolution of criminal cases.

- The SAPS should prioritise the adoption and implementation of specific goals for crime scene processing in order to guide investigators effectively. Emphasising the importance of a systematic and meticulous approach, agencies should focus on goals that include avoiding rushing investigations, eliminating mistakes, and minimising omissions.

- It is further recommended that crime scene technicians adhere to the six recommended basic steps of assessing, observing, documenting, searching, collecting, and analysing. This approach, as highlighted in the literature, ensures the collection of evidence in a pristine condition. Additionally, the SAPS should reinforce the ultimate objective of crime scene investigation, which is to identify, recover, and document physical evidence through a careful and systematic collection of facts, clues, and material evidence. Regular training programs and updates on best practices should be provided to crime scene personnel to enhance their proficiency in achieving these goals.

- Investigators should prioritise strategies for preventing, controlling ongoing, and documenting known contamination. Special attention should be given to factors

contributing to evidence contamination, such as police interference, suspects covering up evidence, victims handling evidence, animals transferring or removing it, weather-related contamination, and investigators failing to adhere to proper procedures. The literature recommends careful packaging, handling, and storage of evidence to prevent breakage, spoilage, and damage, with an acknowledgment of the role of weather conditions and uncontrolled activities in contributing to contamination. Training programs and resources should be allocated to ensure that investigators are well-versed in contamination prevention and control, preserving forensic integrity throughout the investigative process.

- The SAPS should integrate a historical context into training programs in order to enhance the officers' understanding of the informal settlements in the context of the country's erstwhile policy on racial divisions. Officers should be educated on the implications of past policies, such as the Group Areas Act, and how these have contributed to infrastructural and environmental injustices. This awareness can enhance sensitivity and understanding when interacting with communities in informal settlements.

- Building on the participants' strong support for guidelines, the SAPS should actively collaborate in the development and implementation of comprehensive guidelines for processing serious crime scenes. These guidelines should take into account the specific challenges posed by informal settlements, offering a framework that ensures thorough and efficient crime scene processing while addressing infrastructural and environmental variations.

- The SAPS should explore and integrate international best practices in crime scene processing into their guidelines. Drawing on the global importance emphasised by participants, law enforcement agencies can benefit from insights and innovations implemented successfully in other countries facing similar challenges. This integration ensures a broader perspective and the adoption of proven strategies.

- In addition to professional training, the SAPS should develop community engagement strategies that foster collaboration and trust between officers and residents in informal settlements. Establishing open lines of communication, understanding community dynamics, and involving residents in crime prevention initiatives contribute to a safer and more cooperative environment.

By implementing these recommendations, the SAPS would be able to enhance the effectiveness and sensitivity of crime scene processing in informal settlements, ultimately contributing to improved safety, community relations, and crime prevention efforts.

Based on the study's findings related to serious crime scene processing, the following recommendations are proposed:

- The SAPS should prioritise the development and implementation of unified guidelines for serious crime scene processing. These guidelines should address the specific challenges presented by informal settlements, and ensure consistency and effectiveness in crime scene processing. Collaboration with international policing agencies can provide valuable insights to enhance the guidelines.
- Recognising the disparities in infrastructural and environmental conditions, there is a need for targeted infrastructure investment in informal settlements. Accordingly, it is recommended that governments and relevant authorities should focus on improving essential services, infrastructure, and building regulations in these areas. Adequate infrastructure contributes to a safer environment, enabling more efficient crime scene processing.
- Considering the challenges associated with the unreliability of GPS coordinates in informal settlements, it is recommended that law enforcement agencies should explore and adopt adaptive technology solutions. Technologies that relate to the dynamic nature of informal settlements, such as those addressing housing movement and relocations, can enhance the accuracy and reliability of crime scene location data.
- The SAPS should implement community empowerment initiatives in informal settlements. Collaborative programs that engage residents, enhance trust, and involve communities in crime prevention efforts contribute to a more cooperative and informed environment. Empowered communities can act as partners in crime scene processing initiatives.
- Four private security members trained in and armed with self-loading rifles (LM6s/ LM5s), moved in a backup vehicle (4 x 4) to assist the crime scene technicians. They can give all round cover in every wind direction. They can be called ARDPs (All Round Defense Personnel). There can also be Crime Scene Protectors (CSPs)

who specifically protect the crime scene and the crime scene technicians. In practice the crime scene technicians can then focus on their real job while the CSPs protect the crime scene on the outer perimeter and the ARDPs the wider outer perimeter for a layered / concentric security protective-approach. To cut on financial costs voluntarily community patrollers / neighborhood volunteers can be trained in this kind of protection. The Duty officer can, for example, call upon the ARDPs and CSPs to come and assist.

- Continuous training programs for SAPS personnel should be established, emphasising the unique challenges and considerations in processing serious crime scenes within informal settlements. Awareness campaigns can also be conducted to inform officers about the socio-economic factors influencing crime in these areas, fostering a more nuanced understanding.

- Encouraging collaboration between SAPS and international policing agencies in research initiatives can facilitate the exchange of best practices and innovative approaches. Therefore, it is recommended that joint studies should be undertaken on crime scene processing in diverse environments in order to contribute to a broader knowledge base and enhance the effectiveness of policing strategies. By implementing these recommendations, law enforcement agencies can advance their capabilities in processing serious crime scenes, especially in informal settlements, fostering a safer and more secure urban environment.

- The study accentuates the need for the SAPS to establish a SOP for serious crime scene processing in informal settlements. This SOP should encompass detailed guidelines, best practices, and minimum standards to ensure consistency, reliability, and enhanced investigative approaches. Emphasis should be placed on professionalism, heightened management supervision, and continuous improvement.

- The existing SAPS policy on crime scene management should be expanded to include a broader range of serious crimes within informal settlements. The researcher recommends incorporating categories such as murder, rape, serious assault, kidnapping, corruption, arson, terrorism, piracy, human trafficking, and drug trafficking. This expansion is vital for facilitating specialised responses to various serious crimes while maintaining routine methodologies for minor crime scenes.

- Recognising the critical gap in the existing SAPS policy, it is recommended that a tailored SOP guideline should be specifically designed for informal settlement areas. This SOP should address the unique challenges posed by poor infrastructure and environmental conditions, promoting effective processing of serious crime scenes. The guideline should establish qualified standards, including recognised procedures, supervision, and minimum criteria, to ensure optimal detective performance.
- To overcome the policy compliance disparity between suburban and informal settlement areas, the researcher recommends a heightened emphasis on effective management and supervision within SAPS. Holding managers and supervisors accountable for their roles in processing serious crime scenes in informal settlements is crucial for addressing practical application hindrances and ensuring policy alignment.
- It is recommended that the researcher's developed conceptual SOP guideline derived from the comprehensive literature review and participant insights, should be incorporated into the SAPS policy on crime scene management. This detailed guideline developed by the researcher offers clear directives and instructions for processing serious crime scenes in informal settlement areas, aiming to enhance uniformity and efficiency within SAPS practices.

It is the researcher's belief that the developed conceptual SOP guidelines as shown in Table 6.8 will contribute meaningfully to address the research problem as stated in Section 1.2 of Chapter 1 in this study. The guidelines are intended to augment to the SAPS's efficacy in processing serious crime scenes within informal settlement. Notably, these guidelines are in response to the following research question as articulated in Section 1.6:

- "What practical guidelines, procedures and recommendations can be offered to the SAPS concerning the processing of serious crime scenes in informal settlements?"

7.6   ADDITIONAL RESEARCH

The study recognised a notable gap in South African research concerning crime scene processing in informal settlement areas and advocates for additional research to be undertaken in order to bridge this knowledge void. While the study has successfully

addressed its primary research questions, there still remains significant gaps that warrant further investigation. The study exposes criticisms against the SAPS for ineffective policing services in informal settlements, which are attributed to factors such as insufficient infrastructure and challenging environmental conditions. Regrettably, these issues persist without adequate attention or accountability from government departments responsible for infrastructure and environmental matters, which demonstrably hinders the SAPS's operational effectiveness. The researcher recommends that further research should be done specifically on crime scene contamination and the role that private security can play in the safeguarding of crime scenes. Furthermore, the literature review and interviews with SAPS participants unveil a lack of clarity regarding which government departments bear responsibility for inadequate infrastructure and environmental conditions. Thus, it is suggested that future research delve into identifying and addressing these responsible government entities.

Moreover, the research highlights that informal settlements are a global concern, yet guidelines and recommendations for crime scene processing in such areas are overlooked in both international and national literature by authors. To rectify this oversight, it is recommended that additional research should be conducted to integrate crime scene processing recommendations and guidelines into international and national literature authored by relevant experts.

7.7   CONCLUSION

The South African Constitution (Act 108 of 1996) safeguards the rights of all citizens, including the right to policing services such as crime investigation. The government is responsible for ensuring these rights are protected through institutions such as the SAPS to investigate crime. The South African Constitution outlines the objectives of the SAPS, which include preventing, combating, investigating crime, maintaining public order, protecting citizens and property, and upholding the law.

South African crime statistics reported by the SAPS indicated a consistent increase in crime trends for serious trio crimes from 2011 to 2021. These trends posed a significant issue in crime management and processing due to incorrect processing of crime scenes. These statistics indicates an increase for the selected serious crimes for this research as follows: robbery of motor vehicle (or carjacking, from 9,471 to

16,731), residential robbery (or house robbery, from 16,766 to 20,870), and non-residential robbery (or business robbery, from 15,912 to 18,231).

Government officials frequently assure the public about their efforts to reduce violent incidents, but there is no guarantee that similar incidents will not occur in the future. Furthermore, the government has not effectively investigated serious crime cases in respect of processing serious crime scenes, arrested and prosecuted perpetrators, and protected citizens in accordance with the Bill of Rights.

This study aimed at assess the processing of serious crime scenes by detectives in informal settlements. The study developed a conceptual Standard Operating Procedure (SOP) for new, revised, or improved procedures. The research involved exploratory, descriptive, and explanatory steps to gain a comprehensive understanding of the processes related to crime scene processing in informal settlements. The study objectives included best practices and standards; determining the existing policy of the SAPS; identifying physical conditions that influence non-compliance; assessing the current procedure in suburban and informal settlements; identifying new knowledge on negative aspects; as well as developing practical guidelines for the SAPS. The study further focused on aspects of the legal framework of the SAPS in the handling of serious crime scenes in informal settlements.

Based on the research topic, it was acutely important for the study to allocate specific attention to the existing policy of the SAPS, that is, National Instruction 1 of 2015, and the physical conditions influencing non-compliance by detectives in informal settlements. However, the study also explored the procedures followed by detectives in suburban areas, the new knowledge gained on negative aspects, and practical guidelines and recommendations for the SAPS to improve the processing of serious crime scenes in both informal settlements and suburban areas.

This study applied a qualitative approach, in terms of which literature reviews, interviews, and personal experiences were combined to explore the challenges faced by detectives in processing serious crime scenes in informal settlement areas. The data was collected from officials responsible for the processing of crime scenes, who are the SAPS (Samples A and B) and senior police representatives from international police agencies (Sample C and D).

The SAPS in South Africa is responsible for investigating criminal incidents, processing serious crime scenes, arresting and investigating criminal cases. Due to advanced criminal tactics, SAPS investigators must be more advanced in the processing of serious crime scene investigations. This research explores the processing of serious crime scenes in informal settlements, offering practical guidelines for effective processing of serious crime scenes in these areas. The success of this SOP guideline depends on the consideration and incorporation by the SAPS. The researcher is of the opinion that this study analyses the processing of serious crime scenes in informal settlements, offering valuable insights and practical guidelines for South African serious crime scene investigations.

In the view of the researcher, this study makes a significant contribution to the body of knowledge concerning crime scene processing in informal settlements. The researcher also acknowledges that a study on the complexity of informal settlements in South Africa. In fact, crime scene processing constitutes only a part of the entire dynamic of informal settlements in an environment that is highly charged with political innuendo, socio-economic volatility, as well as environmental inequalities. Notwithstanding all these, the study still makes a significant to the SAPS policy makers to be cognisant of the serious challenges facing their investigators in informal settlements. Failure to take heed of these challenges will seriously dent the morale of the police officers and the public's trust in the capacity of the SAPS to effectively fulfil its Constitutionally mandated responsibility.

LIST OF REFERENCES

Abunyewah, M., Gajendran, T. & Maund, K. 2018. *Profiling informal settlements for disaster risks*. Callaghan: Elsevier Ltd.

Abunyewah, Matthew, Thayaparan Gajendran, and Kim Maund. 2018. Profiling informal settlements for disaster risks. *Procedia Engineering* 212: 238–45.

Adhabi, E.A.R. & Anozie, C.B. 2017. Literature review for the type of interview in qualitative research. *International Journal for Education, 9*(3):87-89.

Aurini, J.D., Heath, M. & Howells, S. 2016. *The how to of qualitative research.* London: Sage.

Anderson, V. 2015. Research methods in human resource management-investigating a business issue. *NHRD Network Journal*, 8(2):135–137. https://doi.org/10.1177/0974173920150224.

Babbie, E. 2017. *The basics of social research*. 7th edition. Boston, MA: Cengage Learning.

Bachman, R. & Schutt, R.K. 2014. *The practice of research in criminology and criminal justice*. 5th edition. London: Sage.

Baker, J.L. 2008. *Urban poverty: A global view.* Washington, DC: World Bank.

Balazs, C. & Ray, I. 2014. The drinking water disparities framework: On the origins and persistence of inequities in exposure. *American Journal of Public Health*, 104(4):603–611.

Baxter E. Jr. 2015. *Complete crime scene investigation workbook*. 1st edition. New York: CRC Press.

Beall, J., Crankshaw, O., Parnell, S. 2000. Victims, Villains and Fixers: The Urban Environment and Johannesburg's Poor. Journal of Southern African Studies, 26(4):833-855.

Becker, R.F. & Dutelle, A.W. 2013. *Criminal investigation.* 4th edition. Burlington, MA: Jones & Bartlett.

Beins, B.C. 2013 *Successful research projects: A step-by-step guide*. London. Sage.

Bengtsson, M. 2016. How to plan and perform a qualitative study using content analysis. *Nursing Plus Open,* (2)8-14. https://doi.org/10.1016/j.npls.2016.01.001.

Benson, B.C., Horne, J.S. & Coetzee, T. 2010. The significance of the crime scene in the investigation of child rape cases. *Child abuse Research a South African Journal,* 11(1):22.

Benson, B.C., Jones, G. & Horne, J.S. 2015. Forensic investigation of crime, irregularities and transgressions. In Zinn, R. & Dintwe, S. (eds). 2015. *Forensic investigation. Legislative principles and investigative practice*. Claremont: Juta.

Bertino, A.J. & Bertino, P.N. 2012. *Forensic science: Fundamentals and investigations*. Mason, OH: South-Western Cengage.

Birks, M. & Mills, J. 2015. *Grounded theory: A practical guide*. (2nd ed.). Los Angeles, CA: Sage.

Birzer, M.L. & Roberson, C. 2012. *Introduction to criminal investigation*. New York: CRC Press.

Biswas, G. 2022. *Forensic pathology: Crime scene investigation*. From: https://www.google.co.za/search?q=biswas+2022+crime+scene+investigation&sca. Accessed on 15 May 2023.

Bless, C., Higson-Smith, C. & Sithole, S.L. 2013. *Fundamentals of social research methods: An African perspective*. 5th edition. Claremont: Juta.

Bless, C., Higson-Smith, C. & Sithole, S.L. 2015. *Fundamentals of social research methods: An African perspective*. 6th edition. Claremont: Juta.

Boyle, M.J. 2023. *Infrastructure: Definition, meaning, and examples*. New York: Elsevier.

Brandl, S. 2014. *Criminal investigation*. California: Sage.

Brandt-Rauf, P. 2010. Global environmental justice beyond Copenhagen: Footprints, fairness and the future of the planet. *Forum on Public Policy: A Journal of the Oxford Round Table*.

Brown, A. 2015. *Planning for sustainable and inclusive cities in the global south*. London: Sage.

Brown-Luthango, M., Reyes, E. & Gubevu, M. 2017. Informal settlement upgrading and safety: Experiences from Cape Town, South Africa. *Journal of Housing and the Built Environment* 32(3):471–493.

Bruce, P.C. 2015. *Introductory statistics and analytics: A sampling perspective*. New Jersey: Wiley.

Brunn, S.D. & Wilson, M.W. 2013. Cape Town's million plus black township of Khayelitsha: Terrae incognitae and the geographies and cartographies of silence. *Habitat International*, 39:284-294.

Brynard, D.J., Hanekom, S.X. & Brynard, P.A. 2014. *Introduction to research*. 3rd edition. Pretoria: Van Schaik.

Burger, J., Gould, C. & Newham, G. 2009. *The state of crime in South Africa: An analysis of the SAPS crime statistics for 2009/10.* From: http://www.issafrica.org/crimehub/uploads/BurgerGouldNewham.pdf. Accessed on 12 June 2019.

Burger, J. 2009. The official 2009/2010 South African crime statistics. *South African Crime Quarterly,* 30:3-11.

Burns, N. & Grove, S.K. 2017. *Understanding nursing research, building evidence-based practice.* 7th edition. Philadelphia: Elsevier Saunders.

Burrel, G. 2017. *Sociological paradigms and organisational analysis.* London: Routledge.

Cassell, C. 2015. *Conducting research interviews for business and management students.* London: Sage.

Chauvet, G. 2020. Introduction to sampling techniques. In F. Ros & S. Guillaume. *Sampling techniques for supervised or unsupervised task* (pp. 1-22). Berlin: Springer.

Chissum, W.J. & Turvey, B.E. 2014. *Crime reconstruction.* 2nd edition. London. Academic Press.

Cirolia, L.R., Görgens, T., Van Donk, M., Smit, W. & Drimie, S. 2016. *Upgrading informal settlements in South Africa: A partnership-based approach.* Cape Town: UCT Press.

Civilian Secretariat for Police Service. 2016. White Paper on policing. Pretoria: Department of the Civilian Secretariat for Police Service.

Cock, J. 2007. *The war against ourselves: Nature, power and justice.* Johannesburg: Wits University Press.

Creswell, J.W. 2013. *Qualitative inquiry and research design: Choosing among five approaches.* 2nd edition. London: Sage.

Creswell, J.W. 2014. *Research design: Qualitative, quantitative, and mixed methods approaches.* 3rd edition. London: Sage.

Creswell, J.W. 2017. *Qualitative inquiry and research design: Choosing among five approaches.* 4th edition. London: Sage.

Creswell, J.W. 2018. *A concise introduction to mixed methods research.* 5th edition. California, LA: Sage.

Creswell, J.W. 2020. *Research design.* 6th ed. Thousand Oaks (CA): Sage.

Creswell. J.W. and Creswell, J.D. 2017. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 4th Edition, Sage, Newbury Park.

Crime Scene Investigation Quality Management. 2019. *Standing operating procedure (SOP) regarding crime scene management. Division forensic services, criminal record centre of the SAPS*. Pretoria: Commissioner SAPS.

da Cruz, N.F., Rode, P. & McQuarrie, M. 2019. New urban governance: A review of current themes and future priorities. *Journal of Urban Affairs 41*(1):1–19.

Dantzker, M.L., Hunter, R.D. & Quinn, S.T. 2018. *Research methods for criminology and criminal justice*. 4th edition. Canada: Jones & Bartlett.

David, R. & Thomas, I.H. 2018. *Designing and planning your research project: Core skills for social and health research*. Chicago: Sage.

De Vos, A.S., Strydom, H., Schulze, S. & Patel, L. 2011. The sciences and the professions. In De Vos, A.S., Strydom, H., Fouché, C.B. & Delport, C.S.L. (eds). 2011. *Research at grass roots: For the social sciences and human service professions*. 4th edition. Pretoria: Van Schaik.

Denscombe, M. 2012. *Research proposals: A practical guide*. Berkshire: Open University Press.

Denscombe, M. 2014. *The good research guide for small-scale social research projects*. 5th edition. Berkshire: Open University Press.

Denscombe, M. 2017. *The good research guide for small-scale social research projects*. 6th edition. Berkshire: Open University Press.

Denzin, N. & Lincoln, Y. 2011. *The Sage handbook of qualitative research*. Thousand Oaks, CA: Sage.

Department of Housing. 2004. <u>National housing policy and subsidy programmes</u>. Pretoria: Department of Human Settlements,

Department of Human Settlements. 2004. '*Breaking new ground*': A comprehensive plan for the development of sustainable human settlements*. Pretoria: Housing Policy, Department of Human Settlements.

Department of Housing 2004. *Request for proposal for a department of housing study into supporting informal housing.* Pretoria: Department of Housing.

Department of Human Settlements. 2009. *The National Housing Code Part 3: Upgrading of Informal Settlements*. Pretoria: Department of Human Settlements.

Department of Human Settlements. 2016. *NUSP resource kit. The case for incremental and radical innovation projects*. Pretoria: Department of Human Settlements.

Department of Human Settlements. 2021. *Baseline evaluation of informal settlements targeted for upgrading in the 2019-2024 MTSF*, Pretoria: Department of Human Settlements.

Department of Human Settlements. 2022. *Annual performance plan 2022/2023*. Pretoria: Department of Human Settlements.

Department of the Civilian Secretariat for Police Service. 2016. *White paper on safety and security*. Pretoria: Government Printers.

DePoy, E. & Gitlin, L.N. 2016. *Introduction to research: Understanding and applying multiple strategies*. 5th edition. Missouri: Elsevier.

Dixon, J. & Ramutsindela, M. 2006. Urban resettlement and environmental justice in Cape Town. *Cities*, 23(2), 129-139.

Doody. O. & Bailey, M.E. 2016. Setting a research question, aim and objective. *Nurse Researcher, 23(4):*19-23.

Dovey, K. & King, R. 2011. Forms of informality: Morphology and visibility of informal settlements. *Built Environment*, 37(1):11-29.

Downs, J.C.U. & Swienton, A.R. 2012. *Ethics in forensic science*. Boston, Mass: Academic.

Drivdal, L. 2016. Flooding in Cape Town's informal settlements: Conditions for community leaders to work towards adaptation. *South African Geographical Journal*, 98(1):21.

Du Plessis, A.A. 2015. The "Brown" environmental agenda and the constitutional duties of local government in South Africa: *A* conceptual introduction. *Potchefstroom Electron. Law J.* (18):1846–1880.

Du Plooy-Cilliers, F., Davis, C. & Bezuidenhout, R. 2013. *Research Matters*. Cape Town: Juta and Company.

Durrheim, K. 2016. *Research in practice: Applied methods for the social sciences*. 2nd edition. Cape Town: UCT Press.

Dutelle, A.W. 2011. *An introduction to crime scene investigation*. Boston: Jones & Bartlett.

Dutelle, A.W. 2014. *An introduction to crime scene investigation*. 2nd edition. Burlington, Mass: Jones & Bartlett.

Dutelle, A.W., 2017. *An introduction to crime scene investigation.* 3rd Edition. Sudbury, MA: Jones and Bartlett

Dutelle, A.W. & Becker, R.F. 2019. *Criminal investigation.* 5th edition. Burlington. Jones & Bartlett.

Efron, S.E. & Ravid, R. 2019. *Writing literature review. A practical guide.* New York: Guilford Publication Incl.

Ellis, D. 2016. *A* comparison of the information-seeking patterns of researchers in the physical and social sciences*. Journal of Documentation* 49(4):356-369.

Engelland, C. 2020. *Phenomenology.* Massachusetts: The MIT Press.

Ericsson, K.A. 2014. *Protocol analysis: Verbal reports as data.* Cambridge, MA: MIT Press.

Faulkner, S.S. & Faulkner, C.A. 2019. *Research methods for social workers: A practical-based approach.* 3rd edition. Oxford: Oxford University Press.

Ferraro, E.F. 2015. *Investigative interviewing psychology, methods and practice.* Boca Raton: CRC Press.

Fish, J.T., Miller, L.S., Michael, C., Wallace, B., Wallace, W.E. & Anderson, J.R. 2014. *Crime scene investigation.* 3rd edition. New York: Anderson Publishing.

Fish. J, Miller. L, Braswell. M, Wallace. E, Jr. 2013. *Crime Scene Investigation.* 3rd edition. New York: Routledge.

Fisher, B.A.J. & Fisher, D.R. 2012. *Techniques of crime scene investigation.* 8th edition. USA: CRC Press.

Fisher, B.A.J. & Fisher, D.R. 2013. *Techniques of crime scene investigation.* 9th edition. London: CRC Press.

Flick, U. 2014. *An introduction to qualitative research methodology.* 4th edition. Los Angeles: Sage.

Flick, U. 2018. *An introduction to qualitative research methodology.* 6th edition. Los Angeles: Sage.

Fouché, C.B. Strydom, H., Roestenburg, W.J. 2021. *Research at grass roots: for the social sciences and human service professions.* 5th edition. Pretoria: Van Schaik.

Gardner, R.M. 2012. *Practical crime scene processing and investigation.* 2nd edition. Boca Raton: CRC Press.

Gardner, R.M., Krouskup, D. 2018. *Practical crime scene processing and investigation.* 3rd edition. Boca Raton: CRC Press.

Gehl, R. & Plecas, D. 2016. *Introduction to criminal investigation: Process, practices and thinking.* New Westminster, BC: Justice Institute of British Columbia.

Geldenhuys, K. 2013. Crime scenes: Responsibilities of the 1st person. *Servamus-Community Based Safety & Security Magazine,* 106(10):56.

Geldenhuys, T. 2017. Criminal procedure handbook. Butterworth: Juta.

Geyer, M. 2021. In Fouché, C.B., Strydom, H., Roestenburg, W.J.H. *Research at grass roots: For the social sciences and human services professions.* 5th edition. Pretoria: Van Schaik.

Gilbert, J.N. 2010. *Criminal investigation.* 8th edition. Upper Saddle River, NJ: Prentice Hall.

Girard, J.E. 2018. *Criminalistics: Forensic science, crime, and terrorism* 5th edition. Burlington: Jones & Bartlett Learning.

Givens, J.E. 2015. *Urbanization, slums, and the carbon intensity of well-being: Implications for sustainable development.* Washington DC: Washington State University.

Glensne, C. 2011. *Becoming qualitative researchers: An introduction* .4th edition. Boston: Pearson Education.

Graff, G.W. 2016. Case management: The foundation for crime scene reconstruction. *J Assoc Crime Scene Reconstr. (2016)* 20:35-43.

Graham, M., Ernstson, H. 2012. Co-management at the fringes: Examining stakeholder perspectives at Macassar Dunes, Cape Town, South Africa - at the intersection of high biodiversity, *Urban Poverty, and Inequality. Ecology and Society*, 17(3):34-52.

Gray, D.E. 2014. *Doing research in the real world.* 4th edition. London: Sage.

Gray, D.E. 2019. *Doing research in the real world.* 5th edition. London: Sage.

Greenfield, T. & Greener, S. 2016. *Research methods for postgraduates.* 3rd edition. London: Wiley.

Grinnell, R.M. & Unrau, Y.A. 2014. *Social work research and evaluation: Foundations of evidence-based practice.* Oxford: Oxford University Press, Print.

Hagan, F.E. 2014. *Research methods in criminal justice and criminology.* 9th edition. Boston: Pearson.

Harris, H.A & Lee, H.C. 2019. *Introduction to forensic science and criminalistics*, 2nd edition. Boca Raton: CRC Press.

Hawkins, J.E. 2018. The practical utility and suitability of email interviews in qualitative research. *The Qualitative Report*, 23(2):493-501.

Hess, K.M, Orthman, C.H & Chow, H.L 2017. *Criminal investigation*. 11th edition Boston, M.A: Cengage.

Hlophe, Z., Marumoagae, C., Naidoo, K., Omar, J., Singh, S., Steynberg, C. A., Theophilopoulos, Tshehla, B. & van der Merwe, A. 2020. *Criminal procedure in South Africa*. 1st edition. Durban: Juta.

Hoctor, S.V. 2017. *Criminal law in South Arica*. 2nd edition. Alphen aan den Rijn: Wolters Kluwer.

Houck, M., Crispino, F. & McAdam, T. 2012. *The Science of crime scenes*. San Diego: Academic Press.

Huchzermeyer, M. 2008. *Settlement informality: The importance of understanding change, formality, land and the informal economy*. Johannesburg: Wits University.

Huchzermeyer, M. 2011. *Cities with slums: From informal settlements eradication to a right to the city in Africa*. Cape Town: UCT Press.

Israel, M. 2015. *Research ethics and integrity for social scientists: Beyond regulatory compliance.* 2nd edition. London: Sage.

James, S.H., Nordby, J.J. & Bell, S.2013. *Forensic science: An introduction to scientific and investigative techniques*. 3rd edition. Boca Raton, Fla: CRC.

James, S.H., Nordby, J.J. & Bell, S. 2014. *Forensic science: An introduction to scientific and investigative techniques*. 4th edition. Boca Raton, Fla: CRC.

Jones, P. 2017. Formalizing the informal: Understanding the position of informal settlements and slums in sustainable urbanization policies and strategies in Bandung, Indonesia. *Sustainability* 9(8): Article 1436.

Jordaan, J. 2015. *The judicial phase of investigation*. In Zinn, R. & Dintwe, S. (Ed.), *Forensic investigation: Legislative principles and investigative practice* (pp. 249-274). Cape Town: Juta.

Joubert, C. 2018. *Applied law for police officials*. 4th edition. Claremont: Juta Law.

Jürgens, U., Donaldson, R., Rule, S. & Bähr, J. 2013. Townships in South African cities. Literature review and research perspectives. *Habitat International*, 39:256-260.

Justice Department, Washington. 2013. *Crime scene investigation: Guide for law enforcement*. Washington, DC. Department of Justice.

Juta, L.B. & Matsiliza, N.S. 2014. <u>Challenges of providing affordable human settlement in a selected township in the Western Cape.</u> Date of access: 25 November 2022.

Kale, G. & Jayanth, J. 2019. Introduction to research: A practical and scientific approach. New York: Chapman & Hall. <u>https://doi.org/10.1201/978135013277-1.</u>

Kanyane, M.H. & Ilorah, R. 2015. The cooperative landscape in South Africa: Analysing critical issues. *Africa Today*, 61(3):3-14.

Kelly, S.E. 2016*. Qualitative interviewing techniques and styles*. London: Sage.

Khosravaninezhad, S. & Akbari, R. 2014. Application of environmental justice concept in urban planning, the peri-urban environment of Tehran as the case study. *International Journal of Architectural Engineering and Urban Planning*, 1, 56–64.

Kivunja, C. & Kuyini, A.B. 2017. *Understanding and Applying Research Paradigms in Educational Contexts.* Australia: University of New England.

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

Kumar, R. 2019. *Research methodology: A step-by-step guide for beginners.* 5th edition. London: Sage.

Kumar, R. 2020. *Research methodology: A step-by-step guide for beginners.* 6th edition. London: Sage.

LaDue, S. 2016. *Management and supervision in law enforcement.* Boston: Cengage Learning.

Leavy, P. 2017. *Research design: Qualitative, quantitative, mixed methods, arts based, and community based, participatory research approaches.* New York: Gillford Press.

Leavy, P. 2022. *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches.* New York: The Guilford Press.

Leedy, P.D. & Ormrod, J.E. 2015. *Practical research: Planning and design.* 11th edition. Upper Saddle River, New Jersey: Merrill Prentice Hall.

Leedy, P.D. & Ormrod, J.E. 2019. *Practical research: Planning and design.* 12th edition. New Jersey: Pearson Education International.

Liamputtong, P. 2013. *Qualitative research methods.* 4th edition. Melbourne: Oxford University Press.

Lichtman, M. 2014. *Qualitative research.* London: Sage.

Locharoenrat, K. 2017. *Research Methodologies for Beginners*.1ˢᵗ edition. New York: Stanford Publishing.

Lochner, H.T. & Zinn, R.J. 2015. *Crime scene investigation*. Cape Town: Juta.

Lochner, H.T. & Zinn, R.J. 2016. Crime scene investigation. 2nd Edition. Cape Town: Juta and Company.

Lyle, D.P. 2012. *Forensic Science*. Chicago: American Bar Association.

Lyman, M.D. 2013. *Criminal investigation.* Boston: Pearson.

Luo, A. 2019. *Content Analysis: A Step-by-Step Guide*. California: Sage.

Lushbaugh, C. & Weston, P.B. 2012. *Criminal investigation*. New York: Prentice Hall.

Machi, L.A. & McEvoy, B.T. 2018. *The literature review: Six steps to success.* 2ⁿᵈ edition. Thousand Oaks, CA: Corwin Sage Company.

Mahabir, R., Crooks, A., Croitoru, A. & Agouris, P. 2016. The study of slums as social and physical constructs: *Challenges and emerging research opportunities. Regional Studies, Regional Science* 3(1):399–419.

Majid, U. 2018. Research fundamentals: *Study design, population, and sample size. URNCST Journal*, 32(1):1-7.

Maloney, M.S. & Housman, D.G. 2014. *Crime scene investigation: Procedural guide*. Boca Raton: Taylor & Francis group.

Manamela, M.S., Smith, J.H. & Mokwena, R.J. 2016. Serological evidence and DNA analysis (Pp. 95-119). In R. Zinn and S. Dintwe. (eds). *Forensic investigation. Legislative principles and investigative practice*. Cape Town: Juta.

Manomano, T., Tanga, P.T. & Tanyi, P. 2016. Housing problems and programs in South Africa: A literature review. *Journal of Sociology and Social Anthropology*, 7(2):111–117.

Maphumulo, S. 2022. Senzo Meyiwa trial revealed that Sergeant Thabo Mosia were. tasked with the responsibility of gathering, packaging, and processing all the crime scene exhibits. *City Press.* 5ᵗʰ June,3

Marshall, C. & Rossman, G.B. 2016. *Designing Qualitative Research.* 6th Edition. Thousand Oaks: Sage Publications, Inc.

Mathur, O.P. 2014. *Urban poverty in Asia*. Mandaluyong City, Philippines: Cataloging-In-Publication.

Maxfield, M.G. & Babbie, E.R. 2012. *Basics of research methods for criminal justice and criminology*. 5ᵗʰ edition. International edition. New York: Wadsworth.

Maxfield, M.G. & Babbie, E.R. 2017. *Basics of research methods for criminal justice and criminology.* 7th edition. International edition. New York: Wadsworth.

Maxfield, M.G. & Babbie, E.R. 2018. *Basics of research methods for criminal justice and criminology.* 8th edition. New York: Wadsworth.

Maxwell, J.A. 2013. *Qualitative research design: An interactive approach.* 3rd edition. Thousand Oaks: Sage.

Maxwell, J.A. 2014. *Qualitative research design: An interactive approach.* 4th edition. Thousand Oaks: Sage.

McCain, N.2022. "To walk through the informal settlement, you see how people live in those conditions. It's the most undignified way of living". *News 24,* 3rd November,2

McMahon, R.J. 2023. *Practical handbook for professional investigators.* 5th edition. New York: Routledge.

Mduduzi, N. 2022 Meyiwa murder trial revealed that the crime scene was left open for tampering after police failed to secure it. *City Press.* 11th September,3

Mels, A., Castellano, D., Braadbaart, O., Veenstra, S., Dijkstra, I., Meulman, B., Singels, A., Wilsenach, J.A. 2009. Sanitation Services for the Informal Settlements of Cape Town, South Africa. Desalination, 248(1-3):330-337

Mertens, D.M. 2015. *Research and evaluation in education and psychology.* (4th ed.). Thousand Oaks, CA: Sage.

Mikati, I., Benson, A.F., Luben, T.J., Sacks, J.D. & Richmond-Bryant, J. 2018. Disparities in distribution of particulate matter emission sources by race and poverty status. *American Journal of Public Health,* 108(4):480. https://doi:10.2105/AJPH.2017.304297.

Millard, C.J. 2019. Using personal experience in the academic medical humanities: A genealogy. *Social Theory and Health,* 18:184-198.

Miller, M. (February 2014). *Crime Scene Investigation Laboratory Manual.* San Diego: Academic Press/Elsevier.

Miller, M.T. & Massey, P. 2016. *The crime scene: A visual guide.* 1st edition. New York: Elsevier Inc: Academic Press.

Miller, M.T. & Massey, P. 2018. *The crime scene: A visual guide.* 2nd edition. London: Elsevier Inc: Academic Press.

Minnaar, A. 1998. Vehicle hijacking in South Africa: An expression of the increase in crime or syndicated operations. Paper presented to the Technikon SA: *World*

Conference- Modern Criminal Investigation, Organised Crime and Human Rights. Sun City, South Africa, 23rd September.

Mitlin, D. & Satterhwaite, D. 2016. *Urban poverty in the Global South: scale and nature reducing urban poverty in the Global South*, 1827-1829.

Manomano, T., Tanga, P. T. and Tanyi, P. 2016. Housing Problems and Housing Programmes in South Africa: A Literature Review. Journal of Sociology and Social Anthropology, 7(2): 111-117.

Mohlala, M.P. 2020. 'The role of cooperatives on community development: The case of the Motloulela farming cooperative'. (Doctoral dissertation, Stellenbosch: Stellenbosch University).

Monckton-Smith, J., Adams, T., Hart, A. & Webb, J. 2013. *Introducing forensic and criminal investigation.* Thousand Oaks, Calif.: Sage.

Monney, I., Odai, S.N., Buamah, R., Awuah, E. & Nyenje, P.M. 2013. Environmental impacts of wastewater from urban slums: case study - Old Fadama, Accra, *International Journal of Development and Sustainability*, (2):2:711-728.

Moore, M., Gould, P. & Keary, B.S. 2003. Global urbanization and impact on health. *International Journal of Hygiene and Environmental Health*, 206, 269-278. https://doi.org/10.1078/1438-4639-00223.

Morgan, H. 2022. Conducting a qualitative document analysis. *The Qualitative Report*, 27(1):64-77. https://doi.org/10.46743/2160-3715/2022.5044.

Moser, A. & Korstjens, I. 2017. Series: *Practical guidance to qualitative research. Part 1: Introduction.* Eur J Gen Pract. 2017: 23:271-273.

National Institute of Justice Department. 2013. *Crime scene investigation: Guide for law enforcement.* Washington, DC. Department of Justice.

National Planning Commission.2012. *National Development Plan.* Pretoria: Department of the Presidency.

Niva, V., Taka, M. & Varis, O. 2019. Rural-urban migration and the growth of informal settlements: A socio ecological system conceptualization with insights through a "Water Lens." *Sustainability* 2019, 11, 3487.

Noon, E.J. 2018. Interpretive phenomenological analysis: An appropriate methodology for educational research. *Journal of Perspectives in Applied Academic Practice* 6(1):75-83.

Nordby, J.J. 2013. *Scientific foundation of crime scene reconstruction: Introducing method to mayhem.* Boca Raton, Fla: CRC.

Nuissl, H. & Heinrichs, D. 2013. Slums: perspectives on the definition, the appraisal and the management of an urban phenomenon. DIE ERDE: *Journal of the Geographical Society of Berlin* 144(2):105–116.

Ogle, R.R. 2012. *Crime scene investigation and reconstruction.* 3rd edition. Pearson Education: New Jersey.

Olge Jr, R.R. & Plotkin, S. 2018. *Crime scene investigation and reconstruction.* 4th edition. New Jersey: Pearson Education.

Ooi, G. & Phua, H. 2007. Urbanization and slum formation. *J Urban Health*, 84 (Suppl 1) (May), p. 27–34.

O'Regan, K. & Pikoli, V. 2014. *Towards a safer Khayelitsha:Report of the commission of inquiry into allegations of police inefficiency and a breakdown in relations between SAPS and the community of Khayelitsha.* Summary, August. O'Regan & Pikoli 2014:30-31).

Orthmann, C.H. & Hess, K.M. 2013. *Criminal investigation.* 10th edition. Clifton Park, NY: Delmar Cengage.

Orthman, C., Hess, K.M & Henry, L.C. 2017. *Criminal investigation.* 12th edition. Clifton Park, NY: Delmar Cengage.

Osterburg, J.W. & Ward, R.H. 2010. *Criminal investigation*: *A method of reconstructing the past.* 6th edition. Cincinnati, OH: Elsevier.

Osterburg, J.W. & Ward, R.H. 2014. *Criminal investigation*: *A method of reconstructing the past.* 7th edition. Cincinnati, OH: Elsevier.

Palmiotto, M. 2013. *Criminal investigation.* 4th edition Boca Barton, Fla: CRC.

Palmiotto, M. 2014. *Criminal investigation.* 5th edition Boca Barton, Fla: CRC.

Parnell, S. & Pieterse, E. 2014. *Africa's Urban Revolution*. London: Zed Books.

Parnell, S. & Seto, K.C. 2018. Building a global urban science. *Nat. Sustain.* 2018, *1*, 2–4.

Patel, K. 2013. Provision and improvement of housing for the poor. London: Evidence on Demand.

Patton, M.Q. 2015. *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.) Thousand Oaks, CA: Sage.

Posel, D.& Marx, C. 2013. *Circular migration: A view from destination households in two urban informal settlements in South Africa.* Pretoria: Taylor & Francis.

Piekkari, R. & Welch, C. 2018. *The case study in management research: Beyond the Positivist Legacy of Eisenhardt and Yin.* Sage.

Rahl, S. 2017. Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics and Management Science*, 6(2):1-5.

Ragnarsson, A.; Townsend, L.; Ekström, A.; Chopra, M. & Thorson, A. 2010. The construction of an idealised urban masculinity among men with concurrent sexual partners in a South African township. *Glob. Health Action,* 2010, *3*, 5092.

Republic of South Africa. 1977. *Criminal Procedure Act No. 51 of 1977*. Government Gazette, No. 5532. Cape Town: Government Printers. 21 April 1977.

Republic of South Africa. 1995. *South African Police Service Act No. 68 of 1995.* Government Gazette, No.16731. Pretoria: Government Printers. 4 October 1995.

Republic of South Africa. 1996. *Constitution of the Republic of South Africa of 1996.* Government Gazette, No.17678. Pretoria: Government Printers. 18 December 1996.

Republic of South Africa. 1997. *Housing Act No.107 of 1997*. Pretoria: Government Printers.4 June1997.

Richards, R., O'Leary, B. & Mutsonziwa, K. 2007. Measuring quality of life in informal settlements in South Africa, Social indicators research: *An International and Interdisciplinary Journal for Quality-of-Life Measurement, Springer*, 81(2), 375-388.

Saferstein, R. 2013. *Forensic science. From the crime scene to the crime lab*. Retrieved from https://data.unhabitat.org/pages/housing-slums-and-informal-settlements. (Accessed date:10 April 2021) Google Scholar.

Salvador, J. T. (2016). Exploring quantitative and qualitative methodologies: A guide to novice nursing researchers. European Scientific Journal, 12(18), 107–122. https://doi.org/10.19044/esj. 2016.v12n18p107

Salvador, J. T. (2016).Revisiting the philosophical underpinnings of qualitative research. International Education and Research Journal.

Samper, J.; Shelby, J.A. & Behary, D. 2020. The paradox of informal settlements revealed in an ATLAS of informality: Findings from mapping growth in the most common yet unmapped forms of urbanization. *Sustainability* 2020, *12*, 9510.

Satterthwaite, D. & Mitlin, D. 2014.*Reducing Urban Poverty in the Global South.* London: Routledge.

Satterthwaite, D. (2016) Missing the millennium development goal targets for water and sanitation in urban areas. *Environ. Urbanization, 28*(2016):99-118.

Satterthwaite, D., Archer, S., Colenbrander, D., Dodman, J., Hardoy, D., Mitlin, S. & Patel. 2020. Building resilience to climate change in informal settlements *One. Earth, 2* (2):143-156 Google Scholar.

Schaider, L.A. & Swetschinski, L., Campbell, C. & Rudel, R.A. 2019. Citation. *Environmental Health* 2019 18:3.

Schlosberg, D. 2013. Environmental management in the Anthropocene. In *Oxford Handbook of Environmental Political Theory.* Gabrielson, T., Hall, C., Meyer, J. & Schlosberg, D. Eds.; Oxford University Press: Oxford.

Scott, D. & Oelofse, C. 2005. Social and environmental justice in South African cities: Including 'invisible stakeholders' in environmental assessment procedures. *Journal of Environmental Planning and Management*, 48(3):445-467.

Schwikkard, P.J. & Van der Merwe. S.E. 2002. *Principles of evidence.* 2nd edition. Claremont: Juta.

Shaler, R.C. 2012. *Crime scene forensics. A scientific method approach*: New York: CRC Press.

Shortt, N.K. & Hammett, D. 2013. Housing and health in an informal settlement upgrade in Cape Town, South Africa. *Journal of Housing and the Built Environment*, 28(4):615-627.

Silverman, D. 2020. *Interpreting qualitative data.* 6th edition. London: Sage.

Smit W, Lannoy A, Dover RV, Lambert EV, Levitt, N., & Watson, V. 2016. Making Unhealthy Places: The Built Environment and Non-Communicable Diseases in Khayelitsha, Cape Town. Health & place, 39:196-203.

Socio-Economic Rights Institute of South Africa. 2018. *Good governance learning network: State of local governance.* Cape Town: Mott Foundation.

South Africa. 1977. *Criminal Procedure, Act 51 of 1977.* Pretoria: Government Printers.

South Africa. 1996. *The Constitution of the Republic of South Africa 108 of 1996.* Pretoria: Government Printer.

South Africa. 2018. *State of Local Governance.* Johannesburg: Socio-Economic Rights Institute of South Africa.

South African Police Service. 2009. *Detectives Learning Programme.* Pretoria: The Commissioner of the SAPS.

South African Police Services. 2011. *Registration and opening of case dockets. National Instruction 3 of 2011.* Pretoria: Commissioner of Police.

South African Police Services. 2013. *Basic Police Development Learning Programme*. Pretoria: Commissioner of Police.

South African Police (SAPS). 2020a. *Gauteng Annual Operational Plan*. Johannesburg: SAPS.

South African Police Service. 2020b. *Organizational structure: SAPS Annual Report*. Pretoria: The Commissioner of the SAPS.

South African Police Service. 2005. *SAPS previous Detective Policy 2 of 2005*. Pretoria: The Commissioner of the SAPS.

South African Police Service. 2015. *SAPS Policy on Crime Scene Management, National Instruction*, 1 of 2015. Pretoria: The Commissioner of the SAPS.

South African Police Service. 2017a. *SAPS Detective Service Policy, National Instruction, 12 of 2017*. Pretoria: The Commissioner of the SAPS.

South African Police Service. 2017b. *SAPS Policy on the Handling of Property and Seized Exhibits, National Instruction, 8 of 2017.* Pretoria: The Commissioner of the SAPS.

South African Police Service. 2017c. *SAPS Policy on the Management of Case Dockets, National Instruction, 13 of 2017*. Pretoria: The Commissioner of the SAPS.

South African Police Service. 2018. *SAPS Policy on the Detective Service, National Instruction 1 of 2018.* Pretoria: The Commissioner of the SAPS.

South African Police Service. 2019. *Crime Scene Investigation Quality Management, Standing Operating Procedure on Crime Scene Management.* Pretoria: The Commissioner of the SAPS

South African Police Service. 2020b. *Organizational structure: Police stations*. Pretoria: The Commissioner of the SAPS.

South African Police Service. 2022. *Crime statistics.* From: https://www.saps.gov.za/services/crimestats. Accessed on 28 March 2022.

Statistics South Africa. 2016. *General Household Survey 2016*. Pretoria: Statistics South Africa.

Statistics South Africa. 2018.*Statistics South Africa. Formal Census*. Pretoria: Statistics South Africa.

Storey, D. 2012. Incompatible partners? urban poor communities and river systems in Bangkok, Thailand. *International Development Planning Review*, 34:109-128.

Strydom, H. 2013. The pilot study in the quantitative paradigm. In De Vos, A.S., Strydom, H., Fouché, C.B. & Delport, C.S.L. 2011. *Research at grass roots: For the social sciences and human service professions.* 5th edition. Pretoria: Van Schaik.

Suditu, B. & Vâlceanu, D. 2013. Informal settlements and squatting in Romania: Sociospatial patterns and typologies. *Human Geographies: Journal of Studies & Research in Human Geography*, 7(2).

Sulemana, I. & Nketiah-Amponsah, E.E.A. 2019. *Urbanization and income inequality in Sub-Saharan Africa.* Canada: Elsevier.

Sutton, Jane & Zubin, Austin. 2015. Qualitative research: Data collection, analysis, and management. *JCPH (68):*226-231.

Sweeney, K. 2017. *Forensic investigations & the art of investigative interviewing.* United Kingdom: Kevin Sweeney.

Terrell, S.R. 2016. *Writing a proposal for your dissertation*: *Guidelines and examples*. New York: Guildford Publishers.

Tight, M. 2017. *Understanding case study research: Small-scale research with meaning.* London: Sage.

Tight, M. 2019. *Documentary research in the social sciences*. London: Sage.

Tissington, K., 2011, *A resource guide to housing in South Africa 1994–2010: Legislation, policy, programmes and practice*, Socio-Economic Rights Institute (SERI), Braamfontein.

Tjia, D. & Coetzee, R. 2022. Geospatial information needs for informal settlement upgrading – A *Review Habitat International*, 122 (102531) (2022).

Todes, A. and Turok, I. (2017) 'Spatial Inequalities and Policies in South Africa: Place-based or People-centred?', Progress in Planning. http://dx.doi.org/10.1016/j.progress.2017.03.001

Turok, I & Borel-Saladin, J . 2015. The theory and reality of urban slums: pathways-out of poverty or cul-de-sacs? Draft REDI3x3 working paper

Turvey, B.E. 2012. Inferring offender characteristics. In B.E. Turvey (Ed.), *Criminal* profiling: *An introduction to behavioral evidence analysis* (pp. 403–446). Canada: Elsevier. https://doi.org/10.1016/B978-0-12-385243-4.00017-4.

United Nations Charter. 2015. United Nations, Population Division: New York, NY, USA.

UN-DESA. 2014. *United Nations Department of Economic and Social Affairs (2015): World Urbanization Prospects*: The Department of Economic and Social Affairs of the United Nations, Population Division: New York, NY, USA.

United Nations Development Programme (UNDP). 2016. Transitioning from the MDGs to the SDGs. Available online at http://www.undp.org/content/dam/undp/library/SDGs. Accessed on 02 May 2019.

UN-Habitat. 2013. *State of the World's Cities 2012/2013: Prosperity of Cities*. Nairobi: United Nations Human Settlements Programme.

UN-Habitat. 2015a. Habitat III issue paper 22-Informal Settlement. (Vol. 2015, pp. 0-8). New York.

United Nations. 2015a. Housing and Sustainable Urban Development – Habitat III, Issue Paper No. 22 on Informal Settlements.

UN-Habitat. 2015b. A New Strategy of Sustainable Neighbourhood Planning: Five Principles - Urban Planning Discussion Note 3, UN-Habitat, Nairobi. From: https://unhabitat.org/a-new-strategy-of-sustainable-neighbourhood-planning-five-principles. Accessed on 10 June 2020.

UN-Habitat (United Nations – Human Settlements Programme). 2015c. World Atlas of Slum Evolution. Working document produced for the United Nations Human Settlements Programme prepared December 2015. From: http://unhabitat.org/world-atlas-of-slum-evolution/. Accessed on 11 May 2019.

UN-Habitat (United Nations – Human Settlements Programme). 2015d. Global country activities report 2015. From: http://unhabitat.org/books/un-habitat-global-country-activities-report-2015-increasing-synergy-for-greater-national-ownership/). Accessed on 08 Feb 2016.

UN-Habitat. 2016a. *World Cities Report: Urbanisation and Development – Emerging Futures* UN-Habitat: Nairobi.

UN-Habitat (United Nations – Human Settlements Programme). 2016b. *World Cities Report.* From: http://wcr.unhabitat.org/wpcontent/uploads/sites/16/2016/05/WCR-%20Full-Report-2016.pdf. Accessed on 18 August 2019.

UN Habitat. 2019. *The Strategic Plan 2020-2023. A Better Quality of Life for all in an Urbanizing World*. New York: UN Habitat. Accessed 15 September 2020.

UN-Habitat. 2020a. World Cities Report. *The Value of Sustainable Urbanization*, UN-Habitat, Nairobi. Accessed on 20 July 2021.

UN-Habitat. 2020b. Sub-Saharan Africa Atlas, UN-Habitat, Nairobi, From: https://unhabitat.org/sites/default/files/2020/07/atlasroafv02. Accessed on 17 March 2021

United Nations. 2022a. The Sustainable Development Goals Report. United Nations, New York.

United Nations. 2019. World Population Prospects. United Nations, New York.

UN-Habitat (United Nations – Human Settlements Programme). 2022b. Habitat III: Issue paper 22 – Informal Settlements. Paper produced in New York. From: http://unhabitat.org/issue-papers-and-policy-units/. Accessed on 13 March 2021.

UN-Habitat. 2017. Implementing the New Urban Agenda by Strengthening crisis in South Africa: Stopgap or prototype solution? *Housing Studies* 31(4):384–409.

UN-Habitat. 2023a. United Nations Human Settlements Programme. Available at: www.unhabitat.org. Accessed on 20 August 2023.

UN-Habitat .2023b. "A sustainable urban future through inclusive and effective multilateralism: achieving the Sustainable Development Goals in times of global crises.2304593e.pdf (unhabitat.org). Accessed on 08 September 2023.

UNISA .2016. Policy on research ethics. Pretoria: University of South Africa.

U.S. National Institute of Justice Department. 2013. *Crime scene investigation: Guide for Law Enforcement.* Washington, DC: Department of Justice.

Van der Watt, M. 2014. Forensic Methods and Techniques 1: Study Guide 1 for FOR1501. Pretoria: Unisa.

Van der Watt, M. 2015. The preliminary investigation phase. In Zinn, R. & Dintwe, S. (eds.) *Forensic investigation legislative principles and investigative practice.* Cape Town: Juta Law.

Varpio, L., Paradis, E., Uijtdehaage, S. & Young, M. 2020. The distinctions between theory, theoretical framework, and conceptual framework. *Academic Medicine*, 95(7), 989-994.

Wagner, C., B. Kawulich and M. Garner. 2012. *Doing social research: A global context.* London: McGraw-Hill.

Wagner, C., Kawulich, B. & Garner, M. 2019. *A mixed research synthesis of literature on teaching qualitative research methods. Sage Open, 9*(3):215.

Walliman, N. 2017. *Social research methods.* 2nd edition. London: Sage.

Wamukoya, D. 2019. *Completing and Recording the Crime Scene Investigation. Cape Town*: Oxford University Press.

Ware, L. 2021 *Crime Scene Processing and Recovery of Physical Evidence from Sexual Assault Scenes.* San Diego.

Welman, J.C., Kruger, S.J. & Mitchell, B. 2015. *Research methodology.* 3rd edition. Cape Town: Oxford University Press.

White Paper on Policing see South Africa. Civilian Secretariat for Police Service. 2016.

White Paper on Safety and Security. Department of Civilian Secretariat for Police Service. From: http://www.policesecretariat.gov.za/downloads/bills/2016_White Paper on Safety & Security.pdf. Accessed on 12 February 2019.

White P. 2014. *Crime Scene to Court: The Essentials of Forensic Science.* 3rd edition. New York, NY: CRC Press

Wilkinson, I. A. G. 2019. On the pitfalls and promises of using mixed methods in literacy research: Perceptions of reviewers. Research Papers in Education, 34(1), 61-83. https://doi.org/10.1080/02671522.2017.1402081

Woods, D.D. 2013. *Fundamentals of criminal investigations.* Springfield, Illinois: Library of Congress.

World Bank. 2018. *Poverty and Shared Prosperity 2018: Piecing Together the Poverty Puzzle.* Washington, DC: World Bank.

World Factbook. 2021. Washington, DC: Central Intelligence Agency, 2021. From: https://www.cia.gov/the-world-factbook/about/archives/2021/. Accessed on 08 April 2023.

Zanganeh, M., Varesi, H.R. & Zangiabadi, A. 2013. 'Strategic housing planning through sustainable development approach in Iran Metropolitans: Case study of Metropolitan Mashhad', *Journal of Basic and Applied Scientific Research* 3(9), p. 52.

Ziblim, A., Sumeghy, M.G. & Cartwright, A. 2013. The dynamics of informal settlements upgrading in South Africa. *Habitat International*, 37, 316-334.

Zinn, R. 2002. Sentenced motor vehicle hijackers imprisoned in Gauteng as a source of crime intelligence. (MTech dissertation, Pretoria, University of South Africa).

Zinn, R. 2007. Incarcerated perpetrators of house robbery as a source of crime intelligence. (DLit et Phil thesis, University of South Africa, Pretoria).

Zinn, R. 2010. Home invasion: Robbers disclose what you should know. Cape Town: Tafelberg.

Zinn, R.J. & Dintwe, S.I. 2015. *Forensic investigation. Legislative and investigative practice.* Claremont: Juta Law.

Zinn, R. & Dintwe, S. 2016. *Forensic investigation: Legislative principles and investigative practice.* Juta: Claremont.

ANNEXURES

9.1 ANNEXURE A: UNISA ETHICS APPROVAL

UNISA | college of law

COLLEGE OF LAW RESEARCH ETHICS REVIEW COMMITTEE

Date: 2015-07-22

Reference: ST 94

Applicant: G A Prins

Dear G A Prins

DECISION: ETHICS APPROVAL

Name	G A Prins
Proposal	An assessment of the processing of crime scenes by detectives in informal settlements
Qualification	D Litt et Phil (Police Science)

Thank you for the application for research ethics clearance by the College of Law Research Ethics Review Committee for the above mentioned research. **Final approval is granted.**

The application was reviewed in compliance with the Unisa Policy on Research Ethics.

The proposed research may now commence with the proviso that:

1. *The researcher will ensure that the research project adheres to the values and principles expressed in the Unisa Policy on Research Ethics which can be found at the following website:*

   http://www.unisa.ac.za/cmsys/staff/contents/departments/res_policies/docs/Policy_Research%20Ethics_rev%20app%20Council_22.06.2012.pdf

2. *Any adverse circumstances arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the College of Law Ethical Review Committee.*

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392, Unisa, 0003, South Africa
www.unisa.ac.za

330

> An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants

3. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.

Note:

The reference number (top right corner of this communique) should be clearly indicated on all forms of communication (e.g. Webmail, E-mail messages, letters) with the intended research participants, as well as with the URERC.

Kind regards

DR B HAEFELE
CHAIR PERSON: RESEARCH ETHICS
REVIEW COMMITTEE
COLLEGE OF LAW

PROF R SONGCA
EXECUTIVE DEAN:
COLLEGE OF LAW

9.2 ANNEXURE B: SAPS APPLICATION TO CONDUCT RESEARCH

SUID-AFRIKAANSE POLISIEDIENS

SOUTH AFRICAN POLICE SERVICE

Private Bag / Privaatsak X 57, BRAAMFONTEIN, 2017

Reference Verwysing	3/34/2(201500044)
Enquiries Navrae	Lt. Col. Peters SAC Linda Ladzani
Telephone Telefoon	(011) 274- 7529
Fax number Faksnommer	(011) 547- 9189

OFFICE OF THE
PROVINCIAL COMMISSIONER

SOUTH AFRICAN POLICE SERVICE

GAUTENG

2015-12-22

A. The Provincial Head: Legal Service
S A Police Service
GAUTENG

B. The Deputy Provincial Commissioner: Crime Detection
S A Police Service
GAUTENG

C. The Deputy Provincial Commissioner: Human Resources Management
S A Police Service
GAUTENG

APPLICATION TO CONDUCT RESEARCH: AN ASSESSMENT OF THE PROCESSING OF CRIME SCENES BY DETECTIVES IN INFORMAL SETTLEMENTS: COL GA PRINS

A-B: For your recommendation
C: For approval

1. Attached herewith is an application of Colonel GA Prins to conduct research within the South African Police Service.

2. The application has been evaluated by the Provincial Research Office (Strategic Management) as per attached Annexure and found to be in compliance with National Instruction 1 of 2006: Research.

3. In the opinion of the Research Office, the research will assist the South African Police Service by contributing to the development of new, revised and or improved policy guidelines on the processing of serious scene in informal settlements. Important knowledge and information regarding the uniqueness and complexity of circumstances and conditions on the processing of serious crime scenes in informal settlements in respect of environmental and infrastructural challenges will be explored during this study. It will also renew, revise or improve the existing policy on the processing of serious crime scenes and will be able to consider the uniqueness and complexity of circumstances and conditions on the processing of serious crime scenes in informal settlements in respect of environmental and infrastructural challenges that exist.

Page 1 of 5

APPLICATION TO CONDUCT RESEARCH: AN ASSESSMENT OF THE PROCESSING OF CRIME SCENES BY DETECTIIVES IN INFORMAL SETTLEMENTS: COL GA PRINS

4. In line with National Instruction 1 of 2006, you are afforded the opportunity to comment on the relevance and feasibility of the proposed research within your area of responsibility. Any objections against the research will be noted and you will be requested to clarify and motivate those with the Provincial Head: Organisational Development & Strategic Management.

5. In order to ensure the effective and efficient finalisation of this application you are requested to forward your comments back to Strategic Management office within the allocated timeframe.

6. Your cooperation and assistance is appreciated.

BRIGADIER
PROVINCIAL HEAD: ORGANISATIONAL DEVELOPMENT & STRATEGIC MANAGEMENT: GAUTENG
SJ PHETO
Date: 2015/12/23

APPLICATION TO CONDUCT RESEARCH: AN ASSESSMENT OF THE PROCESSING OF CRIME SCENES BY DETECTIVES IN INFORMAL SETTLEMENTS: COL GA PRINS

COMMENTS & RECOMMENDATION: PROVINCIAL RESEARCH CENTRE

i	OFFICIAL FILE NO:	3/34/2 (201500044)			
	FILE COMPUTER REFERENCE NO:	7361162			
ii	MOTIVATION FOR RESEARCH:	• To assess the processing of serious crime scene by detectives in informal settlements			
	APPLICATION FOUND TO BE COMPLETE:	YES		NO	
	INDEMNITY / UNDERTAKING SIGNED	YES		NO	
iii	APPLICATION PERUSED BY:	SAC ML Ladzani			
	CONTACT NO:	011 274 7529			
	SIGNATURE:				
	DATE:				
iv	APPLICATION VERIFIED BY:				
	APPLICATION RECOMMENDED:	YES		NO	
	CONTACT NO:				
	SIGNATURE:				
	DATE:				
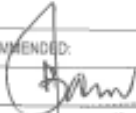
APPLICATION TO CONDUCT RESEARCH: AN ASSESSMENT OF THE PROCESSING OF CRIME SCENES BY DETECTIVES IN INFORMAL SETTLEMENTS: COL GA PRINS

A. RECOMMENDATION BY THE PROVINCIAL HEAD: LEGAL SERVICE
    TIME ALLOCATED: 3 days

COMMENTS WITH REGARDS TO ANY LEGAL OBJECTIONS AGAINST THE RESEARCH WITH ANY ADDITIONAL LIMITATIONS TO RESEARCHER:				
File received today (17/2/2016). There are no legal objections as the research will assist SAPS in improving policy guidelines.				
APPLICATION RECOMMENDED:	YES	✕	NO	
SIGNATURE: _(signature)_	DATE:	17 -02- 2016		

BRIGADIER
N. RAMBACHAN-NAIDOO

B. RECOMMENDATION BY THE PROVINCIAL HEAD: HUMAN RESOUCE DEVELOPMENT
    TIME ALLOCATED: 3 days

COMMENTS WITH REGARDS TO THE RELEVANCE AND FEASIBILITY OF THE RESEARCH WITHIN YOUR INVIRONMENT				
Research is supported and the motivation after the application will advance SAPS knowledge management & improvement of policing practices				
APPLICATION RECOMMENDED:	YES	✕	NO	
SIGNATURE: _(signature)_ Brigadier	DATE:	16 - 02 .18		

Prov. Head: HRD: Gauteng
R. Behari Ram

9.3 ANNEXURE C: SAPS PERMISSION TO CONDUCT RESEARCH

PERMISSION TO CONDUCT RESEARCH IN THE SAPS

RESEARCH TOPIC: AN ASSESSMENT OF THE PROCESSING OF CRIME SCENE BY DETECTIVES IN INFORMAL SETTLEMENTS

RESEARCHER: COL. GA PRINS

Permission is hereby granted to the researcher above to conduct research in the SAPS based on the conditions of National Instruction 1 of 2006 (as handed to the researcher) and within the limitations as set out below and in the approved research proposal.

This permission must be accompanied with the signed Indemnity, Undertaking & Declaration and presented to the commander present when the researcher is conducting research.

This permission is valid for a period of Twelve (12) months after signing.

Any enquiries with regard to this permission must be directed to Lt. Col. Peters or SAC Linda Ladzani at PetersNG@saps.gov.za / Ladzanim@saps.org.za.

RESEARCH LIMITATIONS / BOUNDARIES:

Research Instruments:	Interviews (Semi-structured)
Target audience / subjects:	Police Officials (Detectives) and LCRC officers
Geographical target:	Clusters: Alexandra / PTA Central / Benoni / JHB Central / Carletonville / Orlando / Moroka / Sebokeng / Honeydew /Tembisa / Temba / Hillbrow / Krugersdorp / Katlehong / Mamelodi / Vanderbijlpark
Access to official documents:	No

MAJOR GENERAL
DEPUTY PROVINCIAL COMMISSIONER: HUMAN RESOURCE MANAGEMENT: GAUTENG
DS DE LANGE

Page 5 of 5

9.4 ANNEXURE D: INTERVIEW SCHEDULE FOR DETECTIVES

INTERVIEW SCHEDULE FORM: DETECTIVES

RESPONDENT NO: ....

Title of research project: AN ASSESSMENT OF THE PROCESSING OF CRIME SCENES BY DETECTIVES IN INFORMAL SETTLEMENTS.

Researcher: ....

Promoter: Prof Juanida Horn

This research project is undertaken by the researcher as part of a DLitt et Phil in Policing Science degree at UNISA.

(Notes: Bridging dialogue is in italics, but questions are in normal text).

SUMMARY OF THE PROJECT

This interview schedule forms part of a research project to determine the participants' understanding of the processing of serious crime scenes in informal settlements and to shed light on the complexity and difficulties encounter during the processing of serious crime scenes in informal settlements.

CONFIDENTIALITY

You are NOT REQUIRED to give your name in this interview. Your name will also not appear in any other report and the researcher guarantees your anonymity. In addition all other personal information will be kept confidential. Your identity will in no way be detectable from the research results. The analysed and processed data (statistics) will be published in a research report.

Written permission has been obtained from the South African Police Service (SAPS) in advance for the interviews to be conducted.

The researcher is bound to his assurances and guarantees by the ethics code for research of UNISA.

DEFINITIONS

Crime scene management

According to the SAPS Policy for Crime Scene Management (2005), Crime scene management means the process of planning and implementation of measures to (SAPS, 2005:2):

- *take control and secure the crime scene;*
- *ensure the integrity and the originality of evidence and exhibits;*
- *investigate and process the crime scene thoroughly and undisturbedly;*
- *co-ordinate and maximise the collection of exhibits;*
- *utilise the investigation support resources optimally;*
- *record facts and events properly; and*

- ensure that the crime scene remains under Police protection for the period determined by the Crime Scene Manager

Crime scene processing

According to Byrd (2007:3), the three basic stages to crime scene investigations can be regarded as the proper processing of the crime scene. These stages consist of Scene Recognition, Scene Documentation and Evidence Collection.

Crime Scene Manager

The SAPS Policy of Crime Scene Management (2005:2) refers to a Crime Scene Manager as a specially trained member of the relevant Investigation Unit, who manages the Crime Scene Team on the crime scene.

Crime Scene Processing Team

According to the SAPS National Instruction on Crime Scene Management (2015:3), Crime Scene Processing Team refers to a team of Crime Scene examiners processing the crime scene to obtain physical evidence

Crime Scene Technician

The SAPS Policy for Crime Scene Management (2005:2), refers to a Crime Scene Technician as a specially trained member of the Criminal Record Centre (CRC) or Local Criminal Record Centre (LCRC), who takes control of the Crime Scene Processing Team

Primary crime scene

The primary crime scene is an area, place or thing where the incident occurred or where the majority or a high concentration of physical evidence will be found (Horswell, 2004: 3)

Secondary crime scene

Secondary crime scene /s are places or things where physical evidence relating to the incident may be found. The potential physical evidence will usually be transported away from the primary crime scene for example:

- The deceased;
- The getaway vehicle in crimes of robbery;
- The suspect;
- The suspect's environment;
- The suspect's vehicle;
- The weapon used in the crime (Horswell, 2004: 3)

Key theoretical concepts of the serious crimes that this study will be limited to are:

Robbery with aggravating circumstances

Robbery with aggravating circumstances is the unlawful and intentional forceful removal and appropriation in aggravating circumstances of movable tangible property belonging to another. Robbery with aggravating circumstances are sub categorised into different crime categories such as robbery of a motor vehicle, robbery at a residential premises and robbery at non-residential premises (National Crime Statistics 2014:79)

Robbery of a motor vehicle

Robbery of a motor vehicle (carjacking) is the unlawful and intentional forceful removal and appropriation of a motor vehicle belonging to another. (National Crime Statistics 2014:79)

Residential robbery

Residential robbery (house robbery) is the unlawful and intentional forceful removal and appropriation of property from residential premises of another person (National Crime Statistics 2014:80).

Business robbery

Business robbery (non-residential robbery) is the unlawful and intentional forceful removal and appropriation of property from the business of another person (National Crime Statistics 2014:80).

Serious crime scenes in this study are limited to residential robberies, business robberies and motor vehicle robberies (Hi-jacking). In a South African context these crimes are commonly known as "Trio crimes".

GENERAL

Only one answer per question is required. Your answers will be written on the questionnaire sheet by the interviewer. Should any question or statement be unclear to you, please ask the interviewer to explain it to you.

When answering the questions it is very important to give your own opinion and to provide accurate facts.

Since my research interest is on the processing of serious crime scenes in informal settlements , as the interview progresses you should be able to see why I am asking most of the questions that follow. If not, you can ask for an explanation, and I will try to explain, although it may not be until we have finished the interview because it is very important that we finish in the time we have available. Also, if you have other information that you think is important that I don't ask about, please tell me.

SECTION A

Let me start with some general information. I would like to know something about your background in general.

Biographical Information:

1. Gender

    Male, Female

2. Home language?

    Zulu Xhosa Tswana Sotho English Afrikaans Other (Specify)

3. Population group?

    Black, Asian, White, Coloured, Other (Specify)

4. Your age group?

    (18-21), (22-25), (26- 29), (30-33), (34-37),(38-41),(42-45),(46-49),(50-53),(54-57),(58-60)

5. What is your current rank?

6. For how long have you been a police official?

7. For how long have you been a detective?

8. Your highest educational qualification? Mark the highest **ONE** only.

    (Gr 10- Gr11)   (Gr 12 (Matric)

    Certificate, Diploma, Degree Post-Graduate Qualification

9. Courses you have attended

10. "Please list any training you have received in the processing of serious crime scenes".

    ....

11. List any training you have received in the processing of Trio crime scenes.

12. At which station are you based?

SECTION B

1. Briefly describe your current position in the detective service?

....

....

2. How long have you served in this position?

....

....

   3. Are you involved in the processing of Trio crime scenes?

....

4. "What does your involvement in the processing of serious crime scenes entails?"

....

....

SAPS National Instruction, 1 of 2015 on Crime Scene Management

   5. Is there any policy or national instruction currently available within the SAPS regarding the processing of crime scenes?

      Complete questions 6 to 15 only if the answer to question 5 is yes.

   6. Do you think there is a need for such policy or national instruction? Explain.

....

....

   7. Are you conversant with the content of this national instruction?

   8. Does this national instruction provide for specific guidelines on the processing of Trio crime scenes? Explain..

....

   9. Do you think there is a need for specific guidelines in this national instruction regarding the processing of Trio crime scenes? Explain...

....

341

10. Are there specific elements or circumstances that have to be considered in this national instruction during the processing of Trio crime scenes in informal settlements? Explain

....

....

....

11. Are the guidelines provided in this national instruction practical to apply in the specific environmental and infrastructural conditions in informal settlements in processing Trio crime, crime scenes? Explain:

....

....

12. Do you apply the guidelines specified in this national instruction in practice when possessing Trio crime scenes?

....

13. Is the application of this national instruction assisting to effectively process Trio crime scenes in suburban areas? Explain:..

....

14. Is the application of this national instruction assisting to effectively process Trio crime scenes in informal settlements? Explain:..

....

15. "Please explain the differences between infrastructural- and environmental physical conditions in suburban- and informal settlement areas?"

....

....

16. "Please explain whether serious crime scenes in suburban areas are more effectively processed than in informal settlement areas?"

....

....

17. "Please explain the barriers and challenges confronted with when processing serious crime scenes in informal settlement areas?"

....

....

18. "Please explain the impact and influence of challenges and barriers towards the effectiveness of crime scene processing in informal settlement areas?"

....

....

19. Are these guidelines provided in this national instruction adequate and sufficient to be effectively applied in the processing of Trio crime scenes in both suburban areas and informal settlements? Explain..

....

....

20. Are Trio crime scenes more effective processed in a well-developed environmental and infrastructural areas than in an under developed environmental and infrastructural areas, such as informal settlements? If yes, please explain why this is the case in your experience

....

....

21. Does the guidelines in this national instruction provide adequately for under developed environmental and infrastructural conditions and circumstances in respect of Trio crimes scenes in informal settlements? Explain

....

....

22. Is national instruction practical and realistic to apply when processing Trio crimes scenes in informal settlements? Explain..

....

23. Please explain how the environmental conditions, infrastructural conditions and circumstances influence the application and adherence with the provisions of this national instruction.

The current procedure followed by detectives during the processing of Trio crime scenes.

24. "Briefly explain the current procedure you followed when processing serious crime scene?"

....

....

343

25. If the procedure followed in processing Trio crime scenes is different from what are

described in the SAPS the national instruction on crime scene management, please explain why you think this is the case.

....

....

26. "In your experience does your colleagues at the police station or LCRC Unit follow the same procedure when processing serious crime scenes?"

....

....

27. "On which policy, instruction or organisational guidelines is this current procedure based on?"

....

....

28. "Do you think there is a necessity for a policy regarding serious crime scene processing in informal settlements?"

....

....

29. Do you process each type of Trio crime scene differently? If yes explain why?

....

....

30. What according to you should be done regarding the processing of Trio crime scenes in informal settlements to improve the effectiveness of the processing?..

....

....

31. Briefly explain what should according to you be amended in the SAPS the National Instruction,1 of 2015 on crime scene management to provide for more effective guidelines in processing Trio crime scenes in informal settlements..

....

....

Thank you that is the end of the interview. I have no more questions for you. Now, is there anything else that you can think of that might be of importance to my study and that I have not asked you about?

INTERVIEWER: COMMENTS

Interview number Identification code

SECTION A

Description of circumstance under which the interview took place

General impressions (co -operation, body language, communication)

SECTION B

Summary of the interview (Important aspects)

Adoption of question and theory

Proposition: (Confirmation, modification, rejection, new understanding, new areas to be researched or explored)

AGREEMENT/INFORMED CONSENT

I,_____ on this the _____ day of
_____ 20_____ hereby consent to being interviewed by
.... on the the topic
....

☐   follow-up interview if necessary;

☐   the interviews be recorded in writing;

☐   the use of data derived from these interviews by the interviewer in a research report as he deems appropriate.

I also understand that:

☐   I am free to end my involvement or to cancel my consent of participate in the research at any time should I want to;

☐   information rendered up to the point of my termination of participation could, however, still be used by the researcher;

☐   anonymity is guaranteed by the researcher and data will under no circumstances be reported in such a way to reveal my identity;

☐   I am free to determine that specific information that I reveal should not be recorded in writing;

☐   no reimbursement will be made by the researcher for information rendered or for my participation in this project;

☐   I will in no way derive any personal benefit from taking part in this research project;

☐By signing this agreement I under take to give honest and full answers to reasonable questions and not to deliberately mislead the researcher;

☐   I will receive the original copy of this agreement on signing it.

I hereby acknowledge that the researcher / interviewer:

☐   discussed the aims and objectives of this research project with me;

☐   informed me about the contents of this agreement;

346

☐ explained the implications of my signing this agreement;

In co-signing this agreement the researcher under takes to:

☐ maintain confidentiality, anonymity, and privacy regarding the identity of the subject and information rendered by the interviewee.

Purpose of the study

The purpose of this study is for the fulfilment of a DLitt et Phil at the University of South Africa. The aims of the research are as follows:

- The main aim of this research is to assess the processing of Trio crime scenes by detectives in informal settlements in order to recommend new, revised or improved, a more realistic, practical, feasible and viable procedures on the processing of serious crime scenes in informal settlements.
- The researcher want to recommend to the SAPS management that new, revised or improved policy be developed, in which all the environmental-, infrastructural circumstances and conditions as well as any other impractical obstruction experienced in informal settlements by detectives when processing of Trio crime scenes are being considered and to be used during the processing of serious crime scenes in South Africa.

Primary objectives

- To assess the current policy of the SAPS 2 of 2005, implemented during 2005 and the National Instruction, 1 of 2015, concerning the processing of crime scenes in informal settlements.

- To explain the procedure currently followed by detectives when processing Trio crime scenes in informal settlements.
- To explain the procedure currently followed by detectives when processing Trio crime scenes in suburban areas.
- To determine scientifically the reasons why there is a difference in the processing of Trio crime scenes by detectives in suburban areas and informal settlements notwithstanding the same policy and national instruction on crime scene processing currently in use by the SAPS.
- To explain the factors that complicates and makes it basically unfeasible to process Trio crime scenes effectively in informal settlements.

9.5 ANNEXURE E: INTERVIEW SCHEDULE FOR LCRC MEMBERS

INTERVIEW SCHEDULE FOR LCRC MEMBERS

RESPONDENT NO: ....

Title of research project: AN ASSESSMENT OF THE PROCESSING OF CRIME SCENES BY DETECTIVES IN INFORMAL SETTLEMENTS.

Researcher: ....

Promoter: Prof Juanida Horn

This research project is undertaken by the researcher as part of a DLitt et Phil in Policing Science degree at UNISA.

(Notes: Bridging dialogue is in italics, but questions are in normal text).

SUMMARY OF THE PROJECT

This interview schedule forms part of a research project to determine the participants' understanding of the processing of serious crime scenes in informal settlements and to shed light on the complexity and difficulties encounter during the processing of serious crime scenes in informal settlements.

CONFIDENTIALITY

*You are **NOT REQUIRED** to give your name in this interview. Your name will also not appear in any other report and the researcher guarantees your anonymity. In addition all other personal information will be kept confidential. Your identity will in no way be detectable from the research results. The analysed and processed data (statistics) will be published in a research report.*

Written permission has been obtained from the South African Police Service (SAPS) in advance for the interviews to be conducted.

The researcher is bound to his assurances and guarantees by the ethics code for research of UNISA.

DEFINITIONS

Crime scene management

According to the SAPS Policy for Crime Scene Management (2005), Crime scene management means the process of planning and implementation of measures to (SAPS, 2005:2):

- *take control and secure the crime scene;*
- *ensure the integrity and the originality of evidence and exhibits;*
- *investigate and process the crime scene thoroughly and undisturbedly;*
- *co-ordinate and maximise the collection of exhibits;*
- *utilise the investigation support resources optimally;*
- *record facts and events properly; and*

- ensure that the crime scene remains under Police protection for the period determined by the Crime Scene Manager

Crime scene processing

According to Byrd (2007:3), the three basic stages to crime scene investigations can be regarded as the proper processing of the crime scene. These stages consist of Scene Recognition, Scene Documentation and Evidence Collection.

Crime Scene Manager

The SAPS Policy of Crime Scene Management (2005:2) refers to a Crime Scene Manager as a specially trained member of the relevant Investigation Unit, who manages the Crime Scene Team on the crime scene.

Crime Scene Processing Team

According to the SAPS National Instruction on Crime Scene Management (2015:3), Crime Scene Processing Team refers to a team of Crime Scene examiners processing the crime scene to obtain physical evidence

Crime Scene Technician

The SAPS Policy for Crime Scene Management (2005:2), refers to a Crime Scene Technician as a specially trained member of the Criminal Record Centre (CRC) or Local Criminal Record Centre (LCRC), who takes control of the Crime Scene Processing Team

Primary crime scene

The primary crime scene is an area, place or thing where the incident occurred or where the majority or a high concentration of physical evidence will be found (Horswell, 2004: 3)

Secondary crime scene

Secondary crime scene /s are places or things where physical evidence relating to the incident may be found. The potential physical evidence will usually be transported away from the primary crime scene for example:

- The deceased;
- The getaway vehicle in crimes of robbery;
- The suspect;
- The suspect's environment;
- The suspect's vehicle;
- The weapon used in the crime (Horswell, 2004: 3)

Key theoretical concepts of the serious crimes that this study will be limited to are:

Robbery with aggravating circumstances

Robbery with aggravating circumstances is the unlawful and intentional forceful removal and appropriation in aggravating circumstances of movable tangible property belonging to another. Robbery with aggravating circumstances are sub categorised into different crime categories such as robbery of a motor vehicle, robbery at a residential premises and robbery at non-residential premises (National Crime Statistics 2014:79)

Robbery of a motor vehicle

Robbery of a motor vehicle (carjacking) is the unlawful and intentional forceful removal and appropriation of a motor vehicle belonging to another. (National Crime Statistics 2014:79)

Residential robbery

Residential robbery (house robbery) is the unlawful and intentional forceful removal and appropriation of property from residential premises of another person (National Crime Statistics 2014:80).

Business robbery

Business robbery (non-residential robbery) is the unlawful and intentional forceful removal and appropriation of property from the business of another person (National Crime Statistics 2014:80).

Serious crime scenes in this study are limited to residential robberies, business robberies and motor vehicle robberies (Hi-jacking). In a South African context these crimes are commonly known as "Trio crimes".

GENERAL

Only one answer per question is required. Your answers will be written on the questionnaire sheet by the interviewer. Should any question or statement be unclear to you, please ask the interviewer to explain it to you.

When answering the questions it is very important to give your own opinion and to provide accurate facts.

Since my research interest is on the processing of serious crime scenes in informal settlements, as the interview progresses you should be able to see why I am asking most of the questions that follow. If not, you can ask for an explanation, and I will try to explain, although it may not be until we have finished the interview because it is very important that we finish in the time we have available. Also, if you have other information that you think is important that I don't ask about, please tell me.

350

The last thing I would like to say before we get started is to remind you that you have the right to refuse to answer any particular question, although I would appreciate you telling me the reason why if there's anything you don't want to answer. Do you have any questions now?

SECTION A

Let me start with some general information. I would like to know something about your background in general.

Biographical Information:

1   Gender

       Male, Female

2   Home language?

       Zulu Xhosa Tswana Sotho English Afrikaans Other (Specify)

3   Population group?

       Black, Asian, White, Coloured, Other (Specify)

4   Your age group?

       (18-21), (22-25), (26- 29), (30-33), (34-37),(38-41),(42-45),(46-49),(50-53),(54-57),(58-60)

5   What is your current rank?

6   For how long have you been a police official?

7.   For how long have you been a detective?

8.   Your highest educational qualification? Mark the highest **ONE** only.

(Gr 10- Gr11) (Gr 12 (Matric) Certificate, Diploma, Degree Post-Graduate Qualification

9.   Courses you have attended:

10.   "Please list any training you have received in the processing of serious crime scenes".

11.   List any training you have received in the processing of Trio crime scenes.

12.   At which LCRC are you based?

SECTION B

1. Briefly describe your current position in the LCRC ?

....

....

2. How long have you served in this position?

....

....

3. Are you involved in the processing of Trio crime scenes?

....

....

4. "What does your involvement in the processing of serious crime scenes entails?"

....

....

....

SAPS National Instruction, 1 of 2015 on Crime Scene Management

5. Is there any national instruction currently available within the SAPS regarding the processing of Trio crime scenes?

   Complete questions 6 to 15 only if the answer to question 5 is yes.

6. Do you think there is a need for such national instruction? Explain.

....

....

7. Are you conversant with the content of this national instruction?

8. Does this policy or national instruction provide for specific guidelines on the processing of Trio crime scenes? Explain...

....

9. Do you think there is a need for specific guidelines in the national instruction regarding the processing of Trio crime scenes? Explain...

....

10. Is there specific elements or circumstances that have to be considered in this national instruction during the processing of Trio crime scenes in informal settlements?   Explain

....

11. Are the guidelines provided in this national instruction practical to apply in the specific environmental and infrastructural conditions in informal settlements in processing Trio crime, crime scenes? Explain:

....

....

12. Do you apply the guidelines specified in this national instruction in practice when   possessing   Trio   crime   scenes?

....

13. Is the application of this national instruction assisting to effectively process Trio crime   scenes   in   suburban   areas? Explain:..

....

14. Is the application of this national instruction assisting to effectively process Trio crime   scenes   in   informal   settlements? Explain:..

....

15. "Please explain the differences between infrastructural- and environmental physical   conditions   in   suburban-   and   informal   settlement areas?"..

....

16. "Please explain whether serious crime scenes in suburban areas are more effectively processed than in informal settlement areas?"

....

....

17. "Please explain the barriers and challenges confronted with when processing serious crime scenes in informal settlement areas?"

....

....

18. "Please explain the impact and influence of challenges and barriers towards the effectiveness of crime scene processing in informal settlement areas?"

....

....

19. Are these guidelines provided in this national instruction adequate

and sufficient to be effectively applied in the processing of Trio crime scenes in both suburban areas and informal settlements? Explain..
....
....

20. Are Trio crime scenes more effective processed in a well-developed environmental

and infrastructural areas than in an under developed environmental and infrastructural areas, such as informal settlements? If yes, please explain why this is the case in your experience

....
....

21. Does the guidelines in this national instruction provide adequately

for under developed environmental and infrastructural conditions and circumstances in respect of Trio crimes scenes in informal settlements? Explain

....
....

22. Is national instruction practical and realistic to apply when

processing Trio crimes scenes in informal settlements? Explain..
....

23. Please explain how the environmental conditions, infrastructural conditions and circumstances influence the application and adherence with the provisions of this national instruction.

The current procedure followed by detectives during the processing of Trio crime scenes.

24. "Briefly explain the current procedure you followed when processing serious crime scene?"

....
....

25. If the procedure followed in processing Trio crime scenes is different from what are

described in the SAPS the national instruction on crime scene management, please explain why you think this is the case.

....

354

26. "In your experience does your colleagues at the police station or LCRC Unit follow the same procedure when processing serious crime scenes?"

....

....

27. "On which policy, instruction or organisational guidelines is this current procedure based on?"

....

....

28. "Do you think there is a necessity for a policy regarding serious crime scene processing in informal settlements?"

....

....

29. Do you process each type of Trio crime scene differently? If yes explain why?

....

....

....

30. What according to you should be done regarding the processing of Trio crime scenes in informal settlements to improve the effectiveness of the processing?..

....

.....

31. Briefly explain what should according to you be amended in the SAPS the National Instruction,1 of 2015 on crime scene management to provide for more effective guidelines in processing Trio crime scenes in informal settlements...

....

....

Thank you that is the end of the interview. I have no more questions for you. Now, is there anything else that you can think of that might be of importance to my study and that I have not asked you about?

....

....

....

....

INTERVIEWER: COMMENTS

Interview number Identification code

SECTION A

Description of circumstance under which the interview took place

General impressions (co -operation, body language, communication)

SECTION B

Summary of the interview (Important aspects)

Adoption of question and theory

Proposition: (Confirmation, modification, rejection, new understanding, new areas to be researched or explored)

AGREEMENT/INFORMED CONSENT

I,_____ on this the _____ day of _____ 20_____ hereby consent to

☐☐being interviewed by .... on the topic

☐ follow-up interview if necessary;

☐ the interviews be recorded in writing ;

☐ the use of data derived from these interviews by the interviewer in a research report as he deems appropriate.

I also understand that:

☐ I am free to end my involvement or to cancel my consent of participate in the research at any time should I want to;

☐ information rendered up to the point of my termination of participation could, however, still be used by the researcher;

☐ anonymity is guaranteed by the researcher and data will under no circumstances be reported in such a way to reveal my identity;

☐ I am free to determine that specific information that I reveal should not be recorded in writing;

☐ no reimbursement will be made by the researcher for information rendered or for my participation in this project;

☐ I will in no way derive any personal benefit from taking part in this research project;

☐By signing this agreement I under take to give honest and full answers to reasonable questions and not to deliberately mislead the researcher;

☐ I will receive the original copy of this agreement on signing it.

I hereby acknowledge that the researcher / interviewer:

☐ discussed the aims and objectives of this research project with me;

☐ informed me about the contents of this agreement;

☐ explained the implications of my signing this agreement;

In co-signing this agreement the researcher under takes to:

☐ maintain confidentiality, anonymity, and privacy regarding the identity of the subject and information rendered by the interviewee.

Purpose of the study

The purpose of this study is for the fulfilment of a DLitt et Phil at the University of South Africa. The aims of the research are as follows:

- The main aim of this research is to assess the processing of Trio crime scenes by detectives in informal settlements in order to recommend new, revised or improved, a more realistic, practical, feasible and viable procedures on the processing of serious crime scenes in informal settlements.
- The researcher want to recommend to the SAPS management that new, revised or improved policy be developed, in which all the environmental-, infrastructural circumstances and conditions as well as any other impractical obstruction experienced in informal settlements by detectives when processing of Trio crime scenes are being considered and to be used during the processing of serious crime scenes in South Africa.

Primary objectives

- To assess the current policy of the SAPS 2 of 2005, implemented during 2005 and the National Instruction, 1 of 2015, concerning the processing of crime scenes in informal settlements.

- To explain the procedure currently followed by detectives when processing Trio crime scenes in informal settlements.
- To explain the procedure currently followed by detectives when processing Trio crime scenes in suburban areas.
- To determine scientifically the reasons why there is a difference in the processing of Trio crime scenes by detectives in suburban areas and informal settlements notwithstanding the same policy and national instruction on crime scene processing currently in use by the SAPS.
- To explain the factors that complicates and makes it basically unfeasible to process Trio crime scenes effectively in informal settlements.
- To explain factors which directly influence on the non-compliance and non-adherence of policy and national instruction requirements by detectives when processing Trio crime scenes in informal settlements.

- To explore international literature relating to the same or similar situations and problems when processing Trio crime scenes in informal settlements.
- To look at international best practices in other countries such as India, Brasilia, Mexico and others which experience the same or similar problems as when processing Trio crime scenes in informal settlements.
- To provide new knowledge on the aspects that poorly and negatively impact and

influence the processing of Trio crime scenes in informal settlements.

- To contribute towards the formulation of a practical and feasible procedure on crime scene processing by making recommendations to the SAPS to renew, revise or improve the current policy.

Secondary objectives

- To provide new knowledge on the aspects that poorly and negatively impact and

influence the processing of Trio crime scenes in informal settlements.

- To contribute towards the formulation of a practical and feasible procedure on crime scene processing by making recommendations to the SAPS to renew, revise or improve the current policy.

_____ _____

(Interviewee)   (Interviewer)

_____

(Date)

(****If applicable)

I , _____ certify that I interpreted the

contents of the above document into the _____

The final questionnaire has to include two copies of the 'Agreement' to enable you to get two copies signed – one for your records and one to hand over before the interview to the participant.

9.6 ANNEXURE F: INTERVIEW SCHEDULE FOR SENIOR INTERNATIONAL POLICE OFFICIALS

INTERVIEW SCHEDULE FOR SENIOR INTERNATIONAL POLICE OFFICIALS

RESPONDENT NO: ....

Title of research project: AN ASSESSMENT OF THE PROCESSING OF CRIME SCENES BY DETECTIVES IN INFORMAL SETTLEMENTS.

Researcher: ....

Promoter: Prof Juanida Horne

This research project is undertaken by the researcher as part of a DLitt et Phil in Policing Science degree at UNISA.

(Notes: Bridging dialogue is in italics, but questions are in normal text).

SUMMARY OF THE PROJECT

This interview schedule forms part of a research project to determine the participants' understanding of the processing of serious crime scenes in informal settlements and to shed light on the complexity and difficulties encounter during the processing of serious crime scenes in informal settlements.

CONFIDENTIALITY

*You are **NOT REQUIRED** to give your name in this interview. Your name will also not appear in any other report and the researcher guarantees your anonymity. In addition all other personal information will be kept confidential. Your identity will in no way be detectable from the research results. The analysed and processed data (statistics) will be published in a research report.*

Written permission has been obtained from the South African Police Service (SAPS) in advance for the interviews to be conducted.

The researcher is bound to his assurances and guarantees by the ethics code for research of UNISA.

DEFINITIONS

Crime scene management

According to the SAPS Policy for Crime Scene Management (2005), Crime scene management means the process of planning and implementation of measures to (SAPS, 2005:2):

- *take control and secure the crime scene;*
- *ensure the integrity and the originality of evidence and exhibits;*
- *investigate and process the crime scene thoroughly and undisturbedly;*
- *co-ordinate and maximise the collection of exhibits;*

- *utilise the investigation support resources optimally;*
- *record facts and events properly; and*
- *ensure that the crime scene remains under Police protection for the period determined by the Crime Scene Manager*

Crime scene processing

According to Byrd (2007:3), the three basic stages to crime scene investigations can be regarded as the proper processing of the crime scene. These stages consist of Scene Recognition, Scene Documentation and Evidence Collection.

Crime Scene Manager

The SAPS Policy of Crime Scene Management (2005:2) refers to a Crime Scene Manager as a specially trained member of the relevant Investigation Unit, who manages the Crime Scene Team on the crime scene.

Crime Scene Processing Team

According to the SAPS National Instruction on Crime Scene Management (2015:3), Crime Scene Processing Team refers to a team of Crime Scene examiners processing the crime scene to obtain physical evidence

Crime Scene Technician

The SAPS Policy for Crime Scene Management (2005:2), refers to a Crime Scene Technician as a specially trained member of the Criminal Record Centre (CRC) or Local Criminal Record Centre (LCRC), who takes control of the Crime Scene Processing Team

Primary crime scene

The primary crime scene is an area, place or thing where the incident occurred or where the majority or a high concentration of physical evidence will be found (Horswell, 2004: 3)

Secondary crime scene

Secondary crime scene /s are places or things where physical evidence relating to the incident may be found. The potential physical evidence will usually be transported away from the primary crime scene for example:

- *The deceased;*
- *The getaway vehicle in crimes of robbery;*
- *The suspect;*
- *The suspect's environment;*

361

- The suspect's vehicle;
- The weapon used in the crime (Horswell, 2004: 3)

Key theoretical concepts of the serious crimes that this study will be limited to are:

Robbery with aggravating circumstances

Robbery with aggravating circumstances is the unlawful and intentional forceful removal and appropriation in aggravating circumstances of movable tangible property belonging to another. Robbery with aggravating circumstances are sub categorised into different crime categories such as robbery of a motor vehicle, robbery at a residential premises and robbery at non-residential premises (National Crime Statistics 2014:79)

Robbery of a motor vehicle

Robbery of a motor vehicle (carjacking) is the unlawful and intentional forceful removal and appropriation of a motor vehicle belonging to another. (National Crime Statistics 2014:79)

Residential robbery

Residential robbery (house robbery) is the unlawful and intentional forceful removal and appropriation of property from residential premises of another person (National Crime Statistics 2014:80).

Business robbery

Business robbery (non-residential robbery) is the unlawful and intentional forceful removal and appropriation of property from the business of another person (National Crime Statistics 2014:80).

Serious crime scenes in this study are limited to residential robberies, business robberies and motor vehicle robberies (Hi-jacking). In a South African context these crimes are commonly known as "Trio crimes".

GENERAL

Only one answer per question is required. Your answers will be written on the questionnaire sheet by the interviewer. Should any question or statement be unclear to you, please ask the interviewer to explain it to you.

When answering the questions it is very important to give your own opinion and to provide accurate facts.

Since my research interest is on the processing of serious crime scenes in informal settlements, as the interview progresses you should be able to see why I am asking most of the questions that follow. If not, you can ask for an explanation, and I will try to explain, although it may not be until we have finished the interview because it is very important that we finish in the time we have available. Also, if you have other information that you think is important that I don't ask about, please tell me.

The last thing I would like to say before we get started is to remind you that you have the right to refuse to answer any particular question, although I would appreciate you telling me the reason why if there's anything you don't want to answer. Do you have any questions now?

SECTION A

Let me start with some general information. I would like to know something about your background in general.

Biographical Information:

1. Gender

    Male, Female:

2. Home language?

3. Population group?

4. Your age group?

    (18-21), (22-25), (26- 29), (30-33), (34-37),(38-41),(42-45),(46-49),(50-53),(54-57),(58-60)

5. What is your current rank?

    ....

6. For how long have you been a police official?

    ....

7. For how long are you performing duties in respect of crime scene processing?

    ....

8. In which Division are you serving currently?

    ....

9. Your highest educational qualification? Mark the highest **ONE** only.

    (Gr 10- Gr11)   (Gr 12 (Matric)

    Certificate, Diploma, Degree Post-Graduate Qualification

10. Courses you have attended:

    ....

    ....

11.   "Please list any training you have received in the processing of serious crime scenes".

....

12.   List any training you have received in the processing of serious crime scenes.

....

13.   At which Police Agency are you based?

....

SECTION B

1.   Briefly describe your current position:

....

....

2.   How long have you performing these duties in this position?

....

....

3.   Are you involved in the processing of serious crime scenes?

....

....

4.   What does your involvement during the processing of serious crime scenes entail?

....

....

....

Policy on Crime Scene Management/ Crime scene processing

5.   Is there any policy or national police instruction currently available within the your country regarding the processing of serious crime scenes?

Complete questions 6 to 15 only if the answer to question 5 is yes.

6.   Do you think there is a need for such policy or national instruction? Explain.

....

....

7.   Are you conversant with the content of this policy or national instruction?

8.   Does this policy or national instruction provide for specific guidelines on the processing   of   serious   crime   scenes?

Explain...
....

9. Do you think there is a need for specific guidelines in the policy or national instruction regarding the processing of serious crime scenes? Explain...
....

10. Are there specific elements or circumstances that have to be considered in the policy or national instruction during the processing of crime scenes in informal settlements? Explain
....
....

11. Are the guidelines provided in this policy or national instruction practical to apply in the specific environmental and infrastructural conditions in informal settlements in processing crime, crime scenes? Explain:
....
....

12. Do you apply the guidelines specified in this policy and national instruction in practice when possessing serious crime scenes?
....

13. Is the application of this policy and national instruction assisting to effectively process serious crime scenes in suburban areas? Explain:...
....

14. Is the application of this policy and national instruction assisting to effectively process serious crime scenes in informal settlements? Explain:...
....

15. "Please explain the differences between infrastructural- and environmental physical conditions in suburban- and informal settlement areas?"
....
....

16. "Please explain whether serious crime scenes in suburban areas are more effectively processed than in informal settlement areas?"
....
....

17. "Please explain the barriers and challenges confronted with when processing serious crime scenes in informal settlement areas?"

....

....

18. "Please explain the impact and influence of challenges and barriers towards the effectiveness of crime scene processing in informal settlement areas?"

19. Are these guidelines provided in this policy and national instruction adequate and sufficient to be effectively applied in the processing of serious crime scenes in both suburban areas and informal settlements? Explain...

....

20. Are serious crime scenes more effective processed in a well-developed environmental and infrastructural areas than in an underdeveloped environmental and infrastructural areas, such as informal settlements? If yes, please explain why this is the case in your experience

....

....

21. Does the guidelines in this policy and national instruction provide adequately for underdeveloped environmental and infrastructural conditions and circumstances in respect of serious crimes scenes in informal settlements? Explain

....

....

22. Are these policy and national instruction practical and realistic to apply when processing serious crimes scenes in informal settlements? Explain...

....

23. Please explain how the environmental conditions, infrastructural conditions and circumstances influence the application and adherence with the provisions of this policy and national instruction ?...

....

The current procedure followed by members of the Namibian Police during the processing of serious crime scenes.

23. Briefly explain the current procedure that you follow when processing a serious crime   scene

....

24. Do you process each type of serious crime scene differently? If yes, explain why?

....
....

28. What according to you should be done regarding the processing of serious crime scenes in informal settlements to improve the effectiveness of the processing?..

....

25. Briefly explain what best practices the your country's Police implementing to ensure that serious crimes scenes in informal settlements are effectively processed.

....
....

Thank you that is the end of the interview. I have no more questions for you. Now, is there anything else that you can think of that might be of importance to my study and that I have not asked you about?

....
....

INTERVIEWER: COMMENTS

Interview number   Identification code

SECTION A

Description of circumstance under which the interview took place

General impressions (co -operation, body language, communication)

SECTION B

Summary of the interview (Important aspects)

Adoption of question and theory

Proposition: (Confirmation, modification, rejection, new understanding, new areas to be researched or explored)

AGREEMENT/INFORMED CONSENT

I,_____ on this the _____ day of
_____ 20_____ hereby consent to

☐☐being interviewed by .... on the topic

....

☐　　　follow-up interview if necessary;

☐　　　the interviews be recorded in writing;

☐　　　the use of data derived from these interviews by the interviewer in a research
　　　report as he deems appropriate.

I also understand that:

☐　　　I am free to end my involvement or to cancel my consent of participate in the
　　　research at any time should I want to;

☐　　　information rendered up to the point of my termination of participation could,
　　　however, still be used by the researcher;

☐　　　anonymity is guaranteed by the researcher and data will under no
　　　circumstances be reported in such a way to reveal my identity;

☐　　　I am free to determine that specific information that I reveal should not be
　　　recorded in writing;

☐　　　no reimbursement will be made by the researcher for information rendered or
　　　for my participation in this project;

☐　　　I will in no way derive any personal benefit from taking part in this research
project;

☐By signing this agreement I under take to give honest and full answers to
　　　reasonable questions and not to deliberately mislead the researcher;

☐　　　I will receive the original copy of this agreement on signing it.

I hereby acknowledge that the researcher / interviewer:

☐　　　discussed the aims and objectives of this research project with me;

☐　　　informed me about the contents of this agreement;

☐　　　explained the implications of my signing this agreement;

In co-signing this agreement the researcher under takes to:

☐   maintain confidentiality, anonymity, and privacy regarding the identity of the subject and information rendered by the interviewee.

Purpose of the study

The purpose of this study is for the fulfilment of a DLitt et Phil at the University of South Africa. The aims of the research are as follows:

- The main aim of this research is to assess the processing of Trio crime scenes by detectives in informal settlements in order to recommend new, revised or improved, a more realistic, practical, feasible and viable procedures on the processing of serious crime scenes in informal settlements.
- The researcher want to recommend to the SAPS management that new, revised or improved policy be developed, in which all the environmental-, infrastructural circumstances and conditions as well as any other impractical obstruction experienced in informal settlements by detectives when processing of Trio crime scenes are being considered and to be used during the processing of serious crime scenes in South Africa.

Primary objectives

- To assess the current policy of the SAPS 2 of 2005, implemented during 2005 and the National Instruction, 1 of 2015, concerning the processing of crime scenes in informal settlements.

- To explain the procedure currently followed by detectives when processing Trio crime scenes in informal settlements.
- To explain the procedure currently followed by detectives when processing Trio crime scenes in suburban areas.
- To determine scientifically the reasons why there is a difference in the processing of Trio crime scenes by detectives in suburban areas and informal settlements notwithstanding the same policy and national instruction on crime scene processing currently in use by the SAPS.
- To explain the factors that complicates and makes it basically unfeasible to process Trio crime scenes effectively in informal settlements.
- To explain factors which directly influence on the non-compliance and non-adherence of policy and national instruction requirements by detectives when processing Trio crime scenes in informal settlements.

- To explore international literature relating to the same or similar situations and problems when processing Trio crime scenes in informal settlements.
- To look at international best practices in other countries such as India, Brasilia, Mexico and others which experience the same or similar problems as when processing Trio crime scenes in informal settlements.
- To provide new knowledge on the aspects that poorly and negatively impact and

  influence the processing of Trio crime scenes in informal settlements.

- To contribute towards the formulation of a practical and feasible procedure on crime scene processing by making recommendations to the SAPS to renew, revise or improve the current policy.

Secondary objectives

- To provide new knowledge on the aspects that poorly and negatively impact and

  influence the processing of Trio crime scenes in informal settlements.

- To contribute towards the formulation of a practical and feasible procedure on crime scene processing by making recommendations to the SAPS to renew, revise or improve the current policy.

_____   _____

(Interviewee)   (Interviewer)

_____

(Date)

(****If applicable)

I, _____ certify that I interpreted the

contents of the above document into the _____

The final questionnaire has to include two copies of the 'Agreement' to enable you to get two copies signed – one for your records and one to hand over before the interview to the participant.

9.7 ANNEXURE G: TURNITIN DIGITAL RECEIPT

turnitin

Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author:	G A PRINS
Assignment title:	Complete dissertation/thesis FINAL
Submission title:	AN ASSESSMENT OF THE PROCESSING OF CRIME SCENES BY …
File name:	SSING_OF_CRIME_SCENES_BY_DETECTIVES_IN_INFORMAL_SE…
File size:	2.34M
Page count:	352
Word count:	109,460
Character count:	641,651
Submission date:	23-Jan-2024 02:43AM (UTC+0200)
Submission ID:	2276310294

9.8 ANNEXURE H: EDITING LETTER

TO WHOM IT MAY CONCERN

I, the undersigned, hereby confirm my involvement in the language editing and research methodology compatibility check for the thesis manuscript of **Mr George Anthony Prins (Student Number: 36781479)** submitted to me as part of his fulfilment of the requirement for the **Doctor of Literature & Philosophy (DLitt et Phil) in Police Science** degree registered with the University of South Africa (UNISA), and entitled:

An assessment of the processing of crime scenes by detectives in informal settlements

As an independent academic editor, I attest that all possible means have been expended to ensure the final draft of **Mr G.A. Prins's** thesis manuscript reflects both acceptable research methodology practices and language competency standards expected of postgraduate research studies at his academic level.

In compliance with expected ethical requirements in research, I have further undertaken to keep all aspects of **Mr G.A. Prins's** study confidential, and as his own individual initiative.

Sincerely.

T.J. Mkhonto
BA Ed: North-West University, Mahikeng (1985)
MEd: School Administration; University of Massachusetts-at-Boston, USA, Harbor Campus (1987)
DTech: Higher Education Curriculum Policy Reform, Design & Management; University of Johannesburg (2007)

All enquiries:
E-mail: mkhonto9039@gmail.com
Cell: +27(0)60 401 8279

Signed: _____   Date: 19 February 2024

Dr T.J. Mkhonto   dd/mm/yyyy
Independent Academic Editor

Professional
EDITORS
30 Guild
1993–2023

Promoting excellence in editing

Themba J Mkhonto
Associate Member

Membership number: MKH001
Membership year: February 2023 to March 2024

060 401 8279
mkhonto9039x@gmail.com

www.editors.org.za