

**AN ANALYSIS OF THE USE OF *MODUS OPERANDI* AS AN IDENTIFICATION  
TECHNIQUE IN THE INVESTIGATION OF CASH-IN-TRANSIT ROBBERIES IN  
LIMPOPO PROVINCE, SOUTH AFRICA**

by

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submitted in accordance with the requirements for  
the degree of

**MASTER OF ARTS**

in the subject

**CRIMINAL JUSTICE**

at the

**UNIVERSITY OF SOUTH AFRICA**

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**NOVEMBER 2024**

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## DEDICATION

I dedicate this study to the Almighty God, my creator, my saviour, my source of aspiration, my strong pillar, and the source of all wisdom, knowledge, and understanding.

I also dedicate this study to my parents, Confidence Mudau and Thomas Ramatsitsi, who encouraged me to study and work hard from an early age. I am very thankful for their prayers and unwavering support, especially during the initial stages of this study. *“Mufuna pfunzo ndi mufuna ndivho, daba-daba li hana thovhedzo.”*

I also dedicate this work to:

My partner, Moraba Constance. Receive my appreciation for the love and guidance you gave me to complete this work.

My lovely daughter, Vhutali Confidence, for her understanding when I was not always available to give her my attention, and

My siblings, Humbulani, Godfrey, and Felicity, to whom this is part of inspirations: *“Mudzimu vha a fhulufhedzea misi yothe.”*

Lastly, this study is also dedicated to all men and women in blue, as well as all the victims of Cash-In-Transit robberies.

## ACKNOWLEDGEMENTS

First and foremost, I would like to thank the Almighty God for granting me the strength, wisdom, knowledge, vision, guidance, and blessings to undertake this academic journey successfully. The following bible verse encourages my faith and hope in God: “For I know the plans I have for you,” declares the LORD, “plans to prosper you and not to harm you, plans to give you hope and a future.” (Jeremiah 29:11.)

I would also like to express my sincere gratitude to my supervisor, Professor Dumisani Quiet Mabunda, for his guidance and for finding time to peruse dissertation drafts and provide helpful and valuable comments throughout the study. Without his support and mentorship, this journey would have been fruitless. Your insights helped me to move my thinking onto higher and different levels.

My sincere appreciation also goes to my academic friend, Mr. Phillemon Sithole of the University of Limpopo, for his role in sharing academic-related matters. *“Kea leboha”*.

I would like to extend my sincere thanks to Prophetess Sadiki M and Pastor Sadiki A of the Centre of Good News Church for spiritual support and encouragement. This academic journey would not have been a success without your support. *“Ndi ri Mudzimu a vha tonde.”*

I would like to extend my appreciation to the University of South Africa for the opportunity and for providing me with financial support through the M & D Postgraduate Bursary to conduct the study and an opportunity to achieve this level of education.

I am grateful to my employer, the South African Police Service (SAPS) Directorate for Priority Crime Investigation (DPCI), for permitting me to conduct my study.

I thank my Provincial Commander, Brigadier A.M Matlabe, whose invaluable support is appreciated.

Last, I would also like to acknowledge all the research participants (Musina, Phalaborwa, and Polokwane DPCI-SOCIU) for their valuable time and views. Without them, this dissertation would not have been completed.

## ABSTRACT

The main aim of this study was to analyse the use of *modus operandi* as an identification technique in investigating Cash-In-Transit robberies in Limpopo Province, South Africa. *Modus operandi* information can be paramount to the investigators during Cash-In-Transit robbery investigations. The study utilized the qualitative research approach with a non-probability sampling method. The case study research design was selected, and semi-structured interviews were utilised as the data collection instrument in this study. The study employed the spiral data analysis method to generate the findings from the data collected. This study was conducted within the Directorate for Priority Crime Investigation (DPCI), with investigating officers responsible for investigating Cash-In-Transit (CIT) robbery cases under Serious Organised Crime Investigation Units (SOCIU) in Limpopo Province, South Africa. A representative purposive sample of fifteen (15) investigating officers attached to Polokwane SOCIU, Phalaborwa SOCIU, and Musina SOCIU was utilized for data collection using the purposive sampling method in this study. In this study, the use of *modus operandi* (MO) as a technique to combat and fight against Cash-In-Transit robbery cases is investigated. The study findings indicate that CIT robbery is challenging in Limpopo Province, South Africa. Furthermore, the nature and extent to which CIT robbery occurs in South Africa are also outlined in the study, thus making empirical and significant contributions by exploring and describing the MO used by perpetrators in the commission of CIT robberies. Based on these findings, the study proposes an integrated multidisciplinary operational approach model in response to CIT robberies as a possible practical solution to deal with CIT robberies effectively.

**Keywords:** Modus operandi; Identification technique; Investigation; Cash-In-Transit; Robbery; CIT robbery; SAPS; Directorate for Priority Crime Investigation; Serious Organised Crime Investigation; Limpopo Province; South Africa.

## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>AK47</b>	:	Avtomat Kalashnikova, Russian-designed assault rifle
<b>ATM</b>	:	Automated Teller Machine
<b>AV</b>	:	Armoured Vehicle
<b>BACSA</b>	:	Business Against Crime South Africa
<b>BMW</b>	:	Bavarian Motor Works
<b>CAS</b>	:	Crime Administration System
<b>CCTV</b>	:	Close-Circuit Television
<b>CIT</b>	:	Cash-In-Transit
<b>CITASA</b>	:	Cash-In-Transit Association of South Africa
<b>CJS</b>	:	Criminal Justice System
<b>CPA</b>	:	Criminal Procedure Act 51 of 1977
<b>CPC</b>	:	Cross-Pavement Carrier
<b>DCS</b>	:	Department of Correctional Services
<b>DNA</b>	:	Deoxyribonucleic Acid
<b>DPCI</b>	:	Directorate for Priority Crime Investigation
<b>FSL</b>	:	Forensic Science Laboratory
<b>G4S</b>	:	Group 4 Security
<b>GD6</b>	:	Global Diesel 6 speed
<b>GBH</b>	:	Grievous Bodily Harm
<b>IPID</b>	:	Independent Police Investigative Directorate
<b>ICDMS</b>	:	Investigation Case Docket Management System
<b>LM4</b>	:	South African assault rifle

<b>LM5</b>	:	South African assault rifle
<b>MO</b>	:	Modus Operandi
<b>NPA</b>	:	National Prosecuting Authority
<b>NPVC</b>	:	National Priority Violence Crime
<b>POCA</b>	:	Preventing Organised Crime Act 121 of 1998
<b>POPIA</b>	:	Protection of Personal Information Act 4 of 2013
<b>PSIRA</b>	:	Private Security Industry Regulatory Authority
<b>R4</b>	:	South African assault rifle
<b>R5</b>	:	South African assault rifle
<b>REC</b>	:	Research Ethics Committee
<b>RICA</b>	:	Regulation of Interception of Communications and Provision of Communication-Related Information Act 70 of 2002
<b>SABRIC</b>	:	South African Banking Risk Information Centre
<b>SAPO</b>	:	South African Post Office
<b>SAPS</b>	:	South African Police Service
<b>SAPS Act</b>	:	South African Police Service Act 68 of 1995
<b>SARB</b>	:	South African Reserve Bank
<b>SASSA</b>	:	South African Social Security Agency
<b>SBV</b>	:	Standard Bank, Barclays Bank and Volkskas
<b>SIM</b>	:	Subscriber Identifying Module
<b>SOCIU</b>	:	Serious Organised Crime Investigation Unit
<b>StatsSA</b>	:	Statistics South Africa
<b>TRT</b>	:	Tactical Response Team



**TUT** : Tshwane University of Technology  
**UNISA** : University of South Africa  
**Vispol** : Visible Policing  
**VOR** : Vehicle on Road  
**VW** : Volkswagen

<b>TABLE OF CONTENTS</b>	<b>PAGE</b>
DECLARATION.....	i
COPYRIGHT.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENTS.....	iv
ABSTRACT.....	v
LIST OF ABBREVIATIONS AND ACRONYMS.....	vi
CHAPTER 1: GENERAL ORIENTATION.....	1
1.1 INTRODUCTION AND BACKGROUND OF THE STUDY .....	1
1.2 PROBLEM STATEMENT .....	2
1.3 AIM OF THE RESEARCH .....	3
1.4 OBJECTIVES OF THE RESEARCH .....	4
1.5 RESEARCH QUESTION .....	4
1.6 PURPOSE OF THE RESEARCH .....	4
1.7 KEY THEORETICAL CONCEPTS .....	5
1.7.1 Modus Operandi .....	5
1.7.2 Robbery .....	6
1.7.3 Cash-In-Transit Robbery .....	6
1.7.4 Criminal Investigation .....	6
1.7.5 Forensic Investigation .....	6
1.7.6 Organised Crime .....	6
1.7.7 Identification.....	7
1.8 VALUE OF THE RESEARCH.....	7
1.9 PRELIMINARY LITERATURE REVIEW.....	8
1.10 RESEARCH STRUCTURE.....	9
1.11 SUMMARY .....	10
CHAPTER 2: LITERATURE REVIEW .....	11
2.1 INTRODUCTION .....	11
2.2 CRIMINAL INVESTIGATION.....	11
2.3 FORENSIC INVESTIGATION.....	12
2.4 IDENTIFICATION .....	13
2.4.1 Situation identification.....	14
2.4.2 Victim identification.....	15
2.4.3 Witness identification .....	15

2.4.4	Perpetrator identification .....	15
2.4.5	Imprint identification .....	17
2.4.6	Origin identification .....	18
2.4.7	Action identification .....	18
2.4.8	Cumulative identification .....	18
2.5	INDIVIDUALISATION .....	18
2.6	LOCARD'S EXCHANGE PRINCIPLE .....	19
2.7	THE MEANING OF ORGANISED CRIME .....	20
2.8	THE MEANING OF ROBBERY .....	21
2.8.1	The elements of robbery .....	21
2.9	CONCEPTUALISING CASH-IN-TRANSIT ROBBERY .....	22
2.10	DIFFERENT TYPES OF CASH-IN-TRANSIT ROBBERIES .....	23
2.10.1	Cross-pavement robbery .....	23
2.10.2	Vehicle on road robbery.....	24
2.10.3	Merchant attack.....	25
2.10.4	Static AV attack.....	26
2.10.5	CIT directed at the banking industry .....	27
2.10.6	Own premises/depot attack .....	27
2.10.7	Bogus pick-up.....	28
2.11	STIPULATED CHARGES FOR CASH-IN-TRANSIT ROBBERIES .....	28
2.12	THE NATURE AND EXTENT OF CASH-IN-TRANSIT ROBBERIES IN SOUTH AFRICA .....	30
2.13	THE LEGISLATIVE FRAMEWORKS GOVERNING THE POLICE IN SOUTH AFRICA .....	34
2.13.1	The Constitution of the Republic of South Africa, 1996.....	34
2.13.2	The South African Police Service Act 68 of 1995.....	35
2.13.3	The Criminal Procedure Act 51 of 1977 .....	35
2.13.4	The Prevention of Organised Crime Act 121 of 1998 .....	35
2.13.5	The Criminal Law (Forensic Procedures) Amendment Act 37 of 2013.....	36
2.14	THE MEANING OF MODUS OPERANDI .....	37
2.15	THE MODUS OPERANDI AS AN IDENTIFICATION TECHNIQUE.....	37
2.16	THE PURPOSE OF MODUS OPERANDI .....	38
2.17	MODUS OPERANDI OF CASH-IN-TRANSIT ROBBERS .....	39
2.17.1	Planning .....	39
2.17.2	Popular days and times.....	40

2.17.3 Weapons and tools.....	40
2.17.4 Task allocations .....	42
2.17.5 Vehicles .....	44
2.17.6 Cellphones.....	44
2.17.7 Dress code.....	45
2.17.8 CIT robbery crime scene.....	45
<b>2.18 FACTORS THAT INFLUENCE MODUS OPERANDI OF CIT ROBBERS.....</b>	<b>46</b>
2.18.1 The criminal background of the perpetrator.....	46
2.18.2 Media and literature.....	46
2.18.3 Ad-hoc influence .....	47
<b>2.19 SUMMARY .....</b>	<b>47</b>
<b>CHAPTER 3: RESEARCH METHODOLOGY.....</b>	<b>49</b>
<b>3.1 INTRODUCTION .....</b>	<b>49</b>
<b>3.2 RESEARCH PARADIGMS .....</b>	<b>49</b>
<b>3.4 INTERPRETIVISM RESEARCH PARADIGM.....</b>	<b>50</b>
3.4.1 Interpretivist epistemology.....	51
3.4.2 Interpretivist ontology .....	52
3.4.3 Interpretivist axiology .....	52
3.4.4 Interpretivist methodology .....	52
3.4.5 Interpretivist metatheory.....	52
<b>3.5 RESEARCH DESIGN .....</b>	<b>53</b>
<b>3.6 RESEARCH APPROACH .....</b>	<b>53</b>
<b>3.7 LOCATION OF THE STUDY .....</b>	<b>54</b>
<b>3.8 TARGET POPULATION AND SAMPLING.....</b>	<b>57</b>
3.8.1 Targeted Population .....	57
3.8.2 Sampling and Sampling Technique .....	57
<b>3.9 DATA COLLECTION METHODS.....</b>	<b>59</b>
3.9.1 Literature Study .....	59
3.9.2 Semi-structured Interviews .....	59
3.9.3 Documentary Sources .....	60
3.9.4 Personal Experience .....	60
<b>3.10 PILOT STUDY .....</b>	<b>61</b>
<b>3.11 DATA ANALYSIS.....</b>	<b>61</b>
<b>3.12 TRUSTWORTHINESS OF THE STUDY.....</b>	<b>63</b>
3.12.1 Credibility.....	63

3.12.2 Transferability .....	64
3.12.3 Dependability .....	64
3.12.4 Conformability .....	65
<b>3.13 ETHICAL CONSIDERATIONS .....</b>	<b>65</b>
3.13.1 University of South Africa Policy on Research Ethics .....	65
3.13.2 South African Police Service National Instruction 4 of 2022 .....	66
3.13.3 Informed consent.....	66
3.13.4 Confidentiality, privacy, and anonymity .....	66
3.13.5 Avoidance of harm .....	67
3.13.6 Avoidance of plagiarism .....	67
<b>3.14 SUMMARY .....</b>	<b>67</b>
<b>CHAPTER 4: PRESENTATION AND INTERPRETATION OF THE RESEARCH FINDINGS</b> .....	<b>68</b>
<b>4.1 INTRODUCTION .....</b>	<b>68</b>
<b>4.2 PARTICIPANTS' DEMOGRAPHIC INFORMATION.....</b>	<b>69</b>
<b>4.3 EMERGING THEMES .....</b>	<b>70</b>
4.3.1 Theme 1: Participants' views on the concept of 'criminal investigation' .....	70
4.3.2 Theme 2: Participants' views on the concept of "forensic investigation" .....	72
4.3.3 Theme 3: Participants' understanding of the term identification.....	74
4.3.4 Theme 4: Participants' perspectives on different categories of identification 76	
4.3.5 Theme 5: Participants' understanding of the term individualisation.....	78
4.3.6 Theme 6: Participants' views of the Locard's Exchange Principle .....	80
4.3.7 Theme 7: Participants' understanding of the concept organised crime .....	81
4.3.8 Theme 8: Participants' understanding of the concept robbery.....	83
4.3.9 Theme 9: Participants' views about the elements of robbery.....	84
4.3.10 Theme 10: Participants' understanding of the concept of 'Cash-In-Transit robbery' .....	86
4.3.12 Theme 12: Participants' perceptions about charges that are used for Cash- In-Transit robbery cases .....	89
4.3.13 Theme 13: Participants' knowledge about legislative frameworks governing the police in South Africa.....	91
4.3.14 Theme 14: Participants' understanding of the concept 'modus operandi' ..	93
4.3.15 Theme 15: Participants' understanding of the purpose of <i>modus operandi</i> in the investigation of Cash-In-Transit robbery cases.....	94

4.3.16 Theme 16: Participants' perspectives of the use of <i>modus operandi</i> to identify Cash-In-Transit Robbery perpetrators .....	96
4.3.17 Theme 17: Participants' understanding of modus operandi of perpetrators in Cash-In-Transit robbery cases in Limpopo Province.....	98
4.3.18 Theme 18: Participants' understanding of factors that influence modus operandi in Cash-In-Transit robbery .....	100
4.3.19 Theme 19: Participants' views on circumstances when modus operandi was previously used .....	102
<b>4.4 SUMMARY .....</b>	<b>104</b>
<b>CHAPTER 5: SUMMARY, LIMITATIONS, RECOMMENDATIONS, AND CONCLUSION</b>	<b>105</b>
<b>5.1 INTRODUCTION .....</b>	<b>105</b>
<b>5.2 SUMMARY OF THE PRECEDING CHAPTERS .....</b>	<b>105</b>
5.2.1 Summary of Chapter 1 .....	105
5.2.2 Summary of Chapter 2 .....	106
5.2.3 Summary of Chapter 3 .....	106
5.2.4 Summary of Chapter 4 .....	107
5.2.5 Summary of Chapter 5 .....	107
<b>5.3 LIMITATIONS OF THE STUDY .....</b>	<b>107</b>
<b>5.4 RECOMMENDATIONS.....</b>	<b>108</b>
5.4.1 Recommendation 1: Awareness programmes and campaigns.....	108
5.4.2 Recommendation 2: Modus operandi database .....	109
5.4.3 Recommendation 3: Provision of sufficient resources .....	109
5.4.4 Recommendation 4: Specialised training.....	109
5.4.5 Recommendation 5: Installation of CCTV .....	110
5.4.6 Recommendation 6: Harsher sentences for CIT robbers.....	111
5.4.7 Recommendation 7: Project driven investigation.....	111
<b>5.5 PROPOSED MODEL OF CIT ROBBERY OPERATIONAL APPROACH.....</b>	<b>111</b>
5.5.1 Pillar 1: Intelligence gathering, co-ordination and analysis .....	112
5.5.2 Pillar 2: Pro-active and high visibility approach.....	113
5.5.3 Pillar 3: Combat and re-action approach.....	114
5.5.4 Pillar 4: Re-active through detection as well as organised crime approach	114
5.5.5 Pillar 5: Communiqué and liaison.....	115
<b>5.6 RECOMMENDATIONS FOR FUTURE RESEARCH .....</b>	<b>116</b>
<b>5.7 CONCLUSION.....</b>	<b>116</b>
<b>REFERENCES. ....</b>	<b>118</b>
<b>ANNEXURE A: SAPS PERMISSION TO CONDUCT RESEARCH .....</b>	<b>131</b>

<b>ANNEXURE B: DPCI PERMISSION TO CONDUCT RESEARCH .....</b>	<b>135</b>
<b>ANNEXURE C: UNISA ETHICAL CLEARANCE.....</b>	<b>138</b>
<b>ANNEXURE D: PARTICIPANT INFORMATION SHEET AND PRIOR INFORMED CONSENT FORM.....</b>	<b>140</b>
<b>ANNEXURE E: INTERVIEW SCHEDULE .....</b>	<b>145</b>
<b>ANNEXURE F: RELATED FIGURES .....</b>	<b>150</b>
<b>ANNEXURE G: CONFORMATION OF LANGUAGE EDITING CERTIFICATE .....</b>	<b>153</b>
<b>ANNEXURE H: TURNITIN REPORT .....</b>	<b>154</b>

### **LIST OF TABLES**

<b>Table 1.1: Crime in Limpopo (provincial total) for April to March 2012-2013/2021- 2022.....</b>	<b>2</b>
<b>Table 1.2: Framework of the study.....</b>	<b>9</b>
<b>Table 2.1: The comparison of CIT fatalities and injuries from April to December 2020 /2021 with those of 2022/2023.....</b>	<b>32</b>
<b>Table 2.2: Sub-type: CIT robberies incident from 2020 to 2021.....</b>	<b>33</b>
<b>Table 2.3: Photographic evidence.....</b>	<b>41</b>
<b>Table 4.1: Participants' demographic information (n=15).....</b>	<b>69</b>

### **LIST OF FIGURES**

<b>Figure 2.1: Cross-Pavement robbery/attack.....</b>	<b>24</b>
<b>Figure 2.2: Vehicle on road robbery/attack.....</b>	<b>25</b>
<b>Figure 2.3: Static AV attack.....</b>	<b>26</b>
<b>Figure 2.4: Depot attack.....</b>	<b>27</b>
<b>Figure 2.5: Different types of CIT robberies and modus operandi.....</b>	<b>31</b>
<b>Figure 2.6: CIT robbery crime scene.....</b>	<b>45</b>
<b>Figure 3.1: The five elements of research paradigms .....</b>	<b>51</b>
<b>Figure 3.2: Limpopo Province map depicting district and local municipalities.....</b>	<b>55</b>
<b>Figure 3.3: Limpopo Province map depicting police stations.....</b>	<b>55</b>
<b>Figure 3.4: The data analysis spiral.....</b>	<b>62</b>
<b>Figure 5.1: Proposed model of CIT robbery operational approach in Limpopo Province.....</b>	<b>112</b>

## CHAPTER 1: GENERAL ORIENTATION

### 1.1 INTRODUCTION AND BACKGROUND OF THE STUDY

This chapter provides an overall introduction to the study. Crime has predominantly increased in South Africa, and it is directly affecting the safety and security of citizens and the economy of the country. Cash-in-transit (CIT) robbery is one of the crimes posing a great threat to South Africa's economy and public safety. Wilson (2023:1) reports that CIT robbery rates have appeared to be escalating every year in South Africa, adding that law enforcement agencies are facing significant challenges in combating these crimes. These robberies are often organised, sophisticated, complex, and dangerous in execution, making it difficult to investigate the crimes.

The South African Reserve Bank (SARB) and South African Banking Risk Information Centre (SABRIC) have expressed concerns about the increase in violent CIT robberies in the nation (SARB, 2018:2; Häefele, 2022:11). In the same way, the South African Police Service's crime statistics for the 4<sup>th</sup> Quarter (January-March 2022) indicate that the number of cases of CIT heists had increased again from 42 to 53 cases (26.2%) as compared to the same period in the previous year (SAPS, 2022a). The SAPS crime statistics for the 1<sup>st</sup> Quarter (April-June 2022) show that 60 cases of CIT robberies had been reported, reflecting a 30.4% increase compared to the same period of the previous year (SAPS, 2022b). The high prevalence of CIT robberies in South Africa, particularly in the Limpopo Province, is of concern. Undetected CIT robbery cases are a major concern in South Africa. Therefore, many questions are asked daily about what can be done to eradicate the scourge of these robberies in South Africa.

The researcher identified a research gap in the utilization of *modus operandi* (MO) in investigating these robberies, hence the necessity for this study to investigate the effectiveness of the police while investigating these robberies. As a result, the researcher sought to fill some of the existing gaps in previous research studies. Considering the preceding context, this chapter introduces the research topic and defines some terminologies used in this study to give the reader a clear understanding of their meanings. The research aim, research question, research objectives, and research purpose are all discussed. Moreover, this chapter describes the significance



of the research and does a preliminary review of the literature. This chapter concludes with a brief dissertation research structure by way of chapter arrangements.

## 1.2 PROBLEM STATEMENT

Creswell (2014:108) describes a research problem as a procedure involving narrowing down the researcher’s overall interest in the study topic to focus on a specific research problem that is small enough to be examined. This is corroborated by Brynard, Hanekom, and Brynard (2014:18), who suggest that the problem statement should include more detail on the matter and the appropriate analytical approach.

CIT heists are a global phenomenon, and almost always, crime is associated with organized crime syndicates. South Africa has, in recent years, been heavily burdened with the scourge of CIT robberies, which the police struggle to eradicate (Thobane, 2019:32). The Portfolio Committee on Police was informed in June 2018 by the then Minister of Police, Mr. Bheki Cele, that CIT robberies are a type of terrorism (News24Wire, 2018:1). The rationale for undertaking this research lies with the prevalence of CIT robbery cases in the Limpopo Province, the analysis of which indicates that investigating officers are not well-versed about the importance of MO in investigating CIT robbery cases.

Importantly, Hosken (2018:2) indicates that the festive season is the busiest time for CIT robberies to occur since more money is being managed and when the police are under pressure to curb CIT robberies. Table 1.1 below shows the number of CIT robbery cases committed in the Limpopo Province from 2012/2013 to 2021/2022 financial years.

Table 1:1 Crime in Limpopo (Provincial total) for April to March 2012-2013/2021-2022

Crime Category	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
CIT Robbery	05	07	09	13	10	14	13	15	13	25

Source: SAPS (2022c:104)

The above table indicates that between 2012/2013 and 2021/2022, Limpopo Province experienced 124 reported CIT robbery cases. The figures indicate that between 1 April 2012 and 31 March 2013, a total of 5 CIT robberies were committed in Limpopo Province, compared to 25 between 1 April 2021 and 31 March 2022. This represents

a year-on-year increment of 20%, which shows the figure remains high and highlights the nature of the problem (SAPS, 2022c:104). From the statistics in Table 1.1 above, it is evident that Limpopo Province is experiencing a high rate of CIT robbery cases.

According to Burger (2018:1), CIT robberies represent serious danger to both public safety and the country's economy because they are on the rise in South Africa, with aggravating circumstances. The CIT robberies also disrupt the flow of cash, which causes major disruptions to the delivery of South African Social Security Agency (SASSA) grants and access to Automated Teller Machines (ATMs) for citizens. The CIT industry in South Africa comprises five large CIT security companies, namely Group 4 Security (G4S) Cash Solutions; Protea Coin; Standard Bank, Barclays Bank, Volkskas (SBV) Services; Fidelity Cash Solutions; and IziCash.

In addition, media reports and social media show that the SAPS does not use MO information when investigating crime (Lochner, Horne, & Van Wyk, 2018:210). The difficulty is that in most situations, suspects are not apprehended and continue to commit CIT robberies since there is little evidence tying them to the crime scene. The major difficulty is that most suspects are not apprehended and continue to commit CIT robberies owing to a lack of evidence linking them to the crime scene. As a result, many cases are closed undetected due to lack of evidence. This study is important because it contributes to the body of knowledge on MO in investigating CIT robbery cases. The findings of this study will provide recommendations for solving the problem using best practices. Again, the researcher contends that the conviction rate would rise if the MO investigation approach were employed in investigating CIT robbery cases.

### **1.3 AIM OF THE RESEARCH**

Denscombe (2012:7) defines research aims as precise information on the study's topic component. Du Plooy-Cilliers, Davis, and Bezuidenhout (2014:73) believe that the main aim of the research is largely to ascertain the procedure, process, and conclusion of the study. The aim of this study was:

This study aimed to analyse the use of *modus operandi* as an identification technique in investigating Cash-In-Transit robberies.

#### **1.4 OBJECTIVES OF THE RESEARCH**

Lichtman (2014:35) concurs that the research objectives are to find answers to the stated problems. The researcher must mention the study's objectives by confirming whether the research is analytical, probing, projecting, explanatory, or straightforward (Creswell, 2014:124). Objectives summarise what is to be achieved by the study. The objectives of the study were as follows:

- To identify the *modus operandi* that criminals use to commit Cash-In-Transit robberies, and
- To determine what extent *modus operandi* can add value to the forensic investigation of Cash-In-Transit robberies in Limpopo Province.

#### **1.5 RESEARCH QUESTION**

Leedy and Ormrod (2013:39) postulate that a research question is classified as an extensive question at the beginning of every study. Thus, research questions narrow down the objectives' stated goals to predictions about the knowledge that will be gained from the study or the problems that need to be addressed, together with the techniques for gathering and analysing data (Creswell, 2013:139; Denscombe, 2012:74). In line with the objectives outlined above, the central research question underpinning the study was:

- How can *modus operandi* be used as an identification technique in the forensic investigation of Cash-In-Transit robberies?

#### **1.6 PURPOSE OF THE RESEARCH**

Leedy and Ormrod (2015:190) believe that research aims to answer the research problem by considering data that concern the problem. Similarly, Dantzker and Hunter (2012:12) indicate that the research seeks to gain scientific knowledge, discover a solution to a practical problem, update existing techniques, and answer questions. Therefore, this research serves the purposes of evaluating, exploring, applying, and empowering, among other purposes (Denscombe, 2012:50). Based on the research aim, questions, and objectives, the researcher determined the following as the purpose of this study:

- **Evaluation:** The researcher evaluated how investigating officers utilised MO as a technique in the investigation of CIT robberies to weigh up the advantages and disadvantages of the MO and consider how the MO technique might be enhanced.
- **Exploration:** To ascertain if the strategies employed globally may be implemented locally by the police in Limpopo Province to prevent and investigate CIT robberies, the researcher explored international and national literature pertaining to the utilisation of MO during CIT robbery investigations. To do this, the researcher conducted a thorough literature review to investigate the topic and see whether any successful strategies are used elsewhere in the globe that police investigators may apply to their CIT robbery investigations.
- **Application:** The researcher aimed to generate recommendations applicable to best practices on using MO in CIT robbery investigations that can improve the performance of the police investigators in CIT robbery investigations.
- **Empowerment:** This study sought to empower investigating officers and researchers with recent information and expertise on using MO in CIT robbery investigations.

## 1.7 KEY THEORETICAL CONCEPTS

Leedy and Ormrod (2019:71-72) state that key research concepts need to be demarcated operationally, and the definitions should explain the concepts in light of the study. In the same vein, Creswell (2012:143) concurs that the rationale for a researcher to clarify key concepts is to provide the readers with a clear meaning of the key concepts, mainly when the reader does not have sufficient knowledge or is not an expert in the subject. The following definitions of concepts have been applied in this study:

### 1.7.1 Modus Operandi

*Modus operandi* is defined by Labuschagne (2015:278) as a term derived from the Latin idiom meaning “method of operation”, and it refers to techniques or methods an offender uses to execute a crime. In the current study, MO refers to the method perpetrators use to execute CIT robberies.

### **1.7.2 Robbery**

Robbery is defined as the theft of property by the unlawful and intentional use of force to take the property from another person or the threat of force to coerce the property's possessor to surrender the property (Snyman, 2020:448). Robbery is commonly referred to as "theft by violence".

### **1.7.3 Cash-In-Transit Robbery**

The South African Banking Risk Information Centre (SABRIC, 2019:14) defines Cash-In-Transit robbery as the intentional, unlawful, and violent taking away of cash while under the control of a registered CIT security company. CIT robbery is categorised as a 'property crime'.

### **1.7.4 Criminal Investigation**

Orthmann, Hess, Cho, and Cho (2023:7) define criminal investigation as a systematic process of gathering, preparing, discovering, locating, presenting, and identifying evidence to ascertain what occurred during the perpetration of a crime and who is accountable.

### **1.7.5 Forensic Investigation**

Benson, Jones, and Horne (2015:19) define forensic investigation as "an in-depth, vigilant inquiry, searching for the truth through the utilisation of specialised expertise, and proficient knowledge and application of systematic investigation techniques and methods, to lawfully ascertain, prepare, identify, collect, and present evidence which can be presented during the disciplinary hearing, court of law, and instructing client or company."

### **1.7.6 Organised Crime**

According to Goga (2014:64), organised crime refers to "an individual, group of people or syndicate acting in an organised style or in a way which could result in substantial financial gain for the individual, group of people or syndicate included and the circumstances resulting to criminal conduct or an endeavour thereto which involves national prevention or investigation or offence which necessitate specialised expertise in the investigation or prevention thereof."

### 1.7.7 Identification

Identification " compares evidence gathered from the crime scene to the class categories of an object or unknown substances" (Van Graan & Budhram, 2015:47).

## 1.8 VALUE OF THE RESEARCH

According to Creswell (2013:111–113), any study's purpose, goal, and value are to address the research questions and provide solutions to the research problem. Likewise, Leedy and Ormrod (2014:44) assert that every researcher sets the reasons for undertaking the study. The results of this study will be of value in several spheres, including:

- **Academic community:** This research is potentially useful for future studies that would benefit the academic community. Following the completion of this study, the academic community and SAPS personnel will have a better understanding of the knowledge of MO in the context of investigating CIT robberies.
- **South African Society:** The South African society is set to profit from this research by expanding the capture and conviction of perpetrators in future CIT robbery cases. This research can also help the South African economy by reducing the annual financial losses incurred by the CIT industry.
- **South African Police Service:** The results of this study could also benefit the SAPS and the Criminal Justice System (CJS) as a whole, as they could soon be used to educate all relevant CJS role-players about the use of MO in identifying CIT robbery perpetrators. The results of this study will offer a comprehensive and in-depth account of the effective use of MO as an identification technique in the forensic investigation of CIT robberies in the province of Limpopo, the rest of South Africa, and globally. The research will be useful to the South African Police Service (SAPS) in investigating CIT robberies.
- **University of South Africa:** Prospective students and/or the University of South Africa (UNISA) may profit from this research and its outcomes, as the study information will be available at the UNISA institutional repository and the academic fraternity. Furthermore, this research will also serve as a reference

source for enrolled students and future researchers in the field of forensic investigation.

## **1.9 PRELIMINARY LITERATURE REVIEW**

Before embarking on the study, a preliminary literature review was undertaken. Researchers must understand the meaning of literature and the types of literature sources that can help answer research questions and contribute to new knowledge. A preliminary literature review provides a comprehensive overview of existing research findings to demonstrate to the readers that the researchers are up to date on recent developments and can provide insight into previous research (Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt, & Wanger, 2014:37). Leedy and Ormrod (2019:82-83) agree with Bryman *et al.* (2014:37) and state that a literature review makes the researcher aware of what has previously been written to avoid repetition of the study.

To find relevant literature sources, the researcher visited the UNISA library, Polokwane municipality library, Google Scholar, newspaper articles, Sabinet, magazine articles, the internet, and other research engines for literature on the study topic, aim, objectives, and questions. Internet searches indicated that there had been some studies on CIT robberies; nevertheless, the researcher established that the other researchers did not use the MO as an identifying technique in the investigation of CIT robberies. After an intensive preliminary literature review, the researcher discovered sources that are closely linked to the phenomena under investigation, namely:

- “Analysing the significance of MO as an identification technique in rape cases” (Ratombo, 2021).
- “The value of MO as a technique to identify rape suspects” (Tshehla, 2020).
- “The value of MO in fraud investigation: A short-term insurance industry perspective” (Govender, 2018).
- “Evaluation of MO as a perpetrator identification technique in the investigation of rape cases” (Badore, 2018).
- “Examining the significance of MO information in the copper cable theft investigation” (Liebenberg, 2018).
- “An analysis of the MO of a perpetrator in human trafficking” (Pardhoothman, 2015), and

- “MO as a technique in suspect identification in burglary cases” (Berning, 2008).

The sources listed above are the ones the researcher considered and utilized. The researcher found no publication or literature with the same title as the current study. Therefore, this research is non-identical to the above sources because its focal area used MO to identify CIT robberies. Another distinction is that this study focuses on the utilization of MO as an identification technique in the investigation of CIT robbery crimes, whereas Ratombo's concentrated on rape cases, and Berning's (2008) research focused on burglary cases. As a result, the researcher recognized the importance of conducting the study to close the gap discovered. The researcher unpacked the key concepts and theories from the literature review and addressed the conceptual framework. Furthermore, in the absence of literature to find information, the research topic was demarcated into keywords, namely “*modus operandi*,” “criminal investigation,” “forensic investigation,” “identification and individualization technique,” “organized crime,” “robbery,” and “Cash-In-Transit robbery.”

## 1.10 RESEARCH STRUCTURE

The dissertation is organized into five chapters. (See Table 1.2 below.)

Table 1.2: Framework of the study

CHAPTER	DESCRIPTION
1	<b>General orientation:</b> This chapter consists of the introduction and background of the study, problem statement, aim of the study, study objectives, research questions, purpose of the research, key theoretical concepts, research value, preliminary literature review, and research structure.
2	<b>Literature review:</b> The chapter concentrated on the in-depth literature review relevant to the research objectives and provided a comprehensive overview of the literature related to the subject matter under investigation. Similarly, the literature is reviewed to establish whether previous studies have sufficiently addressed the research problem identified for research and help identify the existing gaps in the study area.
3	<b>Research methodology:</b> The chapter contains a detailed discussion of the research methodologies and procedures used. An in-depth outline of the data collection methodologies used in the research is also provided, as are the protocols for administering the instruments. The



	chapter additionally discusses the data analysis, methods of trustworthiness, and ethical considerations.
<b>4</b>	<b>Presentation and interpretation of the research findings:</b> The chapter presents and interprets the collected research results considering the study's aim and objectives, using participants' direct responses (verbatim) where necessary.
<b>5</b>	<b>Summary, limitations, recommendations, and conclusion:</b> In this chapter, the researcher presents the study's summary, limitations, recommendations, and conclusion. It particularly provides general recommendations, proposed models, and areas for future research. This chapter marks the end of the study.

Source: Researcher

### 1.11 SUMMARY

This chapter presented the general orientation of the study by outlining the introduction and background of the study, a brief discussion of the research, and the reasons for conducting it. Methodological aspects such as problem statement, research aim, objectives, and questions were deliberated. The research problem was examined by outlining the challenges of CIT robberies that the SAPS faces in the Limpopo Province, South Africa. The scientific contribution of this study in the researcher's field of research was also provided, including individuals and institutions that are set to benefit from the study's findings. Lastly, the chapter presents the research structure of the dissertation. In the next chapter, attention is given to the literature review related to the research project. This seeks to provide an overview of the literature on studies previously conducted by other researchers on the subject under investigation.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 INTRODUCTION**

The previous chapter outlined the general orientation of the study. The current chapter provides an in-depth inclusive literature review of recent studies and debates on MO as an identification technique in investigating CIT robberies. CIT robbery has become an intensifying phenomenon in South Africa. It has become a critical problem for the government and the public, particularly law enforcement agencies, because it reflects poorly on them. CIT robbery investigation represents significant challenges for investigating officers. Its investigation is significantly incomplete without the determination of the identity of the perpetrators. The success of CIT robbery investigative methods and techniques depends mainly on the skill and knowledge of the investigating officer. The investigating officer collects evidence when a CIT robbery has been committed to bring the perpetrators to trial.

For this reason, the investigating officers should use all available investigative methods and techniques to identify the perpetrators, including MO information. MO can be a useful mechanism in the investigation of CIT robbery. Understanding a perpetrator's MO information is the best way to identify, investigate, and eventually apprehend the perpetrators. Identifying perpetrators in their MO can contribute to crimes such as CIT robberies. Against this backdrop, this chapter provides an in-depth and critical literature review on leading topics and sub-topics as deliberated below.

### **2.2 CRIMINAL INVESTIGATION**

From a conceptual standpoint, criminal investigation is the process by which law enforcement officers reconstruct a previous incident to solve crimes (Benson *et al.*, 2015:11). According to Brandl (2018:40), criminal investigation is the process of gathering data connected to crimes to accomplish specific objectives. To corroborate this, Hess, Orthman, and Cho (2017:8) and Newburn, Williamson, and Wright (2017:199) indicate that criminal investigation is a step-by-step process of discovering, recording, collecting, preparing, presenting, and identifying evidence to determine what happened and identifying a responsible perpetrator. Criminal investigation involves a reconstructive process that employs deductive and inductive reasoning, a logical process in which a specific conclusion is drawn from facts (Hess *et al.*, 2017:8).

Monckton-Smith, Adams, Hart, and Webb (2013:2) advocate that criminal investigation be defined as an inquiry to determine whether an offense has been committed, who is responsible, and to gather acceptable evidence to be presented to a judicial authority. Therefore, the researcher identified three distinctive objectives entailed in this meaning. First, there is a need to determine if an offense has been committed, look into the statutes and laws in any particular jurisdiction, and define an offense's defining elements. Secondly, determining who committed the crime is the element of criminal investigation that is sometimes portrayed as the primary responsibility. Lastly, the goal is to compile admissible evidence.

The notion of "investigation" has been developed over many years. Lochner and Zinn (2015:6) define it as the systematic quest for the truth, with the primary goal of finding a positive solution to a crime. It is further noted that criminal investigation is "a methodical, structured, reasoning, thinking, examination, and analysis process intended to find the truth, in which all forms of crimes or unlawful acts are thoroughly investigated and analyzed" (Benson *et al.*, 2015:19). Criminal investigation is one of the key objectives of law enforcement that contributes to the achievement of a broad range of objectives at every level of policing (Berning & Masiloane, 2012:ii).

### **2.3 FORENSIC INVESTIGATION**

The concept of 'forensic investigation' is commonly used in South Africa, but there appear to be different interpretations about its true meaning. Benson *et al.* (2015:18) submit that the notion of 'forensic investigation' causes much confusion and debate in the academic fraternity and investigation milieu. However, these authors incorporate the concept and idea of an investigation conducted by the corporate and private investigative sectors as part of 'forensic investigation.' However, according to Zinn and Dintwe (2015:443), 'forensic investigation' is legitimately establishing evidence and facts for presentation in a court of law or another type of hearing and tribunal. Nowadays, "forensic science" has come to mean the application of scientific methodologies and techniques to cases involving court proceedings.

In addition, Karagiozis and Sgalio (cited in Dintwe and Snyman, 2015:80) state that a "forensic investigation" is defined as accurately recognizing, identifying, and individualizing a piece of evidence as well as providing a clear and concise report that explains the evidence's nature, implications, and relationship to the subject at hand.

Correspondingly, Dintwe and Snyman (2015:80) define “forensic investigation” as an investigation that seeks to open a court case and addresses a legal issue using some or all of scientific technology. The distinction between the two meanings is that investigation is applied to forensic science to produce a ‘forensic investigation.’

## **2.4 IDENTIFICATION**

The primary goal of a criminal investigation is to identify the perpetrator. Van Graan and Budhram (2015:47) define “identification” as grouping related things into a single category and giving each category a name. Similarly, Osterburg and Ward (2014:34) express that identification is classifying an object into a certain category or group based on shared attributes. Identifying something or someone as falling under a particular category is known as identification. Identification is predicated on the idea that everything in the universe is distinct from one another and belongs to a class (Chingado, 2018:47; Houck, 2015:346; Spencer & Spencer, 2013:129). An object can only ever be identical to itself - never to anything else. Individualization requires identification as a precondition. This implies that to assess an object's uniqueness, it cannot simply be identified for what it is without also being compared to other samples of known provenance (Spencer & Spencer, 2013:130).

The forensic sciences have different perspectives on the idea of identification. Still, in general, it is used to place things into specific groups, that is, to identify whether an object belongs to a specific category of objects (Chingado, 2018:47). Identifying is critical during the investigation process; thus, different identifying strategies will lead to individualization. Identification is the process of analyzing, comparing, and evaluating a latent fingerprint to a record or known fingerprints to determine if there is a match or identification (Gardner, 2012:256).

The purpose of identification in “forensic investigation” is to locate physical evidence (Van Graan & Budhram, 2015:45). This evidence can then be analyzed to help the investigator follow a fruitful trail by providing hints based on the particular characteristics of the physical evidence. As an alternative, Lushbaugh and Weston (2016:210) assert that face features, such as distinguishing natural marks or tattoos, hairline and color, race, attire, speech traits, odd behaviors, or nervous spasms, can all be used to identify a person. In CIT robbery cases, when the victims have been murdered or are unable to view the robber's face, identification can be made based

on general physical build, fingerprints, footprints, shoeprints, kind of disguise, loot recovery, means of escape, and weapon used (Lushbaugh & Weston, 2016:210).

Identification of perpetrators is important not only in CIT robbery cases but also in other crimes, such as housebreaking, murder, and rape. It is an essential component of any criminal investigation. Everything found at the scene of a CIT robbery, including fingerprints, blood, and clothing, must be identified. Every piece of evidence discovered must be seized and packaged in forensic exhibit bags by experts following established guidelines before being delivered to the appropriate forensic units for classification and examination.

Van Graan and Budhram (2015:48-63) mention the following identification categories:

- Situation identification.
- Victim identification.
- Witness identification.
- Perpetrator identification.
- Imprint identification.
- Origin identification.
- Action identification, and
- Cumulative identification.

The various categories of identification made by the investigating officers mentioned above are of paramount importance during the preliminary, in-depth, and concluding investigation phases. They are deliberated on in the section below.

#### **2.4.1 Situation identification**

Situation identification is the starting point of the investigation. According to Govender (2019:31), identifying the type of crime committed is known as 'situation identification'. However, Van Graan and Budhram (2015:49) describe "situation identification" as a psychological reconstruction of the incident's circumstances. Therefore, "situation identification" is used to determine the elements of a crime committed and to check whether the probable crime has been committed.

#### **2.4.2 Victim identification**

An individual who has experienced bodily, psychological, or emotional injury, as well as financial loss or a significant impairment of their fundamental rights owing to criminal activity, is considered a victim (SAPS, 2014:2). Therefore, in the case of CIT robbery victims can be either a security guard, bystander, client, or police officer. Victim identification is mainly concerned with deceased or unconscious victims. However, it is not exclusive to them (Van Graan & Budhram, 2015:50). Furthermore, the identification of victims is based on physical appearance.

#### **2.4.3 Witness identification**

A witness is a person who can give a first-hand account of something they saw, heard, or experienced during the execution of an offense, according to Van Rooyen (2012:15). Therefore, eyewitness identification is described by Gilbert (2010:470) as the process by which a witness determines the perpetrator of a particular crime based on their direct observation of that crime. Furthermore, "witness identification", according to Van Graan and Budhram (2015:50), is connecting a particular perpetrator with a particular incident. In the case of CIT robbery, witness refers to security guards, civilians, clients, and any other person who witnesses the robbery.

#### **2.4.4 Perpetrator identification**

In this study, the perpetrator was defined as someone with the requisite capacity to commit an unlawful act, fulfilling the definitional requirements of the crime (Joubert, 2018:98). The main goal of a criminal investigation is to identify the perpetrator. Investigating officers can use different identification methods and techniques to identify CIT robbery perpetrators. The identification techniques used for perpetrator identification include MO, photo identification, personal descriptions, identification parade, voice identification, and Close-Circuit Television (CCTV) video footage. These six are discussed below.

- ***Modus operandi***: MO is the methodology perpetrators use to commission crime. MO is used by investigating officers to identify perpetrators' connected behaviours and methods of committing a crime. MO is an excellent strategy law enforcement agencies use to connect crime cases and identify possible perpetrators (Labuschagne, 2015:278).

- **Photo identification:** Photo identification is an important approach for identifying the perpetrators of violent crimes during investigations. Photographic identification is a strategy used by investigators to identify the perpetrator, particularly robbery suspects in South Africa (SAPS, 2020:13). Furthermore, Section 37(1)(d) of the Criminal Procedure Act, 1977 (Act 51 of 1977, in conjunction with SAPS National Instruction 1 of 2007, permits the collecting of data in the form of pictures of an arrested person (South Africa, 1977). Color photo identification was considered extremely useful in *S v Mlati* 1984 (4) SA 629 (A) 634.
- **Personal descriptions:** According to Gilbert (2010:471) and Van Graan and Budhram (2015:56-57), personal descriptions are based on features such as race, gender, forehead, tattoos, hair color, nose, lips, eyebrows, eyes, nose, mouth, teeth, ears, chin, and cheeks.
- **Identification parade:** An identification parade is a direct technique of person identification in which a group of people who are more or less similar in appearance, dress, and social standing are paraded to allow witnesses or victims to identify the perpetrator whom they saw and have a mental image of imprinted in their memory (Orthmann & Hess, 2013:222). Section 37(1)(b) of the Criminal Procedure Act, 1977 (Act 51 of 1977), in conjunction with SAPS National Instruction 1 of 2007, authorises a police officer to conduct an identification parade (South Africa, 1977). The SAPS 329 form is used in an identification parade and must be completed by the police official in command. The goal of an identification parade is to fairly and properly assess the ability of the witnesses and victims to identify the accused/suspect and to eliminate the element of suggestion as a determining factor, which leads to individualisation and identifies the perpetrator.
- **Voice identification:** This is the identification of a perpetrator based on the perception of vocal sounds. The perpetrator's voice could lead to his identification rather than his physical look. In some courts, voiceprint or spectrograph is the only voice identification technology legally accepted as

proof of identity (Gilbert, 2010:467). In South African courts, voice identification is only admissible if an existing vocal impression can be compared to the perpetrator's (Van Graan & Budhram, 2015:60).

- **CCTV identification:** Osterburg and Ward (2014:454) suggest that investigators search the surrounding area for more perpetrators using the photographic snapshot when perpetrators are captured on CCTV cameras. In addition, according to Brandl (2014:594), if a CCTV camera captures the perpetrator's image, it may be displayed on media platforms to provide helpful leads for further investigation into the perpetrator's identity.

Furthermore, as explained by Van Graan and Budhram (2015:61), CCTV video footage could assist investigators in investigating a case in different ways through the identification of perpetrators, victims, or witnesses and the recovery of evidence that had not been collected initially. Sewpersad and Minnaar (2010:173) share a similar view that CCTV can help identify perpetrators and compile a database of their images for use in court later on and to relate to various cases. The CCTV video footage captured by a bank's security cameras and downloaded onto the computer system was deemed to be clearly original and genuine evidence in the case of *S v Modlongwa* 2010 (2) SACR 419 (SCA).

#### **2.4.5 Imprint identification**

Whorled, angled, and circular fingerprints are distinctive mark patterns used for fingerprint identification; fingerprints are conclusive proof of a person's identity (Dlepu, 2021:6). Everybody has a different fingerprint. Upon making an arrest, the investigator must get a valid set of fingerprints from the suspect on the SAPS 76 form. These fingerprints will then be sent to the Local Criminal Record Centre (LCRC) for examination and comparison. Other fingerprint forms include the SAPS 192 form, which collects fingerprints from the suspect for investigations, judicial records, identification, and comparison purposes. The SAPS 192 form is also used to compare the fingerprints from the crime scene to those of the suspects to determine if they match and whether the suspect is linked to any other cases. Therefore, fingerprints discovered at the scene of a CIT robbery by fingerprint experts can identify the true identity of the perpetrators.



#### **2.4.6 Origin identification**

According to Van Graan and Budhram (2015:52), origin identification primarily focuses on examining common origins in inorganic samples like soil, weaponry, and fabric fibers and organic samples like blood, hair, urine, and saliva. Until an LCRC expert processes physical evidence further, police investigators have a duty to ensure that tangible evidence is protected from contamination (Gilbert, 2010:82). When a lab technician uses the investigative sample and a piece of tape discovered at the crime scene to verify the origin of identification, the process is considered successful at the Forensic Science Laboratory (FSL).

#### **2.4.7 Action identification**

Identifying an action refers to detecting human behaviour directly related to the crime or as its central component (Buckles, 2017:123). Perpetrators have a distinct MO, which is their preferred method of committing crime.

#### **2.4.8 Cumulative identification**

According to Van Graan and Budhram (2015:54), cumulative identification occurs when multiple types of identification are used in criminal investigations. The researcher agrees that cumulative identification occurs when multiple experts' contributions are merged.

### **2.5 INDIVIDUALISATION**

Van Graan and Budhram (2015:64) define "individualization" as a procedure that begins with identification, moves on to classification, and, if feasible, ends with assigning a specific source to provide tangible proof. Consequently, individualization usually refers to setting someone apart from others. Houck (2015:238) states that individualization begins at the scene of the crime and concludes with the presentation of evidence, the victim's identity is established, and the ability to connect the offender to the scene using evidence like fingerprints, projectiles, discharged bullets, or cartridges. "The process of linking physical evidence to a common source is what individualization entails" (Van Graan & Budhram, 2015:64).

Furthermore, Ogle (2012:9) adds that individualization requires comparing contested objects, such as fingerprints, obtained at a crime scene to establish origins. Individualization can occur through MO, forensic evidence, fingerprints, and

informants. According to Ogle and Plotkin (2018:10), identifying the unique source of an evidentiary item is known as individualization.

The researcher observes broad consensus among scholars regarding what individualization entails. Individualization, for instance, occurs when fingerprints taken from the crime scene are examined, compared to fingerprints stored in a database, and matched to the fingerprints of a single person suspected of committing the CIT robbery.

## **2.6 LOCARD'S EXCHANGE PRINCIPLE**

Locard's exchange principle guided this study, pioneered in Lyon, France, by forensic scientist Dr. Edmond Locard in the early 20<sup>th</sup> century (Orthman & Hess, 2013:123). The theory was chosen because of its relationship with the problem being studied. Locard's exchange principle is one of the cornerstones of forensic science. It is regarded as the most prominent theory in both criminal and forensic investigation (Houck, 2017:4). Locard's exchange principle is based on the contact theory, which states that when two items come into contact, trace elements are transferred from one to another, leaving evidence of the contact behind (Orthman & Hess, 2013:123; Lochner & Zinn, 2015:14; Klopper, 2020:596). In other words, when two items or persons touch, materials are transferred reciprocally, and evidence can be discovered from both elements.

In addition, Locard's exchange principle holds that "every contact leaves a trace." An individual cannot behave or act without leaving a trace of their presence (Van Graan & Budhram, 2015: 45). As a result, Locard felt that anytime a perpetrator committed a crime at a crime scene, they would bring something into the scene, leave something there, and take something away from the scene (Gilbert, 2010:82). Locard also felt that no matter where a criminal travels or what a criminal does, coming into contact with items can leave trace evidence, including fingerprints, footprints, DNA, skin cells, hair, blood, body fluids, bits of clothes, fibres, and more. Van Rooyen (2012:20) concurs that incriminating evidence is left behind anytime two items come into contact. A criminal cannot behave without leaving traces of his actions. In examining CIT robbery cases, Lochner and Zinn (2015:40) agree that any object that criminals handle at the crime scene will have traces of evidence. For example, in the case of CIT

robberies, trace evidence such as empty cartridges, projectiles (bullets), explosives, substances, and spikes are typically left behind at the crime scene.

## **2.7 THE MEANING OF ORGANISED CRIME**

Organised crime involves criminal syndicates engaging in systematic and serious offenses driven by the pursuit of power or profit over an extended period (Doorewaard & Minnaar, 2016:34). Lebeya (2012:49) separates the notion of organized crime into two main components, the first focusing on the criminal activities (i.e. money laundering) while the second focusing on the criminal group. The concept is relevant to both the criminal syndicate and their activity. The terms “crime syndicates,” “criminal gangs,” and “organized criminal groups” are often used interchangeably, hence organized crime. Geldenhuys (2020:16) contends that organised criminal groups rely on continuous criminal activity to generate an income and may simultaneously engage in legitimate and illegitimate business activity. CIT robberies are associated with organised crime syndicates that operate nationally. Researchers such as Roelofse (2011:3) and Booyens (2020:388) indicate that organised crime comprises the business with all the inherent practices of planning, division of labour, the hierarchy of authority, intelligence, market research, organisational culture, contracting, and discipline, driven by profit, and power, as well as without legal and moral constraints.

According to Article 2(a) and 2(c) of the Convention Against Transnational Organised Crime (the Palermo Convention), an organised criminal syndicate or group is:

...a structured group of three or more individuals, existing over time and working together with the intent to commit one or more serious crimes defined by this Convention, with the direct or indirect goal of obtaining a financial or other material benefit. (United Nations, 2011:np.)

In the context of organised crime, CIT robberies are carried out by organised criminal syndicates, which come together to commit a crime (Klopper & Bezuidenhout, 2020:322; Van der Spuy, 2018:56; Thobane, 2014:159). According to these authors, a typical CIT robbery gang consists of a core group of roughly six perpetrators; the size of the group depends on the location and type of CIT robbery to be executed. Each member of a CIT robbery gang is given specific tasks and responsibilities during the execution of a CIT robbery. In addition, CIT robberies in South Africa are closely associated with South African organised crime syndicates. They are a major factor in the billions of rands laundered through the financial system (Lebeya, 2012:296).

## 2.8 THE MEANING OF ROBBERY

Robbery is considered as a very serious and violent crime. From a conceptual standpoint, robbery is defined by Joubert (2018:192) as the theft of property carried out by unlawfully and intentionally using violence or threat of violence to coerce the possessor of the property to acquiesce to the taking of the property. Equally, Klopper and Bezuidenhout (2020:223) define robbery as the unlawful and intentional use of violence to take property from someone or force the proprietor of the property to submit to the taking. Robbery is described as the theft or attempted theft of property in a direct confrontation with the victim, using force or threatening violence.

In addition, Swanson, Chamelin, Territo, and Taylor (2019:382) agree with Gilbert (2010:216) that robbery is the stealing of another's personal property to permanently deprive the victim, using force, fear, or the threat of force. Robbery is defined as the unlawful seizure of another's property, either directly from the person or in the person's presence, using force or intimidation (Hess et al., 2017: 411). To prove that a robbery has been committed, the victim must state that property was taken by force and without authorisation.

### 2.8.1 The elements of robbery

Snyman (2020:451) specifies elements of robbery that must be present and established before it can be said that robbery has occurred, namely unlawfulness, intention, use of violence or threat of violence, theft of property, and a causal link between the violence and the taking of property. Therefore, for the police and the courts to prove that a robbery occurred, they must prove certain elements of an offence. According to Hoctor (2013:319-321), the four essential elements of robbery include the following:

- **Theft:** The offence cannot be categorised as a robbery if theft of the victim's belongings did not occur. Robbery is a sub-classification of theft.
- **Intention:** It is significant to prove that the perpetrator intended to permanently or temporarily deprive the victim of their belongings.
- **Violence or force:** The offence of robbery entails either the actual use of threat of violence or force to force the victim to surrender to the removal of their belongings and to prevent resistance. The use of force or threat of violence

should be physical and immediate and must be directed towards the victim. It can entail either fists or a type of weapon.

- **Submission:** The item was removed from the victim or their presence. The use of violence or threat of force should be of such a nature that it will cause the victim to refrain from resisting and, in turn, give up their belongings.

There must be a causal relationship between the threat of violence and the acquisition of another's property. However, Hess *et al.* (2017:411) only specify three elements of robbery: unlawful, taking personal property from or in the presence of a person, and taking property against the person's will by force or threat of force. Although the authors mentioned above discuss comparable elements of robbery, Hess *et al.* (2013:395) have combined certain elements to make them three. The sole distinction is the causal link between violence and property theft, which Hess *et al.* (2013:395) do not address.

## 2.9 CONCEPTUALISING CASH-IN-TRANSIT ROBBERY

To understand the phenomenon of CIT robbery, it is necessary to define what a CIT robbery is. CIT robbery has been one of the National Priority Violence Crimes (NPVC) classified as falling under the Serious Organised Crime Investigation Unit (SOCIU) by the Directorate for Priority Crime Investigation (DPCI). According to SAPS (2020:77) annual crime report, CIT robbery is “the intentional and unlawful forceful removal and seizure of cash money or containers for the conveyance of money belonging to another, while a security company is transporting such money or containers for the conveyance of money on behalf of the owner thereof”. CIT robberies are situations where CIT security company employees who are registered to transport cash money for clients are robbed while doing so (usually between the client and a bank or *vice versa*) (SAPS, 2023a:30). For the robbery to be classified as a CIT robbery, it must have taken place when the employees of Security Company had the money. Robbery of money signed off to the client will be reported as business robbery rather than CIT. In incidents where individuals in their private capacity or employees of businesses are robbed of cash while en route to or from a bank, the charge would be robbery with a firearm and not CIT robbery (SAPS, 2023a:30).

In addition, Klopper and Bezuidenhout (2020:222) concur with SABRIC (2019:14) that CIT robbery is the unlawful, intentional, and violent removal and appropriation of cash

while in transit or under the control of a security company. As such, Pienaar (2014:104) explains that CIT robbery consists of the removal of cash using threats and violence inside or outside the bank or other premises. This type of robbery usually occurs outside a bank, on other business premises, or on the way to a security depot or business. This further includes removing and appropriating movable assets using threats of violence. The key consideration is that the CIT Company must control the movable assets registered to transport cash for clients, generally between the client and a bank or *vice-versa*, and are robbed while transporting such cash.

Various agencies and institutions employ different definitions and classifications of crime. Considering the above, the definitions of CIT robbery by the SAPS, SABRIC, and CITASA differ. The SAPS definition states that the CIT Company must have already gained custody of the money. Still, with SABRIC and CITASA, the personnel of the CIT Company must be present during the theft of the money, even if they have not yet taken control of it.

Furthermore, there is no such crime as CIT robbery in South Africa; instead, it is referred to as robbery with aggravating circumstances. The term CIT robbery is a classification allocated by SAPS for statistical purposes. The perpetrators who commit the crime against a CIT Company are charged with robbery with aggravating circumstances. Section 1(1) (b) of the Criminal Procedure 51 of 1977 defines aggravating circumstances in relation to robbery or armed robbery as the use of a firearm or other dangerous weapon, or the infliction of grievous bodily harm (GHB), or a threat to inflict GHB, by the perpetrator or an accomplice on the occasion when the offence is committed, whether before, during, or after the commission of an offence (Snyman, 2020:451).

## **2.10 DIFFERENT TYPES OF CASH-IN-TRANSIT ROBBERIES**

CIT robberies have been classified depending on the nature of the target, namely Armoured Vehicle (AV), the Cross Pavement Carrier (CPC), and the Merchant's Premises, as well as the Own Premises (see Annexure F). There have been many different types of attacks on CIT service providers. These are discussed below.

### **2.10.1 Cross-pavement robbery**

When cash is robbed by force while being transported to or is being loaded into a stationary AV, or when it is being unloaded from the stationary AV and being

transported to the bank, it is called cross-pavement robbery (Klopper & Bezuidenhout, 2020:319). This type of robbery occurred when the index makes provision for robbery incidents where the attack was directed at the security guard carrying the CPC or warrior bag of money whilst crossing the pavement or in the parking area, and it includes cash destined for a bank branch or ATM site.

Another explanation offered by Burger (2018:1) is that cross-pavement robbery occurs when CIT security personnel are robbed while transporting cash between the AV and a business or *vice-versa*. This robbery occurs outside the CIT vehicle in the parking area or pavement. Figure 2.1 below shows a cross-pavement robbery, where the CIT security guard is accosted by two armed perpetrators while returning with the CPC bag of cash toward the CIT vehicle.

Figure 2.1: Cross-pavement robbery/attack



Source: Chothia (2020:1)

### 2.10.2 Vehicle on road robbery

The vehicle on-road robbery is also known as AV on-road attack. This type of robbery occurs on the road when an AV carrying cash is stopped, either by driving into the CIT vehicle with another vehicle or impeding the AV (boxing in) to appropriate the cash within the vehicle (Klopper & Bezuidenhout, 2020:319). The attack includes robberies where the CIT security vehicles are targeted by the suspects through various means, with the intent to gain control of and/or immobilize the cash-carrying vehicle while in transit. These measures include the security vehicles being forced off the road using

a collision (tap-tap), boxed in and moved to a standstill, or overturned by the excessive use of violence (drive-by shooting).

One MO used to bring the AV to a standstill or overturn on the road is to ram it using high-end luxury sedans. This attack usually occurs on the road, usually on freeways. The most popular make of vehicles used to ram AV to overturn and/or standstill are Mercedes-Benz or Bavarian Motor Works (BMW) sedans. These vehicles are usually hijacked or stolen vehicles. Figure 2.2 below shows a CIT vehicle on a road attack crime scene.

Figure 2.2: Vehicle on road robbery/attack



Source: Pijoo (2023:1)

Figure 2.2 above depicts the Fidelity Cash Solutions AV on-road attack, a CIT explosion on the R40 near Hezyview in Mpumalanga Province, in which the perpetrators used a white Mercedes-Benz sedan to ram the CIT vehicle to a standstill. It became a common trend for the perpetrators to burn vehicles used to ram the CIT vehicle beyond recognition to destroy evidence.

### 2.10.3 Merchant attack

This type of robbery occurs when the attacker targets the merchant. The index includes robbery cases in which the attacker targets a security guard who has assets (money) while executing a service for a retail client (SABRIC, 2023:7). The incident takes place inside the retail (merchant) premises or pay point.

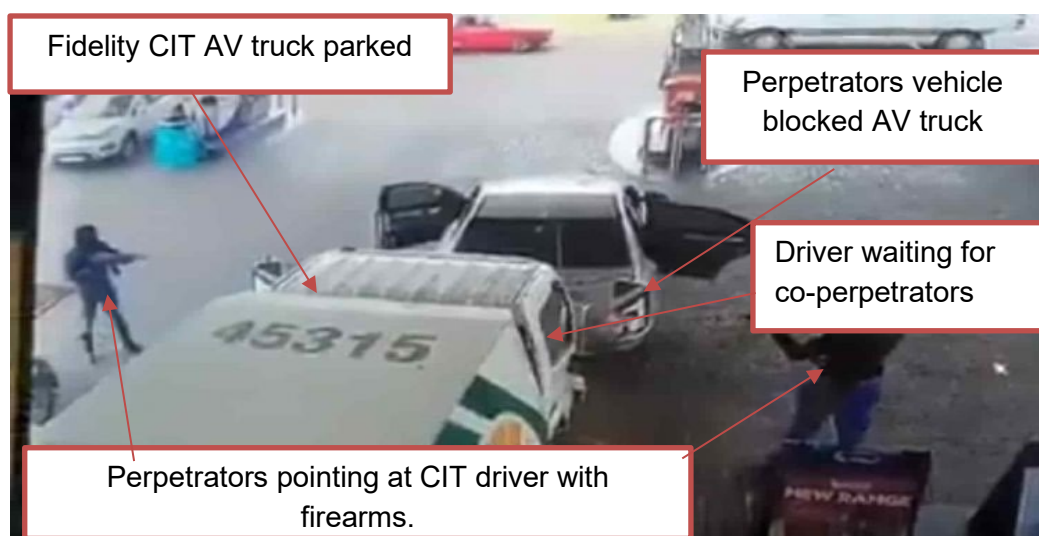


#### 2.10.4 Static AV attack

According to SABRIC (2023:7), static AV attacks include robberies where the security vehicle is targeted whilst stationary and perpetrators gain access to the security vehicle using, amongst others, threatening of the guards or use of petrol, explosive devices, and extreme violence. It further makes provision for attempted attacks where the security guards are brought under the impression that perpetrators' access to the security vehicle is imminent. Still, owing to circumstances, the attack is not completed.

Figure 2.3 below depicts the static AV attack. The Fidelity cash solutions AV truck had parked near the entrance of an Engen convenience store, supposedly to drop off new stacks of cash money for a nearby ATM machine (Sicetsha, 2021:1). However, lurking in the periphery were two vehicles occupied by armed perpetrators who waited until the security guard opened the rear door of the AV truck. Before the driver punched in the passcode to unlock the rear door, two armed men pounced on him with fully loaded assault rifles pointed at his face (see Figure 2.3). One wrong move, and his head would have been blown away. One of the perpetrators entered the canopy of the AV truck and hauled out two bags full of cash money. According to Sicetsha (2021:1), a Mercedes-Benz was seen blocking the Fidelity AV truck in front, blocking its escape. The two men armed with automatic machine guns were seen exiting the vehicle and immediately pointed at the driver of the Fidelity with firearms.

Figure 2.3: Static AV attack



Source: Sicetsha (2021:1)

### 2.10.5 CIT directed at the banking industry

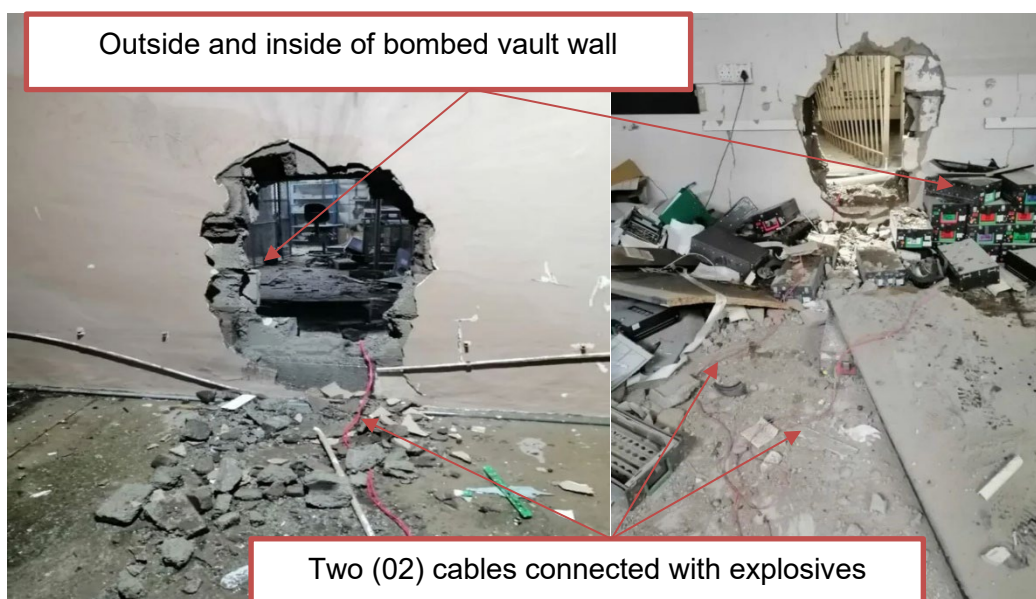
This type of robbery occurs in instances in which the attacker targets the security guard when they are carrying cash and are providing service inside a bank branch or ATM (SABRIC, 2023:7). If the security guard was on the way to or from the branch or ATM (not inside), these incidents will then be classified as cross-pavement attacks or static AV attacks if the cash was intended for/from a bank premises or ATM site.

### 2.10.6 Own premises/depot attack

The types of robbery or burglary comprise incidents committed at the CIT company premises (SABRIC, 2023:7). This type of robbery is also known as a depot attack. It involved a robbery that was directed at CIT company premises. Often, offenders pretend to be maintenance personnel to access the CIT depot (SABRIC, 2023:7). They utilise explosives to target either cash vehicles or cash storage facilities. Evidence demonstrates that carrying out such an attack requires precise planning and preparation.

Maqhubela (2023:1) reports that a group of armed suspects carrying Avtomat Kalashnikova, a designed assault rifle (AK47), entered the Fidelity Cash Solutions depot in East London and bombed the office to try to enter the vault where cash money was kept. The author further reports that security guards were injured during a shootout between the robbers and the guards. The following Figure 2.4 shows a depot attack crime scene.

Figure 2.4: Depot attack



Source: Maqhubela (2023:1)

### **2.10.7 Bogus pick-up**

Perpetrators (often accompanied by violence) impersonate guards of a security company or CIT company to gain access to a cash collection at a bank branch or from a third party whose cash is intended for banking (SABRIC, 2023:7). This category is not classified as a CIT robbery.

## **2.11 STIPULATED CHARGES FOR CASH-IN-TRANSIT ROBBERIES**

CIT robberies are becoming an epidemic in South Africa, and communities expect the courts to impose harsh convictions and sentences for these crimes. In the cases of *S v Luke and Others* (SS16/10) [2012] ZAWCHC 9; *S v Mogale and Others* (CC79/2018; 10/2/11/1-L41/18) [2020] ZALMPPHC 70, and *S v Mabena and Others* (CC2/2020) [2023] ZAGPPHC 1189, the accused were convicted and sentenced on the following incorporated counts:

- Robbery with aggravating circumstances as defined in Section 1 of the Criminal Procedure Act, 1977 (Act 51 of 1977), read with the provisions of Section 51(2) of the Criminal Law Amendment Act, 1997 (Act 105 of 1997) – CIT robbery;
- Contravention of Section 18(2)(b) of the Riotous Assemblies Act, 1956 (Act 17 of 1956) – Incitement to commit robbery with aggravating circumstances;
- Contravention of Section 18(2)(a) of the Riotous Assemblies Act, 1956 (Act 17 of 1956) read with section 1 of the Criminal Procedure Act, 1977 (Act 51 of 1977) – Conspiracy to commit robbery with aggravating circumstances;
- Contravention of Section 120(1) read with Section 3(1) of the Firearm Control Act, 2000 (Act 60 of 2000) – Unlawful possession of a firearm without a license, permit or authorization in terms of the Act;
- Contravention of Section 120(1) read with Section 4(1)(a) of the Firearm Control Act, 2000 (Act 60 of 2000) and read with Section 51(2) of the Criminal Law Amendment Act, 1977 (Act 105 of 1997) – Unlawful possession of an automatic or prohibited firearm;

- Contravention of Section 120(1) read with Section 90 of the Firearm Control Act, 200 (Act 60 of 2000) – Unlawful possession of ammunition without a license, permit or authorisation in terms of the Act;
- Contravention of section 120(6) of the Firearm Control Act, 2000 (Act 60 of 2000) - Pointing with a firearm;
- Contravention of the provisions of Section 6(1) of the Explosives Act, 1956 (Act 26 of 1956), read with 1,6(2) and 6(3) of the Act, as amended and read with Section 51, Schedule 2, Part II of the Criminal Law Amendment Act, 1977 (Act 105 of 1997) - Unlawful possession of explosives;
- Contravention of the provision of Section 28 read with Section 27, 28(2), and 1 of the Explosives Act, 1956 (Act 26 of 1956) and further read with Section 51(2) of the Criminal Law Amendment Act, 1997 (Act 105 of 1997) – Possession of Explosives to injure any person or property;
- Murder: perpetrators may be charged with murder if a civilian, client, security guard and police officer is injured and die as a results of CIT robbery thereof.
- Attempted murder read with the provisions of Section 51(2) of the Criminal Law Amendment Act, 1997 (Act 105 of 1997). Perpetrators may be charged with attempted murder if a civilian, security guard, client and police officer is injured during the perpetration of CIT robbery.
- Malicious damage to property: this charge is owing to the damage of cash vehicle caused by the explosives or bullets used during the perpetration of the CIT robbery.
- Contravention of section 6 of the General Law Amendment Act, 1995 (Act 62 of 1995) – Unlawful possession of suspected stolen motor vehicles. Stolen or hijacked vehicles are used during CIT robberies or stolen/hijacked at the crime scene and used during getaways.
- Contravention of Section 63 read with other relevant provisions regarding the National Traffic Act, 1996 (Act 93 of 1996) – Reckless or negligent driving.

- Contravening the provision of Section 68 (1) or (2) read with Section 1, 35, 63(2), 63(3), 69, 73, 89(5) of the National Road Traffic Act, 1996 (Act 93 of 1996) – Use of falsified vehicle registration number during the robbery.
- Contravention of Section 4(a) or (b) read with Section 1, 8, 76(1) of the Prevention of Organised Crime Act, 1998 (Act 121 of 1998), hereafter referred to as “POCA” – Money laundering.

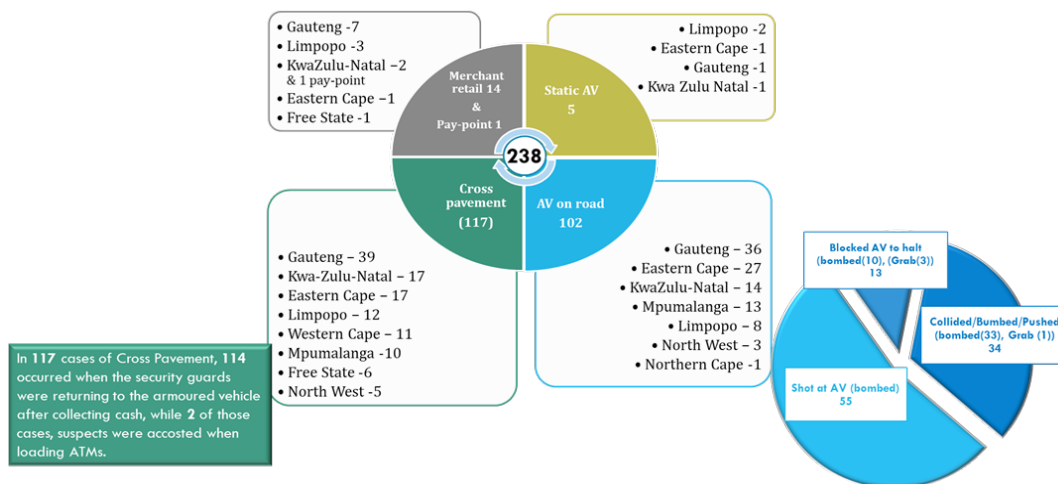
Besides the above charges of CIT robberies, if the security guards, bystanders, and customers were threatened and seriously assaulted during the perpetration of the CIT robbery, the perpetrators could also be charged with assault and assault with intent to cause GBH. Sections 280(1) and (2) of the Criminal Procedure Act, 1977 (Act 51 of 1977), hereafter referred to as “CPA”, allow a sentencing court to order that one or more sentences of imprisonment run concurrently, in whole or in part (South Africa, 1977). However, where life imprisonment is issued, other jail sentences are served concurrently with life imprisonment without a specific order by Section 39(2)(a)(i) of the Correctional Services Act 111 of 1998 (South Africa, 1998b). If the elements of reputation are present, the culprits may face prosecution under the POCA.

## **2.12 THE NATURE AND EXTENT OF CASH-IN-TRANSIT ROBBERIES IN SOUTH AFRICA**

According to Zinn (2017:18), CIT robberies are the most violent and serious crimes in South Africa. This kind of crime necessitates the use of more instrumental violence to subdue security guards, get around an AV's protection of the cash and the security guards, and manage the comparatively greater number of bystanders in a public area. The ramifications of CIT robberies encompass a range of issues, such as fatalities, injuries, financial losses, pilferage of weapons, vehicle damage, infrastructural damage, and traffic congestion. The MO of CIT robberies bears similarities to other organized crime syndicates, including illicit gun trafficking, explosives trafficking, and ATM explosions.

Figure 2.5 below shows the different types of CIT robberies and MO of all nine provinces of South Africa from the SAPS annual crime report 2022/2023.

Figure 2.5: Different types of CIT robberies and modus operandi



Source: SAPS (2023a:31)

Figure 2.5 above highlights that from 1 April 2022 to 31 March 2023, 238 CIT robbery cases were committed in South Africa. From the available indicative statistics, cross-pavement robbery was the most prevalent type of CIT robberies, with 117 (49.2%) cases. AV on road robbery was committed in 102 (42.9%) cases. It is also apparent from Figure 2.5 that perpetrators utilise three MOs to execute AV on road robbery. First, in 13 cases, perpetrators barricaded the road with another vehicle to stop the AV on the road. They commanded the security personnel to open the rear door before robbing it of the cash. Secondly, in 55 cases, perpetrators shot at the AV on the road while driving by to bring it to a standstill or to overturn it before bombing it with explosives to gain access to cash. Lastly, in 34 cases, perpetrators deliberately rammed, bumped, collided, or pushed the AV before proceeding to bomb it to open it to gain access to the cash (SAPS, 2023a:31). Perpetrators accosted security personnel while dropping or collecting cash money inside the business premises (pay-point or merchant robbery) in 14 (5.9%) cases. In contrast, five (2.1%) static AV robbery cases were committed. From Figure 2.5 above, the highest province affected by CIT robberies was Gauteng with 83 (34.9%), followed by the Eastern Cape with 46 (19.3%), KwaZulu-Natal with 34 (14.3%), Limpopo with 25 (10.5%), Mpumalanga 23 (9.7%), Western Cape 11 (4.6%), North West 08 (3.4%), Free State 07 (2.9%) and lastly, Northern Cape 01 (0.4%) cases (SAPS, 2023a:31). The Cash-In-Transit Association of South Africa (CITASA) was established in November 2021 by its founding members, Fidelity Cash Solutions, G4S Cash Solutions, and SBV Services

(CITASA, 2023:np). CITASA aims to bridge the gap between the CIT industry, external stakeholders, and law enforcement agencies. It further collects, captures, analyses, and provides reports on CIT crime-related incidents aiming at collaboration, protection, and preventing CIT robberies (CITASA, 2023:np). The researcher accessed CITASA's most recent CIT robbery statistics at the time of the study. Table 2.1 below indicates the number of fatalities and injuries that occurred as a result of CIT robberies in South Africa.

Table 2.1: The comparison of CIT fatalities and injuries from April to December 2020/2021 with those of 2022/2023

Year	Personnel		Member of Public		SAPS		Perpetrator	
	<i>Loss of Life / Fatalities</i>	<i>Injuries / Wounded</i>	<i>Loss of Life/ Fatalities</i>	<i>Injuries / Wounded</i>	<i>Loss of Life/ Fatalities</i>	<i>Injuries / Wounded</i>	<i>Loss of Life/ Fatalities</i>	<i>Injuries / Wounded</i>
<b>2020</b>	20	120	2	21	1	12	0	3
<b>2021</b>	16	113	2	7	0	5	25	8
<b>2022</b>	14	138	4	28	1	3	22	10
<b>2023</b>	11	139	10	29	1	3	22	10
<b>Total</b>	<b>61</b>	<b>510</b>	<b>18</b>	<b>85</b>	<b>3</b>	<b>23</b>	<b>69</b>	<b>31</b>

Source: CITASA (2023:np)

The figures in Table 2.1 above depict the fatalities and injuries caused by CIT robberies in South Africa from April 2020 to December 2023. According to statistics released by CITASA (2023:np), injuries suffered by CIT personnel increased by 25%, of which hundred and thirty-eight (138) CIT personnel were injured, and fourteen (14) were killed. In comparison, members of the public increased by 76%, of which twenty-nine (29) were injured and ten (10) were killed in 2022. Moreover, perpetrator fatalities increased by 20% after ten (10) were killed and twenty-two (22) were injured as a result of CIT robberies in 2022. According to CITASA (cited in Geldenhuys, 2022:15), the damage to AVs runs into astronomic amounts as it could cost as much as R2 million to replace an AV. Furthermore, twelve (12) SAPS members were wounded and one (01) murdered during 2020. From the above statistics, it is clear that the perpetrators have no respect for the lives of others and do not hesitate to inflict bodily harm and even kill anybody they see as a threat or obstacle to the successful

commission of their crimes. The various categories of people affected by CIT robberies in South Africa are compiled in Table 2.1 above. Since 2017, CIT robberies in South Africa have been considered a national priority crime (Geldenhuys, 2019:28).

The SABRIC is a non-profit organisation founded by South African banks to assist the banking industry in preventing crime. SABRIC clients include South African banks and CIT companies. Its primary goal is to detect, prevent, and minimize organized crime in the banking industry through effective public-private partnerships (SABRIC, 2023:2). SABRIC coordinates inter-bank efforts aimed at combating organized bank-related violent crimes, as well as acting as a liaison between the banking industry and others on crime-related matters. In addition, the latest statistics on sub-type CIT robberies are available from the SABRIC (see Table 2.2) below.

Table 2.2: Sub-type: CIT robberies incidents from 2020 to 2021

Sub-type of CIT robberies	2020	2021	Difference
ATM Site	14	15	7%
Marchants Premises (Retail)	25	23	-8%
Cross Pavement	121	119	-2%
Pay point	8	8	0%
Robbery (Own Premises)	2	1	-50%
Static AV Attack	7	14	100%
Vehicle on Road	120	133	11%
Bank Premises	0	0	0%
<b>TOTAL</b>	<b>279</b>	<b>313</b>	<b>5%</b>

Source: SABRIC (2021:22)

From above Table 2.2, cross-pavement robbery was the dominant MO of perpetrators. However, in 2021, the sub-type of vehicle-on-road (VOR) robbery surpassed cross-pavement robbery by 15 incidents. The increase in CIT robberies may be partly explained by year-on-year increases in cash circulation in South Africa.



## **2.13 THE LEGISLATIVE FRAMEWORKS GOVERNING THE POLICE IN SOUTH AFRICA**

The legislative frameworks and regulatory tools that control police in South Africa are described in this section. A deliberate emphasis on using the law to combat crime has coincided with South Africa's transition. Police must be thoroughly aware of the law and their rights and obligations under it to guarantee that they are carrying out their constitutional mission. The Constitution of the Republic of South Africa, 1996; the South African Police Service Act, 1995 (Act 68 of 1995); the Criminal Procedure Act, 1977 (Act 51 of 1977); the Prevention of Organised Crime Act, 1998 (Act 121 of 1998); the Criminal Law (Forensic Procedures) Amendment Act, 2013 (Act 37 of 2013), and the Regulation of Interception of Communication and Provision of Communication-related Information Act, 2002 (Act 70 of 2002) govern the police in South Africa. These legal frameworks are briefly presented in this section to provide a broad background view in the context of this study.

### **2.13.1 The Constitution of the Republic of South Africa, 1996**

The Constitution of the Republic of South Africa, 1996 (hereafter referred to as “Constitution”) is the country's supreme law, and all laws or conduct must be consistent. Section 205(3) of the Constitution stipulates that the SAPS has the following objectives, *inter alia*:

- “to prevent, combat and investigate crime;
- to maintain public order;
- to protect and secure the inhabitants of the Republic and their property; and
- to uphold and enforce the law”.

Considering these provisions, the SAPS has the sole right to investigate any offence or alleged offence. The SOCIU of the DPCI, also known as the “Hawks,” is in charge of the CIT robbery investigation. The DPCI is the branch of the SAPS that investigates organized crime, economic crime, corruption, and other serious crimes referred to it by the President or another division of the police. The unit was established in 2008 by former President Jacob Zuma to replace the disbanded Scorpions.

### **2.13.2 The South African Police Service Act 68 of 1995**

The South African Police Service Act, 1995 (Act 68 of 1995), hereafter referred to as the “SAPS Act”, defines some of the responsibilities, duties, and activities of police officers. According to Section 13(1) of the SAPS Act, police officers should exercise their powers and carry out the responsibilities and functions bestowed or assigned to them by law. The mandate of the DPCI is enshrined in Section 17 D of the SAPS Act since 14 September 2012 and is complemented by Section 17 (11) of the SAPS Act. Section 17B(a) and 17D provides the functions of the DPCI to prevent, combat, and investigate national priority offences, *inter alia*, serious organised crime, serious corruption crime, and serious commercial crime (South Africa, 1995a). In addition, Section 16 deals with national crime prevention and investigation and provides a thorough understanding of the scope of the DPCI (South Africa, 1995a). This may only be done subject to the Constitution and with due regard for the fundamental rights of every person. This means that police officials are obliged to follow the provisions of the Constitution, especially regarding the rights of individuals, when they arrest suspects. Every empowering provision should, therefore, be read considering the Constitution.

### **2.13.3 The Criminal Procedure Act 51 of 1977**

The Criminal Procedure Act of 1977 (Act 51 of 1977), the CPA is one of the most essential Acts that gives police the authority to search for and seize items. The CPA also addresses procedural and related issues in criminal cases. The CPA thus governs the criminal justice logical process, which is split into four stages: pre-trial, trial, sentencing, and remedies after judgment and sentence. Because of their powers and functions, police officers play an important role in trials, particularly during the pre-trial phase. The CPA prescribes procedures for acquiring evidence, assuring the accused's attendance in court, and refusing bail. Police officers are granted broad rights and authority, including the ability to search a person or property, confiscate specific items, arrest a person, and use force to carry out their duties (Joubert, 2013:18).

### **2.13.4 The Prevention of Organised Crime Act 121 of 1998**

The Prevention of Organised Crime Act, 1998 (Act 121 of 1998), the POCA, took effect on 21 January 1999 as a mechanism to deal effectively with measures to combat organised crime, racketeering, money laundering, criminal gang activities, and the proceeds of crime in general (South Africa, 1998a; Roelofse, 2011:13). POCA must

be read together with the Financial Intelligence Centre Act, 2001 (Act 38 of 2001), which, through its Financial Intelligence Centre, serves as an additional statutory mechanism to assist in the identification of the proceeds of crime and the combating of money laundering activities as well as the financing of terrorist and related activities (South Africa, 2001). Subsequently, it becomes the responsibility of the DPCI to investigate organised crime at national and provincial levels. In the context of POCA, organised crime must be investigated effectively because CIT robbery syndicates normally involve themselves in various criminal activities. For instance, CIT robbery syndicates may also be involved in the illegal trafficking of firearms and vice versa. An example of money laundering is when a CIT robber buys a house with the money he has robbed and registers the house in his father's name. In this way, the CIT robber disguises his crime proceeds (robbed money).

#### **2.13.5 The Criminal Law (Forensic Procedures) Amendment Act 37 of 2013**

The Criminal Law (Forensic Procedures) Amendment Act, 2013 (Act 37 of 2013) became operational on 31 January 2015 when sections 36D and 36E of the CPA were inserted (South Africa, 2013b). This Act serves as a forensic and criminal investigative tool in the fight against crime if the police in Limpopo Province, South Africa, can use forensic experts in their investigations. Regarding CIT robbery investigations where the suspect is unknown, this act assists the police by identifying the suspect using fingerprints, palm prints, footprints, or any physical evidence found at the crime scene.

#### **2.13.6 The Regulation of Interception of Communication and Provision of Communication-related Information Act (Act 70 of 2002): RICA**

The RICA is a South African statute that aims, *inter alia*, to regulate and govern the provision of specific communication-related information, the monitoring of specific signals and radio frequency spectrums, and the interception of specific communications. Bank statements, telephones, retail accounts, municipal rates, existing leases, credit or rental agreements, insurance policies, television licenses, and motor vehicle permits are just a few examples of the documents that RICA displays, along with personal information about persons and their residence addresses (South Africa, 2001). However, the police and intelligence services can monitor syndicates and obtain information about planned CIT robberies by intercepting phone calls and internet connections. This can certainly help identify the MO of the CIT

robbers. According to the RICA policy, the police cannot intercept someone's conversations without special approval from a judge. To get around the process, the SAPS is taking advantage of a gap in the present surveillance legislation, such as the subpoena under Section 205 of the CPA (South Africa, 1977).

#### **2.14 THE MEANING OF MODUS OPERANDI**

According to Gilbert (2010:10), Bartol and Bartol (2017:314), Hall and Bezuidenhout (2019:32), Klopper (2020:596), Turvey and Freeman (2023:578), MO is the Latin phrase that means a method of operating, and it refers to how crime has been committed. Thobane (2014:159-179), a leading researcher on CIT robberies in South Africa, persuasively argues that the most common MO in CIT robberies in South Africa involves attacking AVs with commercial explosives in addition to the ramming of vehicles and use of a lethal arsenal of weapons. Labuschagne (2015:278) elaborates that MO includes “time and day of the offence, venue, weapons used, method of gaining access and controlling victim, and method of escape”. Furthermore, Thobane (2019:33) explains MO and submits that all perpetrators have a method for committing their crimes, including habits, techniques, and behavioural characteristics. In repeated acts, the characteristic pattern of acts as evidenced in an MO can be used to identify perpetrators and predict possible escalation of perpetrating (Van der Watt, Van Graan & Labuschagne, 2014:61). However, Berning and Masiloane (2012:84) submit a more comprehensive description of the term MO as regarding the trademark actions that could be associated with the commission of a crime by certain perpetrators. The investigating officers use MO to identify perpetrators' related behaviour and their method of committing a crime. MO is a great technique law enforcement services use to link criminal cases and identify the responsible perpetrator (Labuschagne, 2015:278).

#### **2.15 THE MODUS OPERANDI AS AN IDENTIFICATION TECHNIQUE**

Identifying the MO of the criminal perpetrator is tactic investigators employ to solve a crime. According to Van Graan and Budhram (2015:54), identifying the perpetrator or suspect of a criminal act is critical because detection and, by extension, classification of incident scenarios are nearly impossible without it. When investigating a crime, the officer must use all available lawful resources, tactics, and procedures to uncover the truth. According to Van Rooyen (2012:18), when investigating officers have gathered,

processed, and stored sufficient information regarding an offense, MO information can aid in identifying and apprehending the perpetrators.

Furthermore, Van Graan and Budhram (2015:55) emphasize that identifications might be made directly or indirectly during the investigation. The term “direct method of identification” refers to methods used to identify offenders, including voice identification, photography identification, identification parades, personal descriptions, sketches, and the offender's mode of operation. The evidence used to connect criminals to the crime scene, such as DNA, fingerprints, hairs, fibres, soil, footprints, palm prints, and shoeprints, is called the “indirect method of identification”. However, as Van der Watt et al. (2014:61) noted, each crime and criminal has an MO that can aid an investigating officer in identifying the perpetrator. Nonetheless, Labuschagne (2015:61) points out that since every crime scene differs, MO is essential for the investigating officer to identify the offender. MO has long been regarded as a reliable source of information for the CIT robbery investigation.

## **2.16 THE PURPOSE OF MODUS OPERANDI**

The Crime Administration System (CAS) and the investigation journal include records of every crime reported to the SAPS. As a result, Function 8.1.1.1 is used to log all information, including dates, hours, locations, techniques employed, target groups, and criminals' MO into the CAS system. Van de Watt *et al.* (2014:64), Berning and Masiloane (2012:84), and Turvey and Freeman (2023:578) state that the goal of MO is searching, tracing, collection, storage, and examination of a criminal's MO. For the following reasons, MO has historically been relevant to investigations:

- linking unsolved cold cases by MO.
- unsolved case identification by comparing known criminal MO with the MO evident in unsolved cases.
- routine comparison of arrestee MO with the MO evident in unsolved cases.
- development of investigative leads or offender identity in unsolved cases by accumulating MO information.
- prioritization or elimination of perpetrators; and
- clearing unsolved cold cases.

In addition to connecting instances, MO provides information about an offender's inner traits and motivations useful for criminal investigative analysis and offender profiling. For this reason, MO is utilized to track down offenders. MO thus refers to the traits exhibited by an individual during committing a criminal act.

## **2.17 MODUS OPERANDI OF CASH-IN-TRANSIT ROBBERS**

The CIT robbers are known for operating in larger groups of ten or more, using guerrilla-style tactics and launching ambushes and attacks, often armed with automatic rifles, similar to the methods used by terrorists. Nkosi and Mofokeng (2023:8) highlight that this type of robbery is still not well-researched in terms of the MO, motives of the perpetrators, the profile of the victims, and the resulting impact. Lochner *et al.* (2018:210) propose that each crime has its own MO and that each criminal has their own MO when planning and executing a crime, as well as after the crime has been committed. The following section provides the MO techniques utilised by CIT robbers.

### **2.17.1 Planning**

Robberies involving CIT are not impulsive crimes carried out by inexperienced criminals. This type of criminal activity demands thorough preparation and a substantial number of capable individuals who are willing to use violence and coercion to achieve their objectives. According to Van der Spuy (2018:56), supported by Geldenhuys (2019:27), CIT robberies are not spontaneous acts driven by emotions, but rather, they necessitate a composed approach, professional expertise, and the use of vehicles, firearms, and explosives. As Klopper and Bezuidenhout (2020:321) indicated, recruiting members for a CIT robbery gang is a crucial aspect of the planning phase. Only individuals who are already participating in armed robberies or exhibit specific qualities like courage, exceptional driving skills, and possessing the necessary weapons would be enlisted as part of the gang (Klopper & Bezuidenhout, 2020:321).

On the contrary, Geldenhuys (2016:14) believes that CIT robbery is perpetrated by a group of criminals that numbers more than ten. Although a typical CIT robbery gang consists of a core group of about six men, the group's size is determined by the location and type of CIT crime.

### **2.17.2 Popular days and times**

Robbers who target CIT vehicles carefully consider the risks and rewards of specific days and times before carrying out their attacks. Organised crime groups meticulously plan their criminal activities, paying close attention to details such as the time and day of the attack and the escape route. Thobane (2014:181) suggests that these types of robberies are more likely to occur on Mondays, as it is believed that there is a significant amount of money being transported on that day, especially since no money is collected over the weekend. Another reason cited is that Mondays are perceived as easier for robberies because people are generally less vigilant.

A serious doubt can be raised about Thobane's (2014:181) viewpoint on popular days and times to commit robbery. However, the researcher points out that robberies of this nature are usually committed during month end and on any day except Sundays, depending on the MO of the gang. However, CITASA (cited in Geldenhuys, 2022:11) reveals that cross-pavement robbery usually occurs in the morning, while attacks on AVs mainly occur during the afternoon. High-risk times are between 08:00 and 11:00 for cross-pavement attacks and after 15:00 for AV attacks. In controversy, Sewpersad and Minnaar (2010:175) assert that no particular time is selected for committing CIT robbery. Therefore, CIT robbery can be committed any day and at any time, depending on the MO of the suspects.

### **2.17.3 Weapons and tools**

Various types of weapons and tools are used during the commission of CIT robberies. The CIT robbers use powerful firearms, including semi-automatic and fully-automatic firearms such as the AK47, South African assault rifles (R4s, R5s, R1s, LM4s, and LM5s), revolvers, machine guns, and handguns (See Figure 2.6 below). Zinn (2017:19) asserts that the AK47 is the most favoured firearm because of its exceptional power, dependability, and ease of handling. Furthermore, crowbar iron scissors, knives to open sealed bags, and spiked chains to roll on the road causing damage to an AV once driven and force it to come to a standstill. CIT robbers also use garden rakes and blankets to collect money from the ground after an AV is bombed. Figure 2.6 depicts photographic evidence found in the possession of CIT robbers at a crime scene.

Table 2.3: Photographic evidence



Source: Pijoos (2022:1)

Geldenhuis (2022:12) supports the statement made by Thobane (2014:171) and further states that CIT robbers are well-prepared to kill anyone who stands in their path, and they often have bulletproof vests on, signal jammers, and commercial explosives. Therefore, getting hold of firearms is not difficult in South Africa. During the attack, the robbers also robbed security guards of their service firearms (Nkosi & Mofokeng, 2023:12). CIT robbers gain firearms by a variety of means, including disarming law enforcement officers, purchasing firearms from corrupt law enforcement or military personnel, and borrowing or hiring firearms (Geldenhuis, 2019:28). Similarly, Thobane and Prinsloo (2018:36) claim that these firearms are often illegal and unlicensed, with some hired from other criminals. Chelin and Els (2020:58) state that commercial explosives are procured by organised criminal syndicates and smuggled through Beitbridge Port of Entry into Limpopo Province, South Africa. Most of the time, the Limpopo River is dry, and illegal immigrants can freely cross into the Limpopo Province of South Africa with illegal firearms and explosives. There are no law enforcement agencies, such as the military, patrolling the river to stop the immigrants from entering the country illegally. Therefore, illegal explosives, firearms, and ammunition are used by criminal gangs to attack and bomb AVs to gain access to cash during CIT robbery. In addition, smuggled commercial explosives are also used in illicit mining and ATM bombings.



#### 2.17.4 Task allocations

During a CIT attack, every member of the heist group is given distinct roles and tasks. According to Thobane (2014:165–167), members of the CIT robbery group were as follows:

- *Frontmen*: The frontmen are responsible for attacking the CIT escort team. Two frontmen teams will work together if a CIT escort team is assigned to guard the AV. While the other team is tasked with disarming the CIT squad, one team will concentrate on neutralising the escort team.
- *“Madubula” and/or “Machaisa”*: In the context of this study, *“Madubula”* is derived from a Zulu name meaning shooter or sniper, while *“Machaisa”* refers to ram. Both *“Madubula”* and *“Machaisa”* are responsible for stopping and attacking the AV carrying cash. According to Thobane (2014:166), a *“Machaisa”* is a driver in a car whose job is to stop the AV carrying cash by ramming into it whilst a *“mandibula”* is firing at the tyres of the AV to deflate it to stand still. If the *“machaisa”* ramming of the vehicle is ineffective in stopping the targeted AV, a *“madubula”* is constantly on the ready to shoot the tyres (Thobane, 2014:166; Klopper & Bezuidenhout, 2020:322).

In addition to shooting and ramming the tyres of the AV to deflate them, sometimes a three-hook chain spike is put across the road to puncture the tyres of the AV to a standstill or to overturn it. If the AV overturns or comes to a standstill, *“Madubula”* will quickly place explosives at the rear of the AV and bomb it to blow up the cash.

- *Cash Collectors*: Cash collectors are responsible for opening the AV, removing the cash, warrior bags, currency protection devices, and CPC, and passing it to the groundsmen. The ground men will then load the cash into the getaway vehicle after the front men have disarmed the escort and/or CIT team (Klopper & Bezuidenhout, 2020:322).
- *Guards or Spotters*: Their duties include controlling traffic, keeping an eye out for any armed reactions, neutralising them, and seizing bystanders’ cellphones, car keys, and firearms (Thobane, 2014:166).

- *Rovers*: These team members patrol the ambush scene, as stated by Thobane (2014:166), and they must ensure that the attack does not take too much time. The general rule is that the complete procedure should not take longer than ten minutes to prevent the need to deal with police or armed response units.
- *Drivers*: The drivers can operate getaway vehicles and have exceptional driving abilities. The driver's primary responsibility is to ensure the perpetrators leave the crime scene safely. They remain in the car, ready to flee as soon as the robbery is completed and the guns, spotters, and cash collectors are back inside. Nonetheless, because of their alleged superior driving abilities and familiarity with escape routes, taxi drivers are occasionally recruited as getaway drivers (Thobane & Prinsloo, 2018:36).
- *Getaway driver*: A getaway driver, according to Lushbaugh and Weston (2016:207), is a driver who stays in the getaway car until the perpetrators have finished their robbery, at which point they pick them up and leave the area. The getaway driver waits for the robbery to be finished in parked cars about two kilometres from the scenes. After the robbery is complete, the gang of perpetrators travels to this site, abandons the vehicles they used and were seen by witnesses during the attack, and boards the getaway vehicles with the getaway driver. They travel to a safe place, typically ten minutes away from the attack scene. The getaway drivers' position is carefully selected to enable fast access to main routes for a speedy getaway (Thobane, 2014:166; Geldenhuys, 2019:27; Klopper & Bezuidenhout, 2020:322).

To make sure CIT robberies are successful, a gang of perpetrators will also enlist the assistance of a few additional associates and the individuals listed above. Consequently, the following individuals are examples of such associates:

- *Finger man*: An employee of a bank, CIT company, or security sector working with a CIT robbery group is called the "finger man". They supply sensitive insider information to the perpetrators to facilitate the CIT robbery. Sometimes, ex-CIT company employees become part of CIT robbery groups (Geldenhuys, 2022:12).

- *Finder-finders*: When no inside information could be obtained, finder-finders are used to obtain information. According to Klopper and Bezuidenhout (2020:322), these individuals obtain information by careful observation and networking techniques. These techniques can be as basic as hanging out in shebeens and listening in on conversations, or they can be more involved and build relationships with staff members in the CIT, banking, and security sectors.
- *Corrupt police officials*: Corruption plays a big role in CIT robberies. The success of past CIT robberies has led to the creation of corrupt police officials who accept bribes from the robbers. Their involvement is alleged to take various forms, such as distracting armed response units away from the scene of the robbery, escorting the gang from the crime scene, protecting the loot, handing the firearms, getting rid of the evidence, making police vehicles available to off-ramp drivers to make their getaway, and destroying police case files (Geldenhuis, 2022:12).

#### **2.17.5 Vehicles**

According to Geldenhuis (2022:13; 2019:14), vehicles are important to CIT robbers; without them, they cannot perpetrate their deadly crimes. In a typical CIT robbery, three to four vehicles are typically involved. During the robbery, at least three vehicles were used, with two used to block the AV and one used to ram it (Thobane, 2014:166). The ramming vehicle is abandoned at the scene owing to damage incurred and then set on fire to destroy evidence such as fingerprints and Deoxyribonucleic Acid (DNA). The other two vehicles are used to escape to a location where getaway drivers are waiting for them. According to Thobane (2014:177), the most commonly preferred vehicles for these robberies are BMWs, Mercedes Benz, Audis, Volkswagen (VW) Amarok, Toyota Global Diesel 6 (GD6), V6, and V8 engine vans. Those vehicles are often hijacked or stolen and are driven with false registration number plates.

#### **2.17.6 Cellphones**

Thobane and Prinsloo (2018:36) postulate that the perpetrators utilize cheap cell phones discarded after the robbery. The authors also indicate that the perpetrators obtain Subscriber Identifying Module (SIM) cards that have already complied with the RICA. This is because the information used during the RICA process (such as identity number and residential address) belongs to a different individual. As a result, it

becomes challenging for investigators to track or intercept these phones. Cell phones are utilized by perpetrators to communicate with each other, resulting in the absence of messaging apps like WhatsApp and Facebook conversations that could serve as proof to connect group members with each other. In addition, the offenders do not keep each other's contact information; instead, they store it using fake names or aliases (Thobane & Prinsloo, 2018:36).

### 2.17.7 Dress code

In the case of *S v Letshoa and Others* (CC48/2019) [2020] ZAGPPHC 347, suspects wore balaclavas, headgear, and gloves. The suspects also wear bulletproof vests and masks to conceal identity.

### 2.17.8 CIT robbery crime scene

The CIT robbery crime scenes are dangerous, particularly when explosives are used to bomb the AV. When the CIT robbery is committed, the area becomes a crime scene. The CITASA mentioned that in many CIT robbery scenes, community members contaminated crime scenes when they removed the cash left over at the scene when robbers fled (Geldenhuys, 2022:13). Figure 2.7 below shows the CIT robbery crime scene contaminated by community members.

Figure 2.6: CIT robbery crime scene



Source: Ramothwala and Koka (2023:1)

Figure 2.7 above shows residents of Ga-Maupa in Bolobedu, Limpopo Province, scrambling for money that CIT robbers left behind. The CIT truck with three occupants

was chased by robbers from the R81 road towards Giyani from Polokwane before thugs caught up with it and bombed it at Ga-Maupa in Limpopo Province (Ramothwala & Koka, 2023:1). Probably, some explosives do not detonate when the robbery is carried out. This, therefore, poses a high risk for the detonator to explode in the presence of community members, as this will pose a risk of loss of life. Members of the community who loot cash from the crime scene must realise that they can also face criminal charges of accessory to the robbery as they defeat the end of justice. They can also be charged for theft. It is, therefore, important for the investigating officers to familiarise themselves with the systematic crime scene process flow outlined in the SAPS National Instruction 1 of 2015 (SAPS, 2015:21). This is crucial for effective crime scene management.

## **2.18 FACTORS THAT INFLUENCE MODUS OPERANDI OF CIT ROBBERS**

The perpetrators' behaviors and MO are acquired and, therefore, adaptable. This is because MO behaviour is influenced by time and can change as the perpetrator gains or loses skills. Perpetrators may recognise that certain choices they make when committing a crime are more effective than others. They may then repeat these choices in future offenses, becoming more proficient and reinforcing their MO (Turvey & Freeman, 2023:580). Perpetrators may learn ways to commit crimes more skilfully, avoid capture, and conceal their identity, among other factors.

### **2.18.1 The criminal background of the perpetrator**

More active perpetrators can acquire new and improved techniques for carrying out criminal acts and evading arrest (Labuschagne, 2015:280). Professional knowledge and experience gained legally can be used to commit a crime. Gilbert (2010:224) argues that criminal gangs have established fixed MO, and perpetrators often establish procedures early in their criminal careers, which they seldom change. The experience gained during criminal activities can also influence a criminal's future behaviour. A single arrest can provide a perpetrator with crucial insights on how to evade discovery by law enforcement in the future (Turvey & Freeman, 2023:581).

### **2.18.2 Media and literature**

Labuschagne (2015:281) states that the media has a crucial influence on the behaviour of the MO of the perpetrators. When the media platforms provide crime reports, perpetrators also listen to, read, and watch the news. Hence, when robbery

perpetrators become aware that their MO may provide a tracing hint to uncover identity, they will adopt the actions naturally established during initial robbery attempts (Gilbert, 2010:224).

In addition, Labuschagne (2015:281) also argues that MO can be dynamic and may change over time. Television programs and movies on crime often showcase police strategies for preventing crime. As a result, perpetrators can learn what actions to take or avoid detection or arrest. Information about police investigation methods and techniques is widely available in books, the internet, magazines, and other media platforms, making it easily accessible (Thobane, 2019:33).

### **2.18.3 Ad-hoc influence**

During the execution of a CIT robbery, things may not always go as planned. In such cases, the perpetrator may need to be resourceful and adapt their approach to ensure the success of the criminal act. Labuschagne (2015:281) provides an example where unexpected factors such as resistance from the victim, intervention by bystanders, or the perpetrator's change of heart could force the use of violence, which was not initially part of the plan, to ensure the success of the crime.

Thobane (2019:33) elaborates that the MO plays a crucial role in “criminal investigation, crime detection, and crime prevention” because it connects a single perpetrator to multiple criminal activities. Furthermore, the MO aids law enforcement in effectively distributing resources. Investigating the MO primarily aims to uncover the perpetrator's identity. The identification process begins when the crime is committed and continues until the suspect's guilt is established (Thobane, 2019:33).

## **2.19 SUMMARY**

In this chapter, an in-depth literature review of the recent state of knowledge and debates on the subject under investigation was done. This chapter unpacked key concepts, including criminal investigation, forensic investigation, identification, individualization, organized crime, robbery, CIT robbery, and *modus operandi*. The categories of identification and different types of CIT robberies were also explained in this chapter. In this chapter, possible charges of CIT robberies, as well as MO identification techniques, were also discussed. The chapter also reviewed the literature on the nature and extent of CIT robbery, the purpose of MO, the MO of CIT robbers, and legislative frameworks guiding the work of the police. The chapter ended

with a presentation of different factors that influence MO. It is evident throughout this chapter that the crime of CIT robbery has reached a high peak. The next chapter, Chapter 3, provides the study's research methodology.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1 INTRODUCTION**

The literature review was outlined in the previous chapter. This chapter provides the research methodology that was used in this study. Bertram and Christiansen (2014:207) submit that research involves a systematic investigation and an empirically informed process to gain deeper insights into the study. Similarly, Leedy, Ormrod, and Johnson (2019:2) define research as a methodical process of gathering, analysing, and interpreting data to enhance comprehension of the phenomenon being studied. Research methodology is the systematic study of methodologies that are, can be, or have been implemented within a discipline or a specific procedure or collection of procedures (Bezuidenhout, 2020:50). Therefore, in this chapter, the researcher outlines the research design, methodological procedures, and research techniques utilised in the study to collect data pertinent to the research problem. Data were acquired from both primary and secondary sources. This chapter discusses the key research components of the study's methodology.

This chapter delineates the fundamental methodological aspects of the study. The following sections constitute the discussion and guided study: research paradigm, research approach, research design, targeted population and sampling techniques, data collection techniques, pilot study, and method of data analysis adopted for the study. The current chapter discusses procedures and techniques utilised to analyse and collect data to comprehend better the phenomenon being studied. Furthermore, justifications are provided for each study's methods, techniques, and procedures. This chapter also comprehensively explained the procedures for assessing the study's trustworthiness and ethical considerations.

### **3.2 RESEARCH PARADIGMS**

The researcher's general beliefs and perspectives regarding the nature and actuality of research are referred to as their research paradigm. According to Bryman *et al.* (2014:381), a paradigm or philosophical worldview encompasses a set of beliefs that influence what should be studied, how research should be conducted, how results should be interpreted, and how problems should be solved within a specific discipline. Similarly, Leavy (2023:12) defines a paradigm as a framework through which



knowledge is filtered, serving as a foundational perspective with a set of assumptions that guide the research process.

The paradigm acts as a framework for conducting research. Research paradigms fall into six distinct philosophical categories, namely positivism, interpretivism, constructivism, post-positivism, critical theory (ideology), and pragmatism (Bertram & Christiansen, 2014:21-27; Kumatongo & Muzata, 2021:17). For this study, the interpretivism paradigm was chosen because the researcher mediates knowledge about reality—a detailed discussion of the interpretivism paradigm proceeds below.

### **3.4 INTERPRETIVISM RESEARCH PARADIGM**

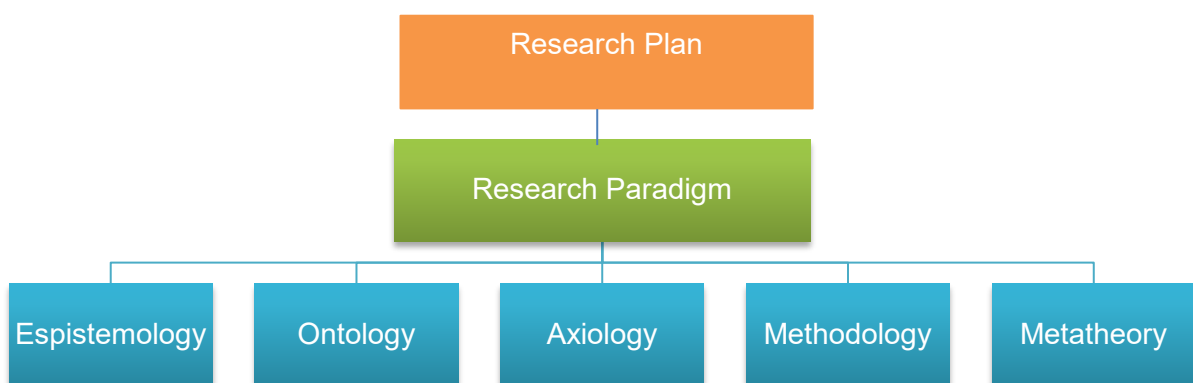
Omodan (2022:277) states that the interpretivism paradigm is a way of understanding the world that emphasizes the role of interpretation in sympathetic reality. However, Creswell and Creswell (2023:283) argue that within the interpretive paradigm, individuals construct personal meanings of their experiences focused on specific objects. This approach is heavily influenced by the participants' backgrounds and experiences related to the subject under investigation. Therefore, the interpretive paradigm was appropriate for this study as the researcher sought to collect qualitative data to understand the area under investigation. The interpretive paradigm allows the researcher to capture the participants' perspectives on the study and their backgrounds, thus aligning with the study's aims and objectives. Interpretive researchers can also use observations, personal notes, field notes, and document analysis (Kumatongo & Muzata, 2021:19).

Bryman *et al.* (2014:14) maintain that the interpretive paradigm normally supports qualitative approaches. The qualitative approach allows the researcher to acquire more about different experiences from the perspectives of individuals. The researcher adopted an interpretive paradigm to understand social settings and social phenomena. Using an interpretive paradigm allowed the researcher to engage with study participants to gain a deeper understanding of their experiences, particularly in how they approached investigations of CIT robberies and the effectiveness of MO to identify suspects. Through the application of an interpretive paradigm, the researchers were able to immerse themselves in the lived experiences of SAPS investigating officers. Furthermore, this interpretive paradigm provided the researcher with clear

and meaningful insights into the responses of the SAPS investigating officers during one-on-one (face-to-face) semi-structured interviews.

Rehman and Alharthi (2016:51) brought up another aspect, stating that a research paradigm is characterised by a distinct belief system and theoretical framework with assumptions comprising five major elements: ontology, epistemology, axiology, methodology, and metatheory. The following figure illustrates five elements that supplement the research paradigm framework.

Figure 3.1: The five elements of research paradigms



Source: Researcher's own illustration

Considering Figure 3.1 above, the current study adopted epistemology, ontology, axiology, methodology, and metatheory belief systems to understand the reality of the phenomenon being studied. The philosophical assumptions in the present study were shaped by the MO surrounding CIT robberies in the Limpopo Province.

### 3.4.1 Interpretivist epistemology

Conceptually, Bryman *et al.* (2014:377) and Leavy (2023:12) define epistemology as “a theory of knowledge, therefore also referring to a stance on what should pass as acceptable knowledge”. In support of this view, Rehman and Alharthi (2016:52) concur that epistemology is a “branch of philosophy that studies the nature of knowledge and the process by which knowledge is acquired and validated”. This study is driven by a pursuit of valid knowledge and a search for knowledge to arrive at results that are as close to the truth as possible about MO as an identification technique in investigating CIT robberies. The epistemological position of the researcher in this research centered

on the belief that rich and valuable data would be obtained from the perspectives of investigators involved in the investigation of CIT robberies. The researcher involved participants in collecting the required data and relied on their perspectives. The researcher conducted a qualitative study focusing on the worldviews below.

### **3.4.2 Interpretivist ontology**

In broad terms, ontology pertains to examining the fundamental nature of reality (Rehman & Alharthi, 2016:51; Leavy, 2023:12). It focuses on the beliefs regarding what can be known about the world and the methodological assumptions. To comprehend the construction of reality and gain insights into the everyday work experiences of the participants, the researcher utilised one-on-one (face-to-face) semi-structured interviews and secondary data collection techniques. In this context, ontology enables researchers to recognize the diverse perspectives on the world what there is to study, and the various ways of perceiving and understanding the problem (Sefotho, 2021:8).

### **3.4.3 Interpretivist axiology**

Interpretivism recognizes that, axiologically, value-free research is not necessarily plausible when studying human experiences. Axiology refers to the ethical issues of right and wrong within the research process (Fuyane, 2021:33).

### **3.4.4 Interpretivist methodology**

Interpretivism methodology is a broad term that encompasses research design, techniques, and approaches used in a study. These methodologies emphasise understanding human expertise, contexts, and meanings through qualitative research to understand multiple realities (Fuyane, 2021:33). Moreover, research approaches associated with interpretivism involve case studies, ethnography, participatory observation, autoethnography, and narrative research hermeneutics. In this study, qualitative research was adopted and underpinned by a case study research design.

### **3.4.5 Interpretivist metatheory**

The metatheoretical considerations of interpretivism, as emphasized by Du Plooy-Cilliers et al. (2014:207), highlight that interpretive research is founded on the textual descriptions of social phenomena. This methodology facilitates a deeper understanding of individuals' experiences, values, and meanings, contrasting with the positivist paradigm, which relies on empirical evidence as the foundation of theory.

Metatheoretically, the study's findings are expressed through the textual descriptions of participants' views and experiences.

### **3.5 RESEARCH DESIGN**

According to Bertram and Christiansen (2014:207), the research design is the structure for gathering, measuring, classifying, and analyzing data to address the research question. The conceptualization of research design by Bezuidenhout (2020:55) establishes the notion that it is a blueprint, procedure, or plan of action, serving as the framework or guideline for the study. In essence, research design encompasses the processes researchers employ to gather data, analyse results, and make conclusions about the study.

The researcher utilised a case study design, method, and strategy to obtain relevant data in the current research. According to Gerring (2017:24), a case study design involves thoroughly and systematically examining a specific individual, group, community, or another unit, focusing on in-depth data related to multiple variables. Bertram and Christiansen (2014:42) also support this view, defining a case study as a research strategy and empirical inquiry that investigates a phenomenon within its real-life context. This design enabled the researcher to gather information on the use of MO as an identification technique in investigating CIT robbery cases based on participants' personal work experience (Leedy & Ormrod, 2013:141).

The researcher utilised a case study research design to focus on a complex subject and narrow it down to address specific research questions. Typically, this design involves selecting a specific geographical region (see Figure 3.2 below) or a limited number of participants as the focus of the study. In this case, the researcher conducted a study to gain insight into how police investigators in the Limpopo Province use MO as an identification technique in the investigation of CIT robberies.

### **3.6 RESEARCH APPROACH**

The research approach is the overall direction in which a research project will be conducted (Bryman *et al.*, 2014:30). According to Creswell (2014:3), the research approach is a strategy and process for conducting scientific research involving the integration of philosophy, research designs, and specific methods. Researchers commonly use three types of research approaches, namely qualitative, quantitative, and mixed methods. In this study, the researcher selected the qualitative research

approach, as this was deemed suitable for the study. Creswell and Creswell (2023:292) define qualitative research as an approach for delving into and comprehending the significance that individuals or groups attribute to a social or human issue. This research approach focuses primarily on experiences, language, and words rather than on statistics, measurements, and numerical data. The decision to use the qualitative research approach in this study was made because the method allows for in-depth interviews and document reviews. Another rationale for selecting the qualitative research method is its capacity to provide comprehensive descriptions and detailed information and solutions to the research problem (Creswell, 2013:21).

Leedy and Ormrod (2014:141) point out that qualitative research involves gathering and analysing empirical data from small individuals through semi-structured interviews, literature review, documentary analysis, and personal experiences to gain detailed insights into events and situations. The decision to use a qualitative research approach for this study, as advised by Creswell (2014:17), was based on understanding the participants' perspectives regarding the phenomenon being studied.

### **3.7 LOCATION OF THE STUDY**

The location of the study in research pertains to the specific geographic location designated based on the demarcation boundaries in effect at the time of data collection. The current study was conducted in the Limpopo Province of South Africa, within the DPCI-SOCIU. The SOCIU is divided into three (3) units in the Limpopo Province: Polokwane SOCIU, Phalaborwa SOCIU, and Musina SOCIU. Limpopo Province was selected because it is one of the top four provinces with high CIT robbery crime rates in South Africa, as depicted in Figure 2.5 of Section 2.12.

Figure 3.2 below depicts a map of Limpopo Province, which indicates the geographical location of the Vhembe, Mopani, Capricorn, Sekhukhune, and Waterberg districts and local municipalities. The map of Limpopo Province in Figure 3.3 displays the geographical location of five SAPS districts and police stations.

Figure 3.2: Limpopo Province map depicting district and local municipalities



Source: Municipalities of South Africa (2018:np)

Figure 3.3: Limpopo Province map depicting police stations



Source: SAPS (2023b:iv)

As shown in Figure 3.3 above, the Limpopo SAPS comprises 105 police stations, including the newly established Beitbridge Police Station. The Polokwane SOCIU is responsible for Capricorn, Waterberg, and Sekhukhune district policing precincts. The Phalaborwa SOCIU is responsible for Mopani district policing precincts, while Musina SOCIU is responsible for Vhembe district policing precincts.

The Limpopo Province is in the Northern Region and is one of South Africa's nine provinces. It was previously called the Northern Province, but this was changed in 2002. Limpopo shares its borders with Zimbabwe, Botswana, and Mozambique (Municipalities of South Africa, 2018:np). It also borders Gauteng, North West, and Mpumalanga provinces. The province was previously part of the old Transvaal and includes several old homelands like Venda, Lebowa, and Gazankulu. The province comes from the Limpopo River, which forms its northern boundary with Zimbabwe and Botswana. Polokwane, previously known as Pietersburg, is the capital city of the Limpopo Province. Polokwane serves as the economic and geographical centre of the province, providing administrative support for a province focused on industry and progress (Municipalities of South Africa, 2018:np).

The province is demarcated into five (5) district municipalities and twenty-two (22) local municipalities. The district municipalities comprise Capricorn, Vhembe, Mopani, Sekhukhune, and Waterberg districts (see Figure 3.1). Vhembe district has the latest population of 1.4 million people, followed by Capricorn district with 1.33 million. Sekhukhune and Mopani's estimated population is 1.2 million each. However, Sekhukhune is slightly larger than Mopani. Waterberg District's population is the lowest, with 754,434 people. (See Figure 3.2 above.)

The recent South African population census of the Limpopo Province (as of the last census in 2022) revealed that the province's total population is 6 572,721. The province comprises different ethnic groups characterised by multiple customs, languages, and races. As much as 97.3% of the population is Black African, 2.4% White, 0.2% Coloured, and 0.1% Indian/Asian (Statistics South Africa [StatsSA], 2022:4). Estimated first languages consist of 57% Northern Sotho or Sepedi, 23% Shangaan or Xitsonga, 12% Venda, and 2.6% Afrikaans (StatsSA, 2022:4).

### **3.8 TARGET POPULATION AND SAMPLING**

In this section, the study's population and sample are discussed. An overview of the population and sampling is provided. This is followed by examining the study's population, the sample selection process, and the rationale behind their selection.

#### **3.8.1 Targeted Population**

Creswell (2013:42) defines 'population' as a collection of individuals who share similar characteristics. Dantzker and Hunter (2012:198) also support this perspective by defining the population as the entire group or category of potential participants from which information is required. Considering the time and financial limitations, it was not feasible for the researcher to interview all the police investigators in the DPCI Limpopo Province. Consequently, the researcher chose to focus on a target population, as described by Bertram and Christiansen (2014:206), which refers to a group of individuals, organisational units, incidents, case records, or other sampling units with common defining characteristics that the researcher can identify and study. The targeted population for this study was selected from the DPCI Limpopo Province. Therefore, the researcher confined the survey to the targeted population within three SOCIUs of the NPVC bureau in the DPCI Limpopo Province, including Polokwane, Phalaborwa, and Musina.

Regarding statistics, these three SOCIU offices in the Limpopo Province record high rates of CIT robbery cases (see Table 1.1 in Chapter 1). The target population was police investigators attached to SOCIU of NPVC who dealt with CIT robbery cases from the DPCI Limpopo Province. The three precincts where the police investigators were stationed offered valuable insights for this research study due to their familiarity with CIT robbery crime scenes and expertise in investigating CIT robbery cases.

#### **3.8.2 Sampling and Sampling Technique**

The sampling process involves the researcher selecting individuals who can provide the most information about the studied topic (Leedy *et al.*, 2019:419). According to Bryman *et al.* (2014:170), there are two types of sampling: probability and non-probability. In probability sampling, population units have an equal chance of being selected, while in non-probability sampling, units do not have an equal chance of being selected (Bertram & Christiansen, 2014:207). Researchers draw samples to comprehend and describe the characteristics of the population they are studying.



Therefore, three samples with five participants were asked the same questions in the current study. The study samples consisted of Sample "A" (Musina SOCIU - 05 Investigators), Sample "B" (Phalaborwa SOCIU – 05 Investigators), and Sample "C" (Polokwane SOCIU - 05 Investigators).

The researcher employed non-probability sampling for this study, commonly used in qualitative research to gain a deep understanding of a phenomenon under investigation. According to Bezuidenhout (2020:59) and Leedy and Ormrod (2015:179-183), non-probability sampling techniques include convenience, quota, and purposive. Therefore, this study utilised purposive sampling, drawing on the researcher's experience as a police investigator to deliberately select the units of analysis. Purposive sampling is a non-probability technique (Bell, Bryman & Harley, 2015:389). Purposive sampling is also called "judgmental sampling". This technique allowed the researcher to use his judgment in selecting suitable participants. The researcher selected five members from each of the three SOCIUs in the province. They were selected because of their knowledge and experience regarding the MO of perpetrators in CIT robberies that affect the Limpopo Province. These three units amounted to a total of fifteen (15) participants.

In addition, Leedy and Ormrod (2014:145) describe purposive sampling as a suitable sampling technique for a targeted population with specialised knowledge and experience related to the phenomenon under investigation. Purposive sampling targeted specific police investigators attached to SOCIU with the required expertise and knowledge in investigating CIT robbery cases. In purposive sampling, the researcher utilises his expertise, understanding, experience, and judgment to determine which population segment is pertinent to the research study (Strydom, 2021:337).

For the current study, the researcher chose police investigators with experience and expertise in MO and CIT robbery investigations. The SOCIU included numerous police investigators, and the researcher specifically selected investigators with at least five years of experience in CIT robbery investigations. When determining the sample size for interview participants, the researcher included police investigators who were well-experienced, knowledgeable, and best suited to answer the research questions. Sampling continued until the point of data saturation was attained. Data saturation

occurs in qualitative data collection when the researcher ceases data collection because no new data provides fresh insights or reveals new properties (Creswell & Creswell, 2023:258).

### **3.9 DATA COLLECTION METHODS**

Data collection involves gathering and utilizing information to conclude (Bryman *et al.*, 2014:376). Kumar (2019:215) similarly states that data collection techniques can be classified into two types, namely primary and secondary data. On one hand, primary data comprises first-hand information such as interviews, questionnaires, and observations. On the other hand, secondary data includes sources like journals, previous research, agency records, and books (Kumar, 2019:215). In this research, the data collection methods employed were literature study, semi-structured interviews, documentary sources, and personal experience, as outlined below.

#### **3.9.1 Literature Study**

Reviewing literature entails searching for, reading, evaluating, and summarising as much of the existing literature as possible that is directly or indirectly related to the investigated topic (Du Plooy-Cilliers *et al.*, 2014:101). The researcher conducted a literature study to seek answers pertaining to the identified research problem and the research questions. The researcher collected literature by visiting libraries to gather information on the studied subject. They utilised recently published journals, articles, books, dissertations, theses, training manuals, newspapers, and internet sources from international and local outlets. Statistical data on reported CIT robberies in the Limpopo Province were obtained from SAPS internal databases and annual reports. The researcher conducted searches using keywords related to the research topic, namely "*modus operandi*", "identification", "individualisation", "criminal investigation", "forensic investigation", "organised crime", "robbery", and "Cash-In-Transit robbery".

#### **3.9.2 Semi-structured Interviews**

In this study, one-on-one (face-to-face) semi-structured interviews were utilised. According to Creswell (2014:181), semi-structured interviews involve interactions between the researcher and interviewee to gather specific information about the interviewee's experiences. Semi-structured interviews are non-standardised and highly beneficial for qualitative analysis. In a semi-structured interview, participants must respond to questions to direct the line of inquiry (Bell *et al.*, 2015:392). The

inclusion of semi-structured interviews in this study enabled the researcher to collect valuable information about using *modus operandi* as an identification technique in investigating CIT robberies.

Semi-structured interview schedules guided the interview between the researcher and participants from Polokwane SOCIU, Phalaborwa SOCIU, and Musina SOCIU, especially those investigating CIT robbery cases. The researcher was granted permission from the SAPS to conduct research and interview study investigators before conducting participant interviews, as per SAPS National Instruction 4 of 2022 (SAPS, 2022d:5–12). The researcher requested permission from each participant to be interviewed before starting the interview process.

### **3.9.3 Documentary Sources**

Documentary sources are similar to reviewed literature and are secondary data collection methods, primarily including legal prescriptions and government policies governing a particular subject matter under investigation, which can be categorised as sources of data (Creswell, 2014:194). In this study, the consulted documentary sources included the UNISA Institutional Repository, SAPS National Instructions, newspaper articles, case reports, annual reports, judgments, monthly feedback statistics, and minutes of gatherings of the SAPS. The researcher reviewed documents from different authors to address the research question and extract essential information related to the study concepts. All relevant documents collected for this study were used, and the data are appropriately cited in the reference list.

### **3.9.4 Personal Experience**

According to Creswell (2014:83), researchers can rely on their personal experience but must determine how to incorporate their understanding into the study. At the time of the study, the researcher had six years of experience investigating crime within the SAPS, Department of Correctional Services (DCS), and Independent Police Investigative Directorate (IPID). At the time of the study, the researcher was employed at the DPCI and was attached to the SOCIU fraternity. The researcher had extensive experience in CIT robbery investigations. The researcher also had experience in asset forfeiture and money laundering investigations and proceedings owing to his involvement in investigating high-profile CIT robberies and criminal syndicates. In 2014, the researcher achieved a National Diploma in Policing (*Cum laude*) from

Tshwane University of Technology (TUT) with a specialization in the Investigation of Crime and Policing. In 2015, the researcher successfully completed a Baccalaureus Technologiae degree in Public Management at TUT. In addition, in 2020, the researcher completed a Baccalaureus Technologiae degree in Policing from the UNISA. The researcher gained valuable skills, knowledge, and experience relevant to the research topic and questions. This personal experience aided the researcher in analysing and evaluating the data collected from literature reviews, semi-structured interviews, and documentaries.

### **3.10 PILOT STUDY**

A pilot study is conceptualized by Bertram and Christiansen (2014:206) as the pre-testing of the effectiveness of a data collection instrument or method before it is used. According to Hazzi and Maldaon (2015:53), the pilot study's ultimate importance is to enhance the quality and effectiveness of the research study. The pilot study enhances the researcher's interview experience to enhance dependability and credibility. In addition, Strydom (2021:236) clarifies that pilot studies help in establishing the suitability of the chosen research procedures for the phenomenon being investigated. Consequently, the researcher carried out pilot interviews to ensure the validity and reliability of the study, with three former SOCIU investigators from the Limpopo Province who were not going to be part of the research. The goal was to test whether the interview questions were not ambiguous or misleading. The researcher also evaluated the effectiveness of the research questions and the time frame to determine how long the interview schedule would take to finish. Resulting from the feedback from the pilot study, the interviews were expected to take 30 to 45 minutes. The pilot study showed that responding to the interview schedule was simple.

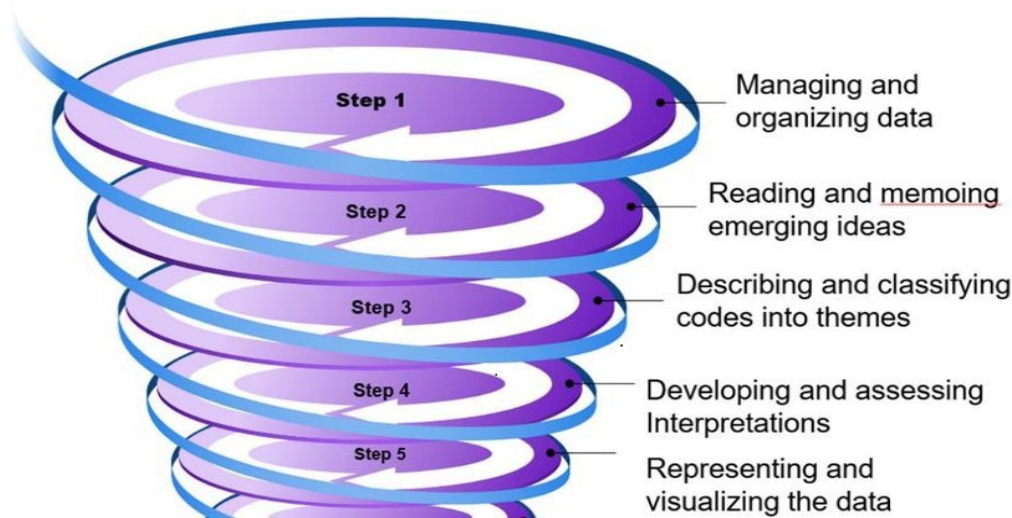
### **3.11 DATA ANALYSIS**

Creswell (2013:180) emphasizes that qualitative research data analysis entails reviewing, preparing, converting, and summarising raw data for analysis. It also involves compressing data themes by coding, considering the codes, and concluding by allotting the data in tables, figures, and discussions. Therefore, the researcher adopted the thematic analysis utilizing the data analysis spiral in this study. The data analysis process can be compared to a spiral since the researcher moves in analytic circles rather than following a fixed linear strategy (Creswell & Poth, 2018:185). The researcher adopted the data analysis spiral technique in various qualitative studies.

Furthermore, Leedy and Ormrod (2015:315) indicate that the data analysis spiral, as elucidated by Creswell (2013:180), best describes and offers perspective on how qualitative data analysis can be conducted.

In summary, the researcher adhered to the five steps applicable to the data analysis spiral technique diagrammatically represented in Figure 3.4, derived from Creswell and Poth (2018:186). The steps of the data analysis spiral are described in Figure 3.4 below:

Figure 3.4: The data analysis spiral



Source: Creswell and Poth (2018:186)

Figure 3.4 highlights a spiral analysis of the data-building progressive analysis in chronological order. The researcher analyzed the data in line with the guidelines advanced by Creswell and Poth (2018:186) in the form of a spiral, as depicted in Figure 3.4 above. The outline in the data analysis spiral represents five steps where a certain data analysis activity will occur, and the strategies employed. The first step is managing and organising data, where files and units are prepared. The researcher created a new Microsoft Word document and copied and pasted field notes and interview transcripts. Ensuring each participant's data is clearly labeled and organized to facilitate analysis. The second step includes perusing and memoing the emergent ideas, where memos lead to code development, thus reflecting and summarising the field notes. The core of this data analysis was the third step, which entails describing and classifying codes into themes where initial codes were named and assigned under

categories (Creswell & Poth, 2018:187). Therefore, categories are assigned under a few themes to finalise the codebook. The data were coded. Coding refers to organizing the data by bracketing chunks, taking text data, segmenting sentences (or paragraphs) or images into categories, and labeling those categories with a term (Creswell & Creswell, 2023:237).

The fourth step is developing and accessing interpretations where contextual understanding is achieved by relating classifications, themes, and families, thus connecting to the systematic framework in the literature. The final step is representing and visualising data, where a perspective is created by showing and reporting the data (Creswell & Poth, 2018:196). As a result, the data analysis spiral enables the researcher to address the research problem and answer research questions. In practice, the researcher requested permission from all participants to use note-taking and audio recordings during interviews. Thus, note-taking and audio-recorded information were translated into a Microsoft Word document.

### **3.12 TRUSTWORTHINESS OF THE STUDY**

In a qualitative study, trustworthiness is determined by four distinct aspects, namely credibility, conformability, transferability, and dependability, and it is these four aspects that indicate the validity and reliability of the phenomenon being studied (Du Plooy-Cilliers *et al.*, 2014:258). As a result, Gray (2014:185) recommends that the researcher employ various ways to address these issues, which are detailed below.

#### **3.12.1 Credibility**

Credibility, as stated by Creswell (2014:201), is one of the benefits of qualitative research and is predicated on evaluating the accuracy of research results from the viewpoints of the researcher, participants, and/or readers. Credibility-gaining techniques include lengthy fieldwork, consistent observations, triangulation, random sampling, peer review, examination of negative cases, elucidating researcher bias, and detailed descriptions of observations (Creswell, 2013:251).

The researcher addressed appropriate questions about the research topic to address the topic, the study's aim, and the research questions. The study used a semi-structured interview schedule to allow participants to respond openly and without being interrupted by leading questions. To improve credibility, the researcher analysed data

obtained from the participants and the relevant literature collected and drew on his personal experience to separate relevant data from irrelevant data.

### **3.12.2 Transferability**

Bless, Higson-Smith, and Sithole (2015:237) emphasize that transferability refers to the extent to which the study findings are applied to other contexts or similar situations. Gray (2014:182-183) points out that “transferability or generalisability in qualitative research is identical to external validity”. In this study, transferability was achieved by collecting a detailed thick data description. A thick description of data in qualitative research means that the researcher collected detailed information from the field to enable the scholar to ensure the research questions for the envisaged study. As a result, this means that the information collected by the researcher for this study can be applied to other provinces of South Africa facing the same challenges of CIT robbery crimes. The researcher also ensured transferability by using a purposive sampling technique with the intention of maximizing the diversity of specific information that could be acquired from and about the phenomena under investigation.

### **3.12.3 Dependability**

Dependability is the alternative to reliability and is used to standardize whether the research procedures will be logical, well-audible, and well-documented (Bryman *et al.*, 2014:376; Du Plooy-Cilliers *et al.*, 2014:259). To ensure dependability, the researcher honestly presented data as the participants delivered it.

In qualitative research, the term ‘dependability’ is used in preference to reliability, demonstrated through the research study design, the implementation of data collection operational particulars, and the project's reflective evaluation. The data-gathering process was piloted with a sample of three participants to ensure dependability. The researcher achieved this by ensuring that all the interviews' stability and consistency were logically recorded, and that participants' verbatim responses were recorded in interview schedules. Moreover, the researcher enhanced the ‘dependability’ of this study by conducting semi-structured one-on-one (face-to-face) interviews with the selected participants, and the same questions were posed to the selected participants to address the aim of the study.

### **3.12.4 Conformability**

Du Plooy-Cilliers *et al.* (2014:259) define confirmability as how well the data obtained supports the researcher's interpretation and findings. According to Bless *et al.* (2015:237), conformability implies that if the same study is done in a comparable environment and research method by a different researcher, the researcher should be able to obtain identical results. Conformability was guaranteed in this study by detailed data recording. The researcher met the conformability criteria by ensuring that the data and findings interpretations were based on the interviews rather than the inquirer's imagination. The researcher intentionally bracketed himself during the data gathering and analysis phases to avoid bias. In practice, Creswell (2014:226) identified bracketing as a way in which the researcher can separate his or her experience from what is being studied. Therefore, the researcher fulfilled this requirement using the spiral data analysis method.

### **3.13 ETHICAL CONSIDERATIONS**

Ethical considerations are of paramount importance for every study. Bezuidenhout (2020:62) and Brynard *et al.* (2014:94) define research ethics as right and wrong when conducting research. These authors also imply that the recognized norms and values should dictate what is right and wrong in scientific inquiry. The researcher complied with the University of South Africa's regulations by following the Policy on Research Ethics rules, which is the University of South Africa's code of conduct for researchers (UNISA, 2016:5–12). The researcher ensured that the data acquired was adequately stated without plagiarism, alteration, falsification, or fabrication of results. Furthermore, to ensure that the researcher is familiar with the ethical standards required by the UNISA code of ethics, the researcher should never compromise those standards, especially at the postgraduate level. Throughout the study, the researcher maintained the highest ethical standards.

#### **3.13.1 University of South Africa Policy on Research Ethics**

Similarly, this research is consistent with the University of South Africa Policy on Research Ethics, which aims to respect that the rights and interests of human participants, animals, communities, institutions, and the environment are safeguarded (UNISA, 2016:1). As such, the researcher first applied to UNISA's College of Law Research Ethics Committee (REC) and obtained ethical clearance prior conducting the study. The ethics certificate bears reference #1514.



### **3.13.2 South African Police Service National Instruction 4 of 2022**

The National Instruction 4 of 2022 guides the application to research SAPS. The primary goal of this instruction is to regulate requests to conduct research in the SAPS by individuals from outside the SAPS or by employees who wish to conduct research for private purposes. As a result, the researcher, guided by sections 1-6 of the above-mentioned document and fully understand the instructions in his role as an applicant, submitted the declaration and indemnity (SAPS, 2022d:1). The researcher was granted permission to conduct research. It was approved by both the National Head of the SAPS Research Section and the National Head of the Directorate for Priority Crime Investigation (“Hawks”) to gain access to the Serious Organised Crime Investigation Unit in the Limpopo Province (refer to attached Annexures A and B). This ensured the research project complied with the South African Police Service standards.

### **3.13.3 Informed consent**

According to Bryman *et al.* (2014:124), for participants to give their informed permission, they must be fully informed about the nature of the research. The researcher provided participants with the informed information sheet (Annexure D) explaining the nature and purpose of the research project, what role they are expected to play, their rights to withdraw at any time from participating, and assurance of confidentiality, privacy, and anonymity. Before the commencement of the interview, the study participants were requested to sign informed consent forms freely, voluntarily, and without undue influence. Similarly, Neuman (2014:151) asserts that participants must be made aware that their participation in the study is entirely voluntary and may always withdraw from it at any moment. The forms for informed consent were filed safely and kept under lock.

### **3.13.4 Confidentiality, privacy, and anonymity**

An essential component of the research project is the right to privacy, anonymity, and confidentiality. A researcher protects the participants’ responses and identity from public disclosure. Privacy is a fundamental right provided for in Chapter Two (Bill of Rights) of Section 14 of the Constitution of the Republic of South Africa, 1996 (South Africa, 1996a). Instead, pseudonyms were used to ensure that the identities of all participants interviewed were kept confidential and private. The researcher ensured that the participant’s personal information was highly protected as required by the

Protection of Personal Information Act, 2013 (Act 4 of 2013), hereafter referred to as “POPIA.” Furthermore, POPIA promotes the protection of personal information, establishes a balance between the right to privacy and the need for the flow of and access to information, and regulates how personal information is handled (South Africa, 2013a).

### **3.13.5 Avoidance of harm**

Before the commencement of the research interviews, participants were fully briefed about the research study's purpose, objectives, and overall design. To protect the participants from physical, psychological, or emotional harm, the researcher ensured that all research protocols were adhered to.

### **3.13.6 Avoidance of plagiarism**

Plagiarism is highly unethical conduct in the academic fraternity, and it involves the use of data or ideas without due acknowledgment and permission where appropriate (Kumar, 2019:445). It is a form of academic theft which comprises a number of dishonest activities. As a result, to avoid plagiarism, the researcher adhered to the UNISA Policy for Copyright Infringement and Plagiarism (UNISA, 2005:1-3). The researcher submitted the research report on a web-based teaching mechanism called Turnitin Software to check for plagiarism and ensure that all sources cited in this research are duly referenced to ensure no plagiarism is committed (refer to attached Annexure H). The researcher has included a comprehensive list of references in acknowledgment of the literature.

## **3.14 SUMMARY**

Chapter 3 entailed a comprehensive discussion of essential components of the research methodology that were adhered to in the study. The chapter assessed the study's fundamental methodological aspects, including research paradigms, research design, research approach, sampling procedure, data collection methods, pilot study, data analysis, the trustworthiness of the study, and ethical considerations. Chapter 4 below presents the interpretation and presentation of the research findings.

## CHAPTER 4: PRESENTATION AND INTERPRETATION OF THE RESEARCH FINDINGS

### 4.1 INTRODUCTION

The previous chapter outlined and discussed the research methodology, including the data analysis process. Therefore, this chapter presents the interpreted data resulting from participants' views and perspectives (focus groups) in various areas in Limpopo Province, such as Musina SOCIU, Phalaborwa SOCIU, and Polokwane SOCIU. These specialised Units deal with serious crimes such as armed robbery, murder as well as CIT robberies. The researcher presents the interpreted data, which emanates from interactions with experienced investigators with extensive field knowledge, ranging from five to twenty years and above. Themes and sub-themes were developed into categories with similar responses, and in most instances, such responses are presented *verbatim* to avoid misinterpretation or distortion of facts. These themes are aimed at facilitating the link with the research aims/objectives and research problem, and to answer the research questions in this study as outlined in Chapter 1.

Creswell (2013:180) states that data analysis in qualitative research entails formulating and arranging the data collected for analysis, creating themes with this data by coding and shortening the codes, and lastly, representing the data in tables, statistics, or conversations. Data was collected using notetaking recording devices and using *verbatim* transcription. Data was analysed by adhering to qualitative analysis techniques. The data analysis spiral was utilized to analyze empirical raw data as outlined in Section 3.9 of Chapter Three of this study.

After the participants were selected, they handed every participant an informed consent form (refer to Annexure D), which explained the purpose, procedure, and the participants' rights in the study. The participants then indicated their willingness to participate in the survey by endorsing their signatures on a copy of the consent form. One-on-one (face-to-face) semi-structured interviews were completed with all the participants according to the interview schedule (refer to Annexure E). A literature review helped to improve the quality and outcomes of the study. The study's findings are based on the literature review presented in Chapter 2 and *verbatim* responses from the participants.

## 4.2 PARTICIPANTS' DEMOGRAPHIC INFORMATION

In this study, fifteen (15) participants were interviewed. The semi-structured interviews were conducted with investigating officers from Musina SOCIU, Phalaborwa SOCIU, and Polokwane SOCIU in the Limpopo Province at the Directorate for Priority Crime Investigation. The participants' demographic information is presented in Table 4.1 below.

Table 4.1: Participants' demographic information (n=15)

Participant Number	Gender/ Sex	SOCIU	Rank/Title	Highest Educational Qualification(s)	Years in CIT robbery investigation
1	Female	Musina	Captain	Grade 12	33
2	Female	Musina	Captain	Degree	05
3	Male	Musina	Lieutenant-Colonel	National Diploma	05
4	Male	Musina	Sergeant	Grade 12	05
5	Male	Musina	Captain	B-Tech degree	15
6	Male	Phalaborwa	Lieutenant-Colonel	National Diploma	30
7	Male	Phalaborwa	Warrant Officer	Grade 12	05
8	Male	Phalaborwa	Captain	National Diploma	25
9	Male	Phalaborwa	Warrant Officer	Grade 12	15
10	Male	Phalaborwa	Lieutenant-Colonel	Grade 12	21
11	Female	Polokwane	Warrant Officer	BA Honours	05
12	Male	Polokwane	Lieutenant-Colonel	Grade 12	13
13	Male	Polokwane	Captain	Grade 12	16
14	Male	Polokwane	Sergeant	Grade 12	05
15	Male	Polokwane	Captain	B-Tech degree	05

Source: Researcher's own illustration

The participants were asked about their demographic information, such as gender, place of employment, rank, years of service in investigating CIT robbery cases, and

highest qualifications. Accordingly, to ensure anonymity, participants were assigned pseudonyms ranging from participants 1 to 15 (real names were not used). The focus of the study was not on the gender, highest educational qualifications and/or participants' area of employment. However, empirical data was collected and presented to give readers a broader picture of the sample employed to generate data. Table 4.1 above further shows that twelve (12) participants were males and three (3) females. The ranks of participants were six (06) Captains, four (04) Lieutenant-Colonels, three (03) Warrant Officers, and two (02) Sergeants. Table 4.1 shows that eight (08) participants' highest qualification was Grade 12, three (03) had a National Diploma, two (02) had a B-Tech degree, one (01) had a BA degree, and one (01) had a BA Honours degree. Lastly, Table 4.1 shows that the number of years investigating CIT robbery cases in this study ranged from 05 to 33 years.

### **4.3 EMERGING THEMES**

This section presents findings through precise themes and sub-themes generated from the participants' responses towards the phenomena of CIT robberies in Limpopo Province, South Africa. The purpose of establishing themes was to capture the relevant data features in connection with the research purpose and objectives representing the level of patterned response or meaning from the collected data to achieve the study aim. All participants from samples "A," "B," and "C" were asked the same questions during the interviews. Participants from Sample A (Musina SOCIU) were participants 1-5, while participants from Sample B (Phalaborwa SOCIU) were participants 6-10, and lastly, participants from Sample C (Polokwane SOCIU) were participants 11-15. The next sections present and interpret the study findings in the form of identified themes.

#### **4.3.1 Theme 1: Participants' views on the concept of 'criminal investigation'**

In section 2.2 of chapter two of this study, 'criminal investigation' is described by Hess *et al.* (2017:8) and Newburn *et al.* (2017:199) as a systematic step-by-step process of collecting, recording, discovering, identifying, documenting, and presenting evidence to ascertain what happened and identifying the accountable perpetrator. In this study, the researcher sought to determine participants' views about the 'criminal investigation' concept. In this regard, a question was put to the participants to elicit their views: "What do you understand regarding the concept of criminal investigation"? Participants' responses were as follows:

*“...Can include searching, interviews, interrogation, evidence collection and presentation and various method of investigation” (Participant 1).*

*“...Collection of evidence either physically, electronically or scientifically in order to prove alleged offence before the court of law” (Participant 2).*

*“...Is a system of collecting evidence to prove a commission of an offence” (Participant 3).*

*“...Gather and analyse evidence including forensic; analyse, witness interviews, surveillance and analyse of physical and digital evidence” (Participant 4).*

*“...It is the systematic search for the truth in respect of a crime or alleged crime committed. The purpose is to collect evidence which can serve as evidence before a court of law through which accused’s involvement in a commission of a crime can be proved. The collection of such evidence involves a search for exhibits, clues and witnesses in order to prove the crime to the satisfaction of the court and identify the offender” (Participant 5).*

*“...To find out truth of crime or find out the reflection as to what of crime is committed” (Participant 6).*

*“...Is a wrongdoing that is against the law” (Participant 7).*

*“...It is the process taken to investigate any type of criminal activities including assessing scene of crime, search, interview and collection of evidence” (Participant 8).*

*“...A methodology which is used to reveal the truth about the crime scene” (Participant 9).*

*“...Is to investigate any criminal activities which is committed” (Participant 10).*

*“...Criminal investigation is a process of investigating a crime that is committed, seeking for the truth, apprehend suspects and take them to the court of law” (Participant 11).*

*“...Interview the victims of whatever they can be able to identify the suspects whom the robbed of cash or shot at them” (Participant 12).*

*“...To investigate the case until you get evidence which will connect the criminals with the cases” (Participant 13).*

*“...Examination and analysis process designed to search for the truth during which an inquiry through analysis is conducted of all type of crime” (Participant 14).*

*“...Investigation of criminal activities in order to find the truth” (Participant 15).*

The above responses indicate that participants have an exhaustive viewpoint of the concept of “criminal investigation”, whereas their answers above are slightly different. Many participants' perspectives differ from those of the above literature. However, the researcher believes that when it comes to the concept of “criminal investigation”, there are few distinctions between the participants' perspectives and that of the literature.

As discussed in paragraph 2 of Section 2.2 of chapter two of this study, Monckton-Smith *et al.* (2013:2) indicate that “criminal investigation” is an inquiry to determine if a crime has been committed, to identify the culpable perpetrators and to gather acceptable evidence to be presented before a judicial authority. The next theme deals with participants' views on “forensic investigation”.

#### **4.3.2 Theme 2: Participants' views on the concept of “forensic investigation”**

Van Rooyen (2012:14) states that “forensic investigation” is typically connected to investigating crimes related to cybercrime, such as embezzlement, fraud, and corruption, as well as other white-collar crimes. The process of legally establishing facts and evidence to be submitted in a court of law or other tribunal hearing is known as “forensic investigation” (Benson *et al.*, 2015:443). Forensic investigation is whereby scientific processes are employed to explain circumstantial evidence with the intent of deciding a legal dispute. The following questions were asked: “What do you understand regarding the concept of “forensic investigation”? The researcher intended to determine the participant's understanding of the phrase forensic investigation. The responses that the participants provided to this question were as follows:

*“...A forensic investigation is an enquiry that includes some form of scientific method or other skill, such as accounting or valuation skill and looks retrospectively to make a determination about something that occurred in the past” (Participant 1).*

*“...Investigation which only include scientific evidence obtained by an expert from forensic laboratory in order to prove the alleged offence, e.g., DNA” (Participant 2).*

*“...It is a scientific way of conducting investigation” (Participant 3).*

*“...Is an investigation that involves some form of scientific method or other skills such as accounting or evaluation expertise and looks retrospectively to make a determination about something that happened” (Participant 4).*

*“...The concept “forensic investigation” refers to the gathering and analysis of all crime related physical evidence in order to come to a conclusion about the suspect and investigators must take care or look at blood, fluids, fingerprints, residues, computers, hard drives or any other technology to establish how a crime took place or has been committed” (Participant 5).*

*“...Investigation determine or analysed by experts” (Participant 6).*

*“...To exercise and determine the cause” (Participant 7).*

*“...It involves some form of scientific method and skills” (Participant 8).*

*“...Process of analysing the evidence in order to find the conclusion” (Participant 9).*

*“...Is a legal process of gathering and analysing of evidence to link the perpetrator with the crime” (Participant 10).*

*“...The use of scientific methods and techniques to analyse physical evidence for criminal legal proceedings” (Participant 11).*

*“...To link the suspects with the crime scene e.g., DNA and Ballistics results for the firearms that they (suspects) used” (Participant 12).*



*“...To determine the exhibits found on the scene of crime and also to put the criminal at the scene of crime” (Participant 13).*

*“...Searching of truth through the use of specialised skills and expert knowledge and the application of scientific investigation” (Participant 14).*

*“...In-depth investigation which requires a wide variety of skills, knowledge and expertise” (Participant 15).*

From the above responses, a minority of the participants understood this concept. However, further training is still required in this regard. The following theme presents and analyses data obtained from the participants about their understanding of the term identification.

### **4.3.3 Theme 3: Participants’ understanding of the term identification**

There are certain skills and experiences that the investigating officer working on Cash-In-Transit robbery cases should possess to extract the necessary physical evidence properly and to identify a perpetrator. In paragraph 1 of Section 2.4 of chapter two of this study, Van Graan and Budhram (2015:45) state that the importance of identification lies in comparing and analyzing physical evidence found at the crime scene to establish a connection and link with the perpetrator. This may be explained by the years of expertise that the participants possess in criminal and forensic investigation. The following question was posed to the participants: “What does the term “identification” mean?” The following is how participants answered the question:

*“...To be able to choose among others, to pick it up to prove the originality of something or to confirm, e.g., ID parade, voice identification and fingerprints” (Participant 2).*

*“...Is a process we use to identify a person or items” (Participant 3).*

*“...Process of identifying someone” (Participant 4).*

*“...The term identification may be referred to as the process of identifying any person (someone referred to as the suspect or witness/victim) or identifying of any object like firearm, rifles, cartridges, etc.”. Suspects may be identified by their physical appearances such as their colour, movements and scars on their bodies. They may also be identified by video cameras, fingerprints or DNA and*

*by their names. Suspects may also differ in sex, ages and culture as well as by languages” (Participant 5).*

*“...To identify the suspect or target who committed the offence amongst the others” (Participant 6).*

*“...To point out a person who has done wrong” (Participant 7).*

*“...The form or the way of knowing or differentiating one object from another, that they are not the same” (Participant 8).*

*“...Is to distinguish or differentiate someone from others” (Participant 9).*

*“...Is to point something from or amongst others (Thing, e.g. to point suspect (one) from (10 suspects)” (Participant 10).*

*“...The process of identifying someone or something” (Participant 11).*

*“...To identify the suspects from other suspects by means of DNA or fingerprints” (Participant 12).*

*“...Identification is when the victim warned by the I/O to come and identify the items, e.g., vehicle stolen, goods, and also the body of a person in the mortuary” (Participant 13).*

*“...Ability to identify physical evidence that can be analysed and assist with investigation” (Participant 14).*

*“...To identify something or somebody” (Participant 15).*

The participants' responses displayed a different understanding of the meaning of the perpetrator's identification. In paragraph 3 of Section 2.4, Lushbaugh and Weston (2016:210) indicate that in most criminal cases, identification can be made by fingerprints, facial features, physical build, footprints, shoeprints, DNA, type of disguise, *modus operandi*, recovery of the loot, means of escape and type of weapon used. Even though some participants gave a general explanation that there were additional categories of identification, the participants' fundamental understanding is sufficient. Regarding the participants' interpretation of identification, their answers are consistent with the consulted literature. According to the researcher, many of the

participants do not seem to comprehend what identification of the perpetrator means. This might be why a large percentage of CIT robbery cases are closed undetected due to insufficient or lack of evidence to identify the perpetrator. The next theme presents and analyses data collected from the participants regarding different categories of identification.

#### **4.3.4 Theme 4: Participants' perspectives on different categories of identification**

The investigators are responsible for identifying types of crime committed, victims, witnesses, and perpetrators, processing the crime scene, and gathering evidence. A question was put to the participants: "Describe the different categories of identification"? Participants responded as follows:

*"...Birth certificate, ID book or card, official South African Passport or ID from country of birth" (Participant 1).*

*"...Identity parade, Facial identification, fingerprint identification, DNA identification and handwriting specimen" (Participant 2).*

*"...ID parade, Photo, Voice ID (Sound)" (Participant 3).*

*"...Voice, picture drawing, smelling" (Participant 4).*

*"...Various types/categories of identification made by the investigator may be divided as follows:*

- *Situation identification – It determines whether a crime has been in fact committed or not.*
- *Witness Identification – Eye-witness are very-very important to account for the part played by the offenders during the commission of the offence and can also give the description of the suspects.*
- *Victim Identification – Identification of a dead corpse is very important to solve a crime motive established can identify possible suspect(s). The following techniques to identify a corpse may include Photography, Fingerprints, Identi Kit, age, sex, height and race, physical (viewed) appearances and Odontological (Dental) identification.*

- *Imprint Identification – This is based on the Locard Principles Identification methods used fingerprints and palm-prints, cast of foot, shoe, bicycle and vehicle tracks and ballistic comparison.*
- *Origin Identification – This involves the analysis of organic and inorganic substances which can be linked to the samples of known origin. The disputed samples refer to article of unknown origin discovered during the process of investigation. Analysis by the forensic expert of disputed samples such as blood, saliva, semen, hair and lyman tissues.*
- *Culprit Identification – It deals with positive identification of the offender, e.g., Direct identification parades, personal descriptions, voice identification parades, photo identification parades etc.” (Participant 5).*

*“...Fingerprints identification; Footprints identification” (Participant 6).*

*“...Spontaneous identification; Voice identification” (Participant 7).*

*“...Persons cannot be the same (look alike) they differ in height, built and other body parts, e.g. big eyes, round face or big ears” (Participant 8).*

*“...DNA; Fingerprints” (Participant 9).*

*“...Voice identification; Parade identification; Fingerprint identification; DNA identification; Spontaneous identification” (Participant 10).*

*“...Witness, situation, Action, the suspect (perpetrators) victim and the origin” (Participant 11).*

*“...Fingerprints, DNA, Ballistics, Cellphone mapping, Handwriting spacemen, ID Parade” (Participant 12).*

*“...ID Parade, Fingerprint identification, DNA identification” (Participant 13).*

*“...Situation Identification; Witness Identification; Perpetrator Identification; Origin Identification” (Participant 14).*

*“...Fingerprints; DNA; Handwriting” (Participant 15).*

Considering the participant responses, it is evident that there were slightly different perspectives concerning the aspect in question. The literature review revealed distinct

categories of identification, as discussed in Section 2.4.1 to 2.4.8 of paragraph 5 in chapter two, described by Van Graan and Budhram (2015:48–63), namely witness identification, victim identification, situation identification, origin identification, action identification; perpetrator identification; imprint identification and cumulative identification. Physical evidence recovered from the crime scene can be identified, and that identification means the objects share a common source. This could imply that investigating officers who investigate CIT robbery cases need formal training to sharpen their skills. The next theme presents and interprets participants' responses regarding the term individualisation.

#### **4.3.5 Theme 5: Participants' understanding of the term individualisation**

Individualisation of the perpetrator begins at the crime scene and requires comparing contested objects discovered at the scene of the crime with those of known provenance (Ogle, 2012:9; Houck, 2015:238). In response to the question, "What does the term individualisation mean"? The following responses reflect how participants answered the question:

*"...The act of making something unique to suit the needs of a particular individual, place, etc." (Participant 1).*

*"...With regard to criminology, perception of view there must be balance between nature of offence and punishment to be imposed" (Participant 2).*

*"...To make or to adjust something to suit a particular individual" (Participant 3).*

*"...Standing alone, e.g., suspect do crime being alone without engaging one another" (Participant 4).*

*"...It is based on comparison. It involves comparing the identified, disputed objects with other samples of known origin to determine the individuality. The successful individualisation depends upon the general quality of the standard of comparison wherein the guilty or innocence may be determined" (Participant 5).*

*“...Means to pick something in a group of individual things, e.g. when the fingerprint is being lifted on the window where crime has been committed”*  
**(Participant 6).**

*“...To single out something or a person”* **(Participant 7).**

*“...How one person looks like”* **(Participant 8).**

*“...Differentiate or separate from others”* **(Participant 9).**

*“...Is to make something different to suit the needs of a particular person”*  
**(Participant 10).**

*“...The process of distinguishing something or individual from everybody else”*  
**(Participant 11).**

*“...By identifying the suspects with blood taken from the crime scene by means of DNA swaps or firearm found in possession of the suspect with cartridges found on the scene”* **(Participant 12).**

*“...Something which the suspect can be individualised through investigation example like DNA text”* **(Participant 13).**

*“...The process of individualising the evidence found at the crime scene, e.g., fingerprint who is the owner of fingerprint”* **(Participant 14).**

*“...Process of distinguishing someone or something from anybody or anything else”* **(Participant 15).**

To this end, it is evident that participants have a variety of perceptions regarding the understanding of the above aspect. The participants' responses demonstrated that they comprehend what individualisation of perpetrators involves, and their responses are consistent with the consulted literature. Paragraphs 1 & 2 of Section 2.5 of Chapter 2 of this study confirm the findings as stated by Ogle (2012:9), Houk (2015:238), Van Graan and Budhram (2015:64) by describing individualization as a process of distinguishing somebody from others. The following theme presents, interprets, and analyses the data collected from the participants regarding the definition of the concept of Locard's Exchange Principle.

#### **4.3.6 Theme 6: Participants' views of the Locard's Exchange Principle**

According to Klopper (2020:596), Locard's Exchange Principle is a forensic science contact theory that asserts that whenever two objects or materials come into contact with one another, the material always transfers from one to the other or *vice-versa*, no matter how little. However, there are basic principles and aspects that all investigating officers should always bear in mind. The participants were asked the following question: "What do you understand by Locard's Exchange Principle"? The responses of participants to this question were as follows:

*"...States that when two things come into touch, microscopic material is exchanged; this undoubtedly includes fibers, but it also includes hair, pollen, paint, and soil"* **(Participant 1 and 6).**

*"...This principle entails that every contact leaves a trace of mark. Whenever a crime is committed, there will be an exchange of physical evidence between the perpetrator and crime scene, between perpetrator and victim"* **(Participant 2).**

*"...The criminal will come to the crime scene and will leave with something from a crime scene and at the same time leave something. E.g., fingerprints"* **(Participant 3).**

*"...I don't know"* **(Participant 4).**

*"...The term Locard's Exchange Principle is also known as the contact theory; it states that there is reciprocal transfer of traces when two objects or persons come into contact with each other. Scientifically, fact implies that clues must be left at every scene of crime. The investigating officers must always be at crime scenes to discover them by using aids and techniques to discover traces that cannot be determined or detected by the existing techniques"* **(Participant 5).**

*"...Is where there is contact in between"* **(Participant 7).**

*"...That every contact leaves a mark"* **(Participant 8).**

*"...Evidence which can assist in placing the suspect or which can assist in linking the suspect"* **(Participant 9).**

*“...The contact between two items and exchange of material” (Participant 10).*

*“...The suspect/perpetrator will always bring something into the crime scene and leave with something from it” (Participant 11).*

No response/answer (Participant 12).

*“...There is no way the suspect can commit a crime and never leave something which can connect them through microscopic investigation” (Participant 13).*

*“...the Locard principle says where there is contact between objects, they leave identification marks that will be individualised during investigation” (Participant 14).*

*“...When something gets in touch with anything, it will always leave something (trace) on the object and take something from the object” (Participant 15).*

Many participants understood Locard's exchange principle, although their perspectives differed significantly. As a result, many participants demonstrate that their interpretation of Locard's exchange principle differs from that of other authors in the literature. The viewpoints expressed by the majority of participants read with Section 2.6 in paragraph 2 of chapter two in this study, where Gilbert (2010:82) points out that all crime scenes relate with Locard's exchange principles, which asserts that whenever a criminal comes into contact with the scene, they will leave something of themselves and take something from the crime scene. Since their answers support the author's viewpoint, some participants concur with the author.

Participant 4 did not know the answer to the question, whereas Participant 7 provided an incomplete response, and Participant 12 did not respond to the question. The next theme presents, interprets, and analyses data collected from the participants regarding the definition of the term organized crime.

#### **4.3.7 Theme 7: Participants' understanding of the concept organised crime**

The following question was asked of the participants to ascertain their understanding of the term organised crime. “What do you understand by the term organised crime”? The participants' answers to this question were as follows:



*“...Is a type of local, national, or global collection of centralised businesses that operate illegally, usually by making money” (Participant 1).*

*“...Planned crime committed by a syndicate or more than two people performed in an orderly manner for a certain period with the purpose of achieving same goal which is financial goal” (Participant 2).*

*“...Crimes that are committed by organised groupings and targeting specific commodities” (Participant 3).*

*“...Group of syndicates with the purpose of robbery or do crime together” (Participant 4).*

*“...Is the group of syndicates/people who commit crime in an organised fashion for purposes of gaining the proceeds of crime” (Participant 5).*

*“...Is a crime that is committed by a group of people” (Participant 7).*

*“...The type of crime that was planned before its commission” (Participant 8).*

*“...A group of people who have the same motive and various skills in crime with the intention to enrich themselves” (Participant 9).*

*“...Organised crime is a crime which is being committed by a group of organised people” (Participant 10).*

*“...Criminal activities controlled by powerful groups” (Participant 11).*

*“...Organised crime means a group of criminals who organise themselves and plan to commit offences to gain money” (Participant 12).*

*“...Group of criminals which commit crime such as cash-in-transit, bank robberies etc.” (Participant 13).*

*“...Crime that committed with group of people with different tasking of criminal activities” (Participant 14).*

*“...Crime executed by two or more people (group) in an organised fashion” (Participant 15).*

All participants remained aware of the question about the concept of organised crime. Despite the differences in their answers, the participants understood what organised crime meant. According to published research, the term organised crime encompasses both criminal syndicates and the crimes they commit. In Section 2.7 of paragraph 1 in chapter two of this study, Doorewaard and Minnaar (2016:34) describe organised crime as the systematic commission of serious offences by criminal syndicates motivated by power or profit over a prolonged period. The following theme strives to present, interpret and analyse data gathered from participants concerning the understating of the concept robbery.

#### **4.3.8 Theme 8: Participants' understanding of the concept robbery**

It is paramount for police investigators to identify and determine the types of crime committed upon arrival at the crime scene. In this regard, the following question was posed to the participants: "Define the concept of robbery?" This question allowed participants to answer freely according to their own understanding. The participants answered as follows:

*"...The commission of theft in circumstances of violence and involves the application of threat of force in order to commit the theft or to secure escape"* **(Participant 1).**

*"...Unlawful and intentional use of force or threat in the commission of theft or taking someone's belongings without owner's consent"* **(Participant 2).**

*"...Unlawful and intentional use of force to obtain or take property belonging to another person"* **(Participant 3).**

*"...Unlawful, intentional force when taking any items from the custodian of such items taken by the robbers"* **(Participant 4).**

*"...Robbery may be described as the taking or attempting to take anything of value from the care, custody of a person by force or threats of force or violence and or by putting the victim in fear"* **(Participant 5).**

*"...Means committing of an offence by aggravating circumstances"* **(Participant 6).**

*"...To take something from somebody using force"* **(Participant 7).**

*“...Taking of another person’s belongings by force that is aggravated”*  
**(Participant 8).**

*“...Unlawful taking of property or any item by using force without the consent of the owner”* **(Participant 9).**

*“...Is when somebody robs someone’s property”* **(Participant 10).**

*“...Taking a person’s property by force or threat unlawfully”* **(Participant 11).**

*“...Robbery is when a criminal took some one by force without the owner’s consent, and sometimes they can injure the victim”* **(Participant 12).**

*“...Robbery is the crime committed by the suspect using force”* **(Participant 13).**

*“...Unlawful and intentional taking of property from person or place by force”*  
**(Participant 14).**

*“...Act of using threat of violence or violence in order to take away somebody’s property/properties”* **(Participant 15).**

Many participants demonstrated greater knowledge and understanding of the definition of robbery. Their responses varied, yet each was relevant. Some participants held the same viewpoint as the literature consulted. According to Joubert (2018:192) and Snyman (2020:451), robbery is theft of property committed intentionally and unlawfully by using violence or threats of violence to compel compliance to its taking. As such, robbery is theft by violence and threat. To establish that a robbery has occurred, the victim must state that the property was taken by force and without permission. Threat of violence is an important element in determining robbery it is a significant aspect that must be proven throughout the robbery investigation. This led to the next theme relating to the elements of robbery.

#### **4.3.9 Theme 9: Participants’ views about the elements of robbery**

To have a clear understanding of the crime that has been committed, one needs to know and understand the aspects of the crime, more specifically in respect of the crime of robbery. The participants were asked the following question: “What are the elements of robbery”? Participants responded to the question as follows:

*“...Unlawfulness, intention, threat, culpability” (Participant 1).*

*“...Unlawfulness, intention, use of force or threat and act” (Participant 2).*

*“...Force, appropriation of property unlawfully and with intention and culpability” (Participant 3).*

*“...Intention; unlawful; force” (Participant 4).*

*“...There are four (4) separate elements of robbery in South Africa: An Act; Unlawfulness; Causation; Robbery committed with the necessary intent or culpability” (Participant 5).*

*“...Act; Unlawful; intention and culpability” (Participant 6).*

*“...Using force, intention and unlawfulness” (Participant 7).*

*“...Use of force; Threat; Armed robbery, Intent” (Participant 8 and 9).*

*“...Unlawfulness, Intention to rob, violence, threats” (Participant 10).*

*“...Unlawful, intention, robbery” (Participant 11).*

*“...Threat or force; Intention and Unlawful; The property must belong to another person” (Participant 12).*

*“...Robbery, Intention, unlawfulness, and Acts, Culpability” (Participant 12).*

*“...Unlawfully and intentionally taking someone’s properties without his/her consent by force” (Participant 13).*

*“...Unlawful; Intentional; Assault; Take forcefully – Threat by force” (Participant 14).*

*“...Unlawful and intentional; Threat of violence; Force” (Participant 15).*

The primary data suggests that participants demonstrated an understanding of the elements of robbery. Although their answers were not the same, they were in line with the literature consulted, for example in Section 2.8.1 of paragraph 1 in chapter two of this study, Snyman (2020:451) and Hess *et al.* (2017:411) mention that the elements of robbery consist of unlawfulness; intention; use of violence; threat of violence and

theft of property from a human being. It is important that law enforcement officials demonstrate that all the elements of the crime were presented simultaneously at the time that the crime was committed for an accused to be found guilty of robbery. The following theme presents, interprets and analyses data collected from the participants' ideas of the definition of the term 'Cash-In-Transit robbery.'

#### **4.3.10 Theme 10: Participants' understanding of the concept of 'Cash-In-Transit robbery'**

This section discusses the understanding of the participants of the concept of Cash-In-Transit robbery. The following question was posed to the participants: "What is your understanding of the concept of Cash-In-Transit robbery"? The participants' responses to this question were as follows:

*"...These types of robberies occur when security officers are robbed while carrying cash from armoured cash vehicles to a business or vice versa"* **(Participant 1).**

*"...Unlawful and intentionally taking or stealing of cash (in a violent manner) which is transported or taken to a certain destination"* **(Participant 2).**

*"...It is the process of moving money on the national roads by means of vehicles to different institutions of business"* **(Participant 3).**

*"...Robbery of money; Taking of money; Shooting of security personnel"* **(Participant 4).**

*"...Cash-In-Transit Robbery may be described as the violent seizing of cash unlawfully and occurs while cash is under the supervision or control of security companies such as Fidelity Cash Solutions, G4S Cash Solutions, SBV Cash Solutions, etc. and can take place inside the bank, outside bank"* **(Participant 5).**

*"...Cash in Transit is an offence committed by a group of people using high calibre and handgun firearms committing an offence in aggravating circumstances against vehicles which carry money"* **(Participant 6).**

*"...To rob the motor vehicle transporting money from point A to point B"* **(Participant 7).**

*“...Robbery during the transportation of money from banks to banks or from clients to banks, mostly by security personnel, and where serious violence is involved to rob the cash” (Participant 8).*

*“...It occurs during when the armoured vehicle is being robbed while transporting cash from one part to another” (Participant 9).*

*“...When motor vehicles on the road deliver the money back to shops and vice-versa” (Participant 10).*

*“...Robbery of cash or valuable items being transported by armoured vehicles” (Participant 11).*

*“...The suspects use violence, are fully armed with automatic rifles, explosives, and shoot randomly with the purpose of taking all the money inside the cash van” (Participant 12).*

*“...Robbery from the vehicle transporting money” (Participant 13).*

*“...Is the armed robbery planned by multiple offenders with firearms with the aim of gains” (Participant 14).*

*“...Robbery committed against security company by forcefully depriving them of cash which is under their custody from an armoured vehicle whilst on the way to deliver it” (Participant 15).*

From the above, it emerged that this concept was understood by most of the participants. In Section 2.9 of paragraph 2 in chapter two of this study, SABRIC (2019:222) concurs with Klopper and Bezuidenhout (2020:222) and defines CIT robbery as the intentional, unlawful, and violent removal and appropriation of cash while it is in transit or under the supervision of CIT security company personnel. The participants' responses are consistent with the above-stated scholars' points of view. The next theme deals with participants' viewpoints about different types of Cash-In-Transit robberies.

#### **4.3.11 Theme 11: Participants' views about different types of Cash-In-Transit robberies**

There are different types of CIT robberies manifestations, which are determined by the action taken by the perpetrator during the commission of crime. When the participants

asked: “What are the different types of Cash-In-Transit robberies that you come across during your years of experience”? The participants’ responses were as follows:

*“...Pavement robberies, Cash-in-transit robbery” (Participant 1).*

*“...Cross-pavement robbery, Robbery inside bank or store, Robbery at pay point, Robbery from vehicle in motion” (Participant 2).*

*“...Vehicle was shot at, then explosives used to blow open the safe. Stopped and forced to open the safe at gun point” (Participant 3).*

*“...Pavement robbery; Cash-In-Transit” (Participant 4).*

*“...Vault attacks, cross pavement, ATM attacks and Bank robberies” (Participant 5).*

*“...Cross pavement; Bomb of armoured vehicle” (Participant 7).*

*“...Pavement robbery; Robbery during cash transportation on the road by security armoured vehicles; Banks; Vaults” (Participant 8).*

*“...Pavement robbery; Vehicle on road” (Participant 9).*

*“...Cash-In-Transit (Vehicle on the road); Pavement Robbery (Vehicle is at standstill, security guard taking money from m/v to the shop vice-versa); Bank Robbery (Inside the bank)” (Participant 10).*

*“...Vehicle on road; cross pavement” (Participant 11).*

*“...Pavement robbery, merchandise, vehicle on road, Robbery in premises, static robbery and robbery at Depo, Vault attack” (Participant 12).*

*“...When the money is taken from the vehicle to the bank before it reaches the bank (Pavement robbery); AV attached in the road; AV attack; Merchant premises Robbery” (Participant 13).*

*“...Cross pavement; Bombing of vehicle transporting money” (Participant 14).*

*“...Vehicle on the road robbery; Cross pavement robbery” (Participant 15).*

All the participants answered the question. The data is in line with Burger (2018:1), Klopper and Bezuidenhout (2020:319), and SAPS (2023:31) which confirms that Cash-In-Transit robbery can be divided into five main types: a vehicle on-road attack, cross-pavement attack, static armoured vehicle attack, merchant retail or pay point as well as own premises or depot attack. Many participants' responses were in line with the viewpoints of the authors; other participants mentioned CIT robbery again, while others mentioned the types of CIT robberies. However, there is a requirement for further training in this regard.

#### **4.3.12 Theme 12: Participants' perceptions about charges that are used for Cash-In-Transit robbery cases**

In terms of Section 35(1)(d)(i)(ii) of the Constitution of the Republic of South Africa, 1996, after the perpetrator is arrested, he/she must be charged and then appear before the court of law within forty-eight (48) hours of arrest (South Africa, 1996a:np). However, this timeframe operates based on court days and excludes public holidays and weekends. The charge sheet is a court document containing all the counts against the accused person and should be made available throughout the court proceedings. Therefore, during the interviews, participants were asked: "Stipulate the charges that are used for Cash-In-Transit robbery cases"? The data gathered from the participants' responses to this question were as follows:

*"...Robbery / Attempted robbery / Attempted murder / Murder / Malicious damage to property" (Participant 1).*

*"...Assault GBH, Attempted murder, Murder" (Participant 2).*

*"...Robbery with firearms; Attempted murder; Possession of unlicensed firearms and ammunition; unlawful possession of explosives" (Participant 3).*

*"...Robbery, Attempted, Unlawful possession of firearms" (Participant 4).*

*"...There are different charges that are used for Cash-In-Transit Robbery cases:*

- *Cross Pavement Robbery Cash-In-Transit*
- *Cash-In-Transit Robbery*
- *Static Robbery Cash-In-Transit (Parked Vehicle)*



- *Cash-In-Transit Robbery on the Road (Moving Vehicle)*
- *Post Office Robbery*
- *Auto Teller Machine (ATM) Cash-In-Transit Robbery*
- *Cash-In-Transit Robbery at or inside the premises, e.g. Depot etc.”*  
**(Participant 5).**

*“...Robbery with aggravating circumstances contravening schedule 5 and schedule 6 of the Criminal Procedure”* **(Participant 6).**

*“...Armed Robbery; Attempted murder; Murder”* **(Participant 7).**

*“...Robbery with aggravating circumstances; Malicious damage to property; Murder, attempted murder”* **(Participant 8).**

*“...Armed robbery; Possession of unlicensed firearm; Possession of explosives; Murder; MITP”* **(Participant 9).**

*“...Armed Robbery with aggravating circumstances; Possession of unlicensed firearm; Possession of ammunition; Attempted murder; murder; Possession of explosives”* **(Participant 10).**

*“...Armed Robbery”* **(Participant 11).**

*“...Robbery with aggravated circumstances, attempted murder, murder, possession of unlicensed firearm and ammunition, possession of explosives, malicious damage to property”* **(Participant 12).**

*“...Theft of cash, firearm robbery, MI to property, murder, attempted murder”* **(Participant 13).**

*“...Robbery with aggravation; Murder – Unlawful possession of firearm; Attempted murder; Theft, Malicious damage to property”* **(Participant 14).**

*“...Robbery with aggravating circumstances”* **(Participant 15).**

Most of the participants demonstrated an in-depth understanding of the charges of CIT robberies, though their responses slightly differ in some ways. Most participants' perceptions did not differ from those of the literature. However, even though some of the charges are not mentioned, the participants demonstrated an understanding of the

charges. The next theme sought to gain participants' knowledge about legislative frameworks governing the police in South Africa.

#### **4.3.13 Theme 13: Participants' knowledge about legislative frameworks governing the police in South Africa**

In this regard, the participants were asked this question: "What are the legislative frameworks governing the police in South Africa?" Participants gave the following answers:

*"...The legislative framework topic area covers specific issues regarding the laws and regulations that are an essential element for free and fair election administration and for results to be accepted as fully legitimate" (Participant 1).*

*"...SAPS Act 68 of 1995, Criminal Procedure Act of 1977, The Constitution of South Africa, 1996" (Participant 2).*

*"...The South African Police Service Act 68 of 1995" (Participant 3).*

*"...Constitution; Police Act" (Participant 4).*

*"...The Legislative frameworks that governs the police in South Africa are controlled by Chapters 11 of the Constitution of the Republic of South Africa (Act 108 of 1996) and it stipulates the responsibilities of the South African Police Service:*

- *To prevent, combat and investigate crime;*
- *To maintain Public Order;*
- *To protect and secure the inhabitants of the Republic of South Africa and their property;*
- *To uphold and enforce the law;*
- *Create a safe and secure environment for all people in South Africa;*
- *Prevent anything that may threaten the safety or security of any community;*
- *Investigate any crimes that threaten the safety or security of any community;*
- *Ensure criminals are brought to justice; and*

- *Participation in efforts to address the causes of crime.*”

*“...The South African Police Service Act 68 of 1995 has the role to provide for the establishment, organisation, regulation and control of the South African Police Service and to provide for matters in connection therewith” (Participant 5).*

*“...Police Act no. 68 of 1995”; Section 252A of the Criminal Procedure Act 51 of 1977; Prevention of Organised Crime Act, No.121 of 1998” (Participant 6).*

*“...To maintain law and order; Constitutional rights” (Participant 7).*

*“...South African Police Act 68 of 1995; Criminal Procedure Act” (Participant 8).*

*“...Criminal Procedure Act; POCA; Firearm Control Act” (Participant 9).*

*“...The expectation for police officer and strategic” (Participant 10).*

*“...South African Police Service Act; Criminal Procedure Act; Constitution; Criminal Law Amendment Act” (Participant 11).*

*“...Comply with Constitution rights of the suspects, Application of Section 205” (Participant 12).*

*“...Criminal Procedure Act” (Participant 13).*

*“...South African Police Service Act 68 of 1995” (Participant 14).*

*“...RSA Constitution Act 108 of 1996; Criminal Procedure Act 51 of 1977; South African Police Service Act 68 of 1995” (Participant 15).*

Many participants had knowledge of the legislative regulatory framework that governed the police in South Africa. However, participants 1, 2, 10, and 12 did not answer the question correctly. Many participants’ answers did not differ from those of the literature consulted in Section 2.13 of chapter two of this study according to the Constitution of the Republic of South Africa, 1996; South African Police Service Act, 1995 (Act 68 of 1995); Criminal Procedure Act, 1977 (Act 51 of 1977); Prevention of Organised Crime Act, 1998 (Act 121 of 1998); Criminal Law (Forensic Procedures) Amendment Act, 2013 (Act 37 of 2013); and Regulation of Interception of

Communication and Provision of Communication-related Information Act, 2002 (Act 70 of 2002).

#### **4.3.14 Theme 14: Participants' understanding of the concept 'modus operandi'**

Van Rooyen (2012:18) defines *modus operandi* as an offender's pattern of operation or manner of planning and carrying out a crime. In this study, the researcher aimed to determine the participant's comprehension of the term "modus operandi." To this end, participants were asked the following question to establish their perspectives: "How would you define "*modus operandi*?" The following were verbatim responses of the participants:

*"...A particular way or method of doing something every killer has his own special modus operandi or way of doing or committing crime" (Participant 1).*

*"...Manner, pattern or style which the suspect prefers to use while committing offences" (Participant 2).*

*"...Destruction with explosives; Shots fired on the vehicle to force it to stop; Pointing or sometimes shots at victims" (Participant 3).*

*"...Modus operandi is the way how it is happens". E.g., sometimes robbers can take money from a certain security company using firearms but not shooting at anyone. Others take money and shoot the security personnel" (Participant 4).*

*"...Modus Operandi is the Latin word referring to the method used by the perpetrators to carry out the robbery (robberies) or any crime/offence. Perpetrators take much time to plan and to prepare for the robbery. They plan for target and firearms including explosives to be used as well as vehicles. It is also referred to as the pattern of criminal behaviour that separates crimes" (Participant 5).*

*"...Is to learn the pattern of crime and as well to know the people who committed it at the time you are at the crime scene" (Participant 6).*

*"...The manner in which the criminals are acting when committing crime" (Participant 7).*

*"...The specific manner of committing crime" (Participant 8).*

“...The system or plan in which criminals are operating” (Participant 9).

“...Modus operandi is the pattern which is being used by the perpetrators” (Participant 10).

“...A particular way of doing something (most suspects have their own way of committing crimes)” (Participant 11).

“...system that the suspect used to commit crime, e.g. shooting of cash van, bombing of M/V, ramping of cash van” (Participant 12).

“...The method of how to commit a certain crime” (Participant 13).

“...Method of committing crime” (Participant 14).

“...Method used by criminals when committing crimes” (Participant 15).

In light of the above, the researcher agrees with the assertion by Gilbert (2010:10), Van der Watt, Van Graan and Labuschagne (2014:62), Bartol and Bartol (2017:314), Hall and Bezuidenhout (2019:32), Klopper (2020:596), Turvey and Freeman (2023:578), highlight in chapter two Section 2.14 in paragraph 1 of this study, who indicate that “*modus operandi*” is a Latin phrase that refers to “method of operating” and how crime has been committed. Although the participant’s responses differed, participants had a clear understanding of the meaning of *modus operandi*. To ascertain the criminals’ *modus operandi*, the researcher is of the opinion that investigators may ask questions such as *how, where, who, when, what* and *why*. The next theme deals with the data presented and analyses collected from the participants pertaining to the purpose of *modus operandi*.

#### **4.3.15 Theme 15: Participants’ understanding of the purpose of *modus operandi* in the investigation of Cash-In-Transit robbery cases**

To obtain insight into the participants’ understandings on the purpose of “*modus operandi*.” For this reason, the researcher conducted this study to contribute scientifically and offer a viewpoint in a particular area of the study. Participants were asked the following question: “In your experience, what is the purpose of *modus operandi* in the investigation of Cash-In-Transit robbery cases?” This was an open-ended question, so participants were free to convey their knowledge and experience.

There were no options for this question. Participants' *verbatim* responses were as follows:

*"...Cash-In-Transit robberies can be classified as exclusive robbers who show no respect for life and use extreme violence to achieve their goal"* **(Participant 1)**.

*"...Is to link or connect the suspects with crime scenes"* **(Participant 2)**.

*"...To identify similarities, which will link the suspect with different crime scenes"* **(Participant 3)**.

*"...To identify the group or syndicate because each syndicate in the group have their own ways or style of committing crime"* **(Participant 4)**.

*"...To identify the suspects; To identify their cultures or ages; To identify the types of vehicles they used during the commission of an offence; What types of vehicles are being used as well as firearms, explosives, etc.; To connect suspects with each and every crime scene or crimes committed"* **(Participant 5)**.

*"...To know the suspects who committed such an offence and as well as the style of shooting at the scene"* **(Participant 6)**.

*"...Modus Operandi exists to identify the group of criminals"* **(Participant 7)**.

*"...To identify or link suspects with different crime scenes, i.e. ram or tap the armoured vehicle"* **(Participant 8)**.

*"...to be able to identify the syndicate which was operating"* **(Participant 9)**.

*"...Modus Operandi is a pattern which is used by the criminals to commit cash-in-transit"* **(Participant 10)**.

*"...To be able to identify how different perpetrators on different cases committed their crimes, e.g., Type of cars, how they approach the vehicles, and how they destroy the entrance and how they exit/escape the scene of crime"* **(Participant 11)**.

*“...To distinguish the suspects who committed the crime from other groups”*  
**(Participant 12).**

*“...To determine the instrument used when the vehicle stopped or was bombed during the cash-in-transit cases, an example can be explosives or firearms”*  
**(Participant 13).**

*“...To identify if it is the same people who are committing CIT in Gauteng and Limpopo”* **(Participant 14).**

*“...In order to establish the identity of criminals who have committed criminal conduct repeatedly”* **(Participant 15).**

Considering the above responses of the participants, they have various understandings of the purpose of MO in the investigation of the Cash-In-Transit robbery. In section 2.16 of chapter two of this research, Turvey and Freeman (2023:578) state that the purpose of MO includes seeking, tracking, collecting, storing, and reviewing criminal profiles. The researcher is of the view that participants completely understand the purpose of the MO. In the next theme, the researcher intended to find out from participants the use of *modus operandi* to identify CIT robbery perpetrators.

#### **4.3.16 Theme 16: Participants’ perspectives of the use of *modus operandi* to identify Cash-In-Transit Robbery perpetrators**

According to Van Rooyen (2012:18) “*modus operandi*” can help identify and apprehend criminals after investigating officers have gathered, categorised, and preserved enough information regarding the crime. The *modus operandi* is regarded as one of the most effective tracing elements in the CIT robbery investigation. The following question was posed to the participants: “How can *modus operandi* be used to identify Cash-In-Transit robbery perpetrators?” Participants gave the following answers:

*“...Cash in transit robbers can be classified as exclusive robbers who show no respect for life and use extreme violence”* **(Participant 1).**

*“...Comparison on the lifted fingerprints; DNA linkages”* **(Participant 2).**

*“...Each criminal group has their own way of committing offences, and they are linked to the crime scene in accordance with their methods” (Participant 3).*

*“...Most of the robbers use explosives, rifles, pistol when doing their cash in transit robbery mostly with no killing of the security personnel and even blasting of the vehicle” (Participant 4).*

*“...By profiling the perpetrators. By planting reliable informers; Implementing escort vans with fully armed guards; Applying section 205 for the suspects’ cellphones for records and towers; Use Home Affairs Department; By using Local Criminal Record Centers and Forensic Science Laboratory for DNA and ballistics” (Participant 5).*

*“...To identify the perpetrators by means of looking at the scene of crime” (Participant 6).*

*‘...It can be used by bombing or bumping armoured motor vehicles” (Participant 7).*

*“...Cartridges collected at different crime scenes after they are sent for analysis by FSL ballistic section” (Participant 8).*

*“...The instruments used during the commission of crime the methods used on that crime scene” (Participant 9).*

*“...Can be used e.g. type of motor vehicles used, type of firearms used, type of explosives used, number of groups of suspects” (Participant 10).*

*“...Description of perpetrators, vehicles used, the type of business enterprise they rob, the direction they usually take after committing the crime. (The use of common traits)” (Participant 11).*

*“...To differentiate the suspects from other groups of CIT, because some burn the M/V” (Participant 12).*

*“...We can identify the perpetrators through fingerprints from the scene, DNA and also video footage from the cash in transit vehicle” (Participant 13).*



*“...The way they are conducting their criminal activities will also help investigators to know if they are the same who committed a crime in Mpumalanga” (Participant 14).*

*“...If sentenced offenders are interviewed information on modus operandi can be obtained and profiled” (Participant 15).*

The results of the study found that most of the participants comprehend the use of MO to identify CIT robbery perpetrators. The following theme presents and analyses the responses of participants pertaining to the understanding of the MO of perpetrators of CIT robbery cases in Limpopo Province, South Africa.

#### **4.3.17 Theme 17: Participants’ understanding of modus operandi of perpetrators in Cash-In-Transit robbery cases in Limpopo Province**

The following question was asked during the interview: “What is the *modus operandi* of perpetrators in Cash-In-Transit robbery cases in Limpopo Province?” Please elaborate?” The participants provided the following responses to this open-ended question:

*“...A method of operation or pattern of criminal behaviour so distinctive that separate crimes or wrongful conduct are recognised as the work of the same person” (Participant 1).*

*“...They operate in groups of plus/minus 10 people wearing balaclavas in order to hide their facial identification. They use bakkies M/V as a getaway shooting randomly while leaving the scene” (Participant 2).*

*“...Colliding with AV, shooting with rifles, distractions with explosives” (Participant 3).*

*“...They rob the vehicle conveying money in most cases they block the road from the front and the back, shooting the vehicle in the tyres, force opened the door, blast the vehicle and left the driver alight from the car or vehicle” (Participant 4).*

*“...In Limpopo, perpetrators took much time to plan and to prepare for the Cash-In-Transit Robbery. They planned for their targets, firearms and vehicles including explosives to be used. They also plan for the armoured Vehicle (AV)*

trucks. They also plan to choose the gang members and getaway cars. The planning may take about a week to two months, and this depends on the difficulty of the job to be carried out. The timing of time, place or area to carry or commit the cash-in-transit robbery to avoid being seen or identified by witnesses or being interrupted or arrested by the police not forgetting being killed by police and members of the community. They also evaluate members of the guards and also check if the robbery may be successful or not” **(Participant 5)**.

“...The perpetrators used to block the van, carry money and start to shoot it with high calibre firearms. After that they burn the van carrying money in order to avoid fingerprints being traced. Sometimes perpetrators stopped the G4S or Fidelity van carrying money by means of shooting at them and later they blast the aforesaid vehicles by means of detonators in order to remove the canopy thereafter they take money. During cash-in-transit robbery the other perpetrators guard both sides of the road to avoid disturbance” **(Participant 6)**.

“...Most of the perpetrators use stolen cars to bump the armoured vehicle in order to lose control” **(Participant 7)**.

“...Ram and or shooting the armoured vehicle to standstill, thereafter, bomb the same with explosives to force the safes open in order to access cash” **(Participant 8)**.

“...They use a Mercedes Benz which they robbed from other victims specified for committing robbery. They collide with the vehicle which will be transporting cash and shoot the front tyre. They use high calibre rifles. They preferred to use stolen vehicles during robbery, AK47, R5, 775, R1” **(Participant 9)**.

“...They use stolen motor vehicles, High powered vehicles, using rifles to commit the crime, groups of more than 10 perpetrators” **(Participant 10)**.

“...The use of (Old BMW or Mercedes Benz) to hit the cash van head on for distraction; They use explosives to bomb the cash van to access the safe; They use white Ford bakkies as their vehicles” **(Participant 11)**.

*“...They attack the cash van by shooting the wheels until it stands still and take out the security guards and bomb the vehicle and take the cash and burn it to destroy evidence” (Participant 12).*

*“...Firstly, there is an organiser who will bring tools like vehicles, firearms, explosives, cellphones for communications, drivers of getaway cars, warehouse and also the insider who gives the suspects the job and also”. The route which the cash-in-transit vehicle is going. The warehouse before and after the commission of crime. The shooter during and after the cash-in-transit. The largest numbers during my work experience, plus/minus 15 suspects armed with Pistols and Rifles” (Participant 13).*

*“...Bombing the armoured vehicle and burning the vehicle used to transport the offender” (Participant 14).*

*“...Criminals are mostly above 12 in number, they will use a high-powered motor vehicle in most cases SUV to ram into an armoured vehicle, when it stops either they will shoot at security officers with high calibre firearms or instruct security officers to alight from armoured vehicle, plant explosives and blast it open then take the money and flee from the scene” (Participant 15).*

The above *verbatim* responses of participants revealed that they are familiar with the MO of perpetrators in CIT robbery cases in Limpopo Province, South Africa. However, their responses are not the same. In Section 2.17 of chapter two in this study, the literature revealed that the MO of CIT robbers is characterised by brazenness, brutality and military precision. The following theme presents the understanding of participants regarding the factors that influence MO in CIT robbery.

#### **4.3.18 Theme 18: Participants’ understanding of factors that influence *modus operandi* in Cash-In-Transit robbery**

According to Labuschagne (2015:280) identifies factors that influence “*modus operandi*” as follows: perpetrators criminal background, literature and media, and ad hoc influences. When asked the question: “Based on your experience, what are some of the factors that influence “*modus operandi*” in Cash-In-Transit robbery?” The participants gave the following responses:

*“...Media, operational area, when the security is not tight, they take opportunity and rob” (Participant 1).*

*“...Environment they operate, types of weapons they used, security measures, route and timing” (Participant 2).*

*“...Vehicle travel without escort vehicle. Few security personnel in the vehicle e.g. CIT. Type of CIT AV” (Participant 3).*

*“...Poverty, lack of work, lifestyle” (Participant 4).*

*“...Crews will often enlist the cooperation of employee from the banks and cash-in-transit company. This will help or assist in ensuring the success of the planned robbery. This happens because perpetrators are being fed inside information which provides perpetrators with more or added advantages to win the robbery or to be successful” (Participant 5).*

*“...greed. To be seen as the rich people and due to unemployment in the country” (Participant 6).*

*“...Some of them they are watching some movies to adopt the style” (Participant 7).*

*“...To access cash easily and fast; Unemployment rate; Greediness” (Participant 8).*

*“...They need cash; Influence by other criminals; They need firearms and cars; To impress their friends” (Participant 9).*

*“...Greedy and selfish” (Participant 10).*

*“...They always succeed on the same modus operandi and they continue on it even the same M/V were used” (Participant 12).*

*“... watching movies of Mafias in the TV. The videos (videos) from the tiktaks (TikTok) showing people having photos carrying bulk of money and also unemployment” (Participant 13).*

*“...Unemployment; Peer pressure; Substance abuse” (Participant 14).*

*“...Date and time crime was committed; Methods and equipment; Types of companies targeted” (Participant 15).*

Considering the above responses, participants demonstrated that they comprehend the question, and their responses are unique from one another but respond to the question asked. Section 2.18.2 of chapter two in this study confirms the findings as stated by Gilbert (2010:224), Labuschagne (2015:281) and Thobane (2019:330) who emphasise that media plays an imperative role in the shaping and modifying of perpetrators *modus operandi*. The following theme shows responses of the participants on circumstances when *modus operandi* was previously utilised.

#### **4.3.19 Theme 19: Participants’ views on circumstances when *modus operandi* was previously used**

To understand the pragmatic point of view of the participants on knowledge and expertise on the utilisation of MO in their investigations’ participants were asked the following questions: “Through your experience, have you ever used MO to investigate any cases?” “If your answer is ‘yes’, under what circumstances did you use *modus operandi*?” Participants responded to the question as follows:

*“...Yes”. After a syndicate group has been arrested, we then check on other outstanding cases how the offence was committed” (Participant 1).*

*“...Yes”. Where the suspects are unknown” (Participant 2).*

*“...No” (Participant 3).*

*“...Yes”. Sometimes we use cellphone coordinates to check if the said suspects at the crime scene were having cellphones or talking to each other and again to check if they were shooting using rifles or pistols but not killing anyone; shooting to scare the Transit personnel and maybe they burn the vehicle after robbery” (Participant 4).*

*“...Yes”. There are so many circumstances used for Modus Operandi to investigate any cases during investigation time. If suspects are arrested and during the process of interviewing, they admitted or confessed to have committed other similar offences or crimes. If they make confessed and make 217 Confessions in terms of Criminal Procedure Act 51 of 1977 and also*

*conduct pointing out of the alleged crime scenes where they have committed crimes or offences, even though there are no witnesses that have identified them during the commission of such offences. Confessions may either be made to a Justice of Peace, that is to the police officer from the rank of a Captain upwards or and above or by the Magistrate” (Participant 5).*

*“...Yes”. I used modus operandi from previous similar cases of that nature. By means of revisiting the scene, profiling, forensic analysis and cellphones used by suspect left at the scene” (Participant 6).*

*“...No” (Participant 7).*

*“...Yes”. Types of M/V used at the crime scenes, some used big engine Mercedes to ram the security truck and also used Ford Rangers at the scenes, from different scenes” (Participant 8).*

*“...Yes”. From two different crime scenes which occurred from different areas I found the cartridges which are similar and commercial explosives and the old Mercedes-Benz which was stolen prior to the commission of the crime and burned crime scene” (Participant 9).*

*“...Yes’. On the cases of Pavement Robbery, it is more, and the same crime” (Participant 10).*

*“...Yes”. The comparison of vehicles used as get aways in two similar cases around Tzaneen area and the time used for such cases. I believed they were trying to avoid many entrances and also less distractions” (Participant 11).*

*“Yes”. I went to the residential place of one of the suspects who used the same modus operandi and found him in possession of cash and some money torn by explosives and also explosives were found in his possession. Some through confession at the commissioner’s officer” (Participant 12).*

*“...Yes”. During the investigation followed from Gauteng leading us to Limpopo Province where we arrested plus/minus 10 suspects in possession of rifles, AK47 and Pistols. The suspects were planning to do a cash-in-transit, but we confronted them before commission” (Participant 13).*

“...Yes”. *During the tracing of suspects who committed the cash-in-transit*  
**(Participant 14).**

“...No” **(Participant 15).**

Many participants have previously used MO and provide an explanation of the circumstances in which they use MO. Participants 3, 7 and 15 never previously used MO in their investigation. From the discussion, it is evident that the utilisation of MO as a technique of identification may offer great possibilities in investigating of CIT robbery cases. The researcher believes that using MO would also help to curb the number of cases closed undetected.

#### **4.4 SUMMARY**

In this chapter, the researcher presented data and interpreted research findings gleaned from the literature review and participant responses. The questions were posed, and the participants' responses were cited *verbatim* and, when necessary, interpreted, with references to accessible literature. The findings were divided into themes and sub-themes, as described in Section 4.3 of chapter four of this research. The participants responded to the questions asked based on their experience and expertise of MO as an identification technique in the investigation of CIT robberies in Limpopo Province, South Africa. The majority of the questions were directed by the research aim, objectives, and the semi-structured interview schedule. The absence of adequate responses in relevant areas shows a gap that requires areas for further research. Chapter five is the last chapter of the study. It presents the summary, limitations, recommendations, and conclusion.

## **CHAPTER 5: SUMMARY, LIMITATIONS, RECOMMENDATIONS, AND CONCLUSION**

### **5.1 INTRODUCTION**

In the previous chapter, interpretation and presentation of the research findings of the study were done. This chapter outlines the summary, limitations, recommendations, and conclusion of the study from Chapter 1 to Chapter 5, after which the interpretations derived from Chapter 4 are discussed and conclusions drawn. The recommendations are based on the main findings as derived from the themes and sub-themes that emerged in Chapter 4, to establish the use of MO as an identification technique in the investigation of CIT robberies in Limpopo Province, South Africa. Furthermore, recommendations made in this chapter are established based on the available literature, researchers' experience, and participant responses.

In this chapter, a demonstration of the achievement of the objectives of the study is summarised. Consequently, a model that can be utilised as a CIT robbery operational approach is proposed to efficiently address CIT robberies. Lastly, this chapter outlines several recommendations for future research and provides a conclusion of the entire study at the end of the chapter.

### **5.2 SUMMARY OF THE PRECEDING CHAPTERS**

This section outlines a summary of Chapter 1 to Chapter 5 of the study.

#### **5.2.1 Summary of Chapter 1**

Chapter 1 focused on the general orientation of the study, which includes the introduction and background. A comprehensive and detailed problem statement of this study was discussed. The aim of the research, research question, objectives, purpose and value of the research, key theoretical concepts, and preliminary literature review were also outlined in this chapter. The aim of the study was:

- To analyse using MO as an identification technique in investigating CIT robberies.

To achieve the above-mentioned research aim, the study sought to answer the following research question:

- How can MO be used as an identification technique in the forensic investigation of CIT robberies?



The following objectives guided the study:

- To identify the MO that criminals use to commit CIT robberies.
- To determine to what extent MO can add value to the forensic investigation of CIT robberies in Limpopo Province.

To achieve the above objectives, this study was guided by the above-mentioned research question. The structure of the study is highlighted in this chapter.

### **5.2.2 Summary of Chapter 2**

Chapter 2 of this study engaged in an in-depth and comprehensive literature review on the use of MO as an identification technique in the investigation of CIT robbery. This chapter presented a literature review that assisted the researcher in locating the current study within the existing body of knowledge. This chapter includes the conceptualisation and contextualisation of criminal investigation, forensic investigation, identification, and categories of identification, individualisation, organised crime, robbery, and elements of robbery and CIT robbery. The chapter further deals with Locard's exchange principles, different types of CIT robberies, charges of CIT robbery, the nature and extent of CIT robbery, the legislative frameworks that govern the police in South Africa, the meaning of MO, MO as an identification technique, purpose of MO, MO of CIT robbers and lastly, factors that influence MO of CIT robbers.

### **5.2.3 Summary of Chapter 3**

In Chapter 3, the research methodology utilised in this study was described in detail, underpinned with the interpretivism research paradigm, case study design, qualitative research approach, description location of the study, and targeted population. The chapter also further contained non-probability sampling and purposive sampling techniques. In addition, the population of the study was described in detail, data was gathered through semi-structured interviews, and the interview schedule was explained thoroughly. Furthermore, this chapter also outlined details on the pilot study, the spiral data analysis method, and aspects to ensure the trustworthiness of the study through credibility, transferability, dependability, and conformability. Lastly the researcher further explains the ethical considerations that comprised of ethical reviews, informed consent, confidentiality, privacy, anonymity, avoidance of harm, and avoidance of plagiarism.

#### **5.2.4 Summary of Chapter 4**

Chapter 4 of the study presented and interpreted the research findings. The chapter begins by providing participants' demographic information in Table 4.1, displaying participants' numbers, gender, Units, ranks, educational qualifications, and years of experience in CIT robbery investigation. This chapter presented participants' expert views in the field of the study as gathered during the face-to-face (one-on-one) semi-structured interviews. Direct *verbatim* quotations were used to highlight participants' perceptions to avoid misinterpretation and distortion of the facts. The viewpoints of the participants, which were recorded during semi-structured interviews, were analyzed to understand the perspectives regarding the phenomenon under investigation. Themes and sub-themes were created to organise and show related literature and patterns. Furthermore, this chapter presents Theme 1 criminal investigation; Theme 2 forensic investigation; Theme 3 identification; Theme 4 categories of identification; Theme 5 individualisation; Theme 6 Locard's exchange principle; Theme 7 organised crime; Theme 8 robbery; Theme 9 elements of robbery; Theme 10 CIT robbery; Theme 11 types of CIT robbery; Theme 12 charges of CIT robbery; Theme 13 legislative frameworks; Theme 14 MO; Theme 15 purpose of MO; Theme 16 MO to identify CIT robbery perpetrators; Theme 17 MO of CIT robbers; Theme 18 factors that influence MO in CIT robbery; Theme 19 circumstances where MO was previously used, and the summary. Each identified theme, as discussed in Chapter 4, was presented and supported by the inclusion of relevant literature from Chapter 2 of this study, with the aim of exploring the use of MO as an identification technique in the investigation of CIT robberies in Limpopo Province, South Africa.

#### **5.2.5 Summary of Chapter 5**

Chapter 5 focused on the overall study with the inclusion of the summary, limitations, recommendations, and conclusion of the entire study. The recommendations resulting from the research findings were also outlined. In addition, this chapter also proposed suggestions for further research avenues. The next section presents the limitations of the study.

### **5.3 LIMITATIONS OF THE STUDY**

This study was limited by various constraints. Firstly, some challenges were experienced while conducting research with DPCI - SOCIU members during this study. The participants were not keen on participating because they kept on postponing data

collection appointment dates. Some participants could not participate in the survey saying that they could get themselves into trouble if they did. To address these problems, the researcher kept on explaining the reasons behind conducting the study to the participants and reassured them of confidentiality, anonymity and avoidance of harm. Other participants did not answer other questions. Another limitation was that some participants refused to be recorded and the researcher had to take notes to capture their *verbatim* responses in a notebook. In this study, a major contributing factor was a lack of research knowledge. The researcher repeatedly reminded the participants about ethical protocols for them to feel comfortable. The researcher also had a problem of having no accurate recording device and therefore used his personal cellphone to record interview responses. The next section presents recommendations for the study.

#### **5.4 RECOMMENDATIONS**

The aim of this study was to analyse the use of MO as an identification technique in investigating CIT robberies, and to determine the importance of the using of MO as an identification technique in the forensic investigation of CIT robberies. For this reason, it was of paramount importance for the researcher to offer recommendations to set out alternative actions that could be implemented based on the findings of this study. As a result, recommendations are informed by the reviewed literature and findings of the study. Therefore, considering the above, the study makes the recommendations outlined in the section below.

##### **5.4.1 Recommendation 1: Awareness programmes and campaigns**

The researcher is of the view that at the national, provincial, and local levels, various training resources and reference guides be published and circulated to inform and educate a wide range of stakeholders and community members about what they must do in response to CIT robbery. The researcher recommends that all relevant stakeholders dealing with CIT robbery use awareness programmes and campaigns as a strategy to fight and combat CIT robbery. Such awareness programmes and campaigns should be done in the hotspot precincts where there are many CIT robbery cases.

#### **5.4.2 Recommendation 2: Modus operandi database**

Collected MO information of CIT robbery perpetrators should be updated and stored until required. Therefore, it is recommended that the MO information be recorded on the SAPS - CAS system and Investigation Case Docket Management System (ICDMS), including a compulsory case docket annexure consisting of MO information of the perpetrators. The MO information databases should be used to identify CIT robbery criminal syndicates and arrest repeat perpetrators. In addition, the MO information database should also be utilised as a reference for comparing the MO of well-known CIT robbery perpetrators. The SAPS should be fully aware of the MO utilised in committing CIT robbery crimes. An understanding of MO would give detailed information and result in successful strategies for dealing with this crime effectively. It is further recommended that suggested MO databases of the SAPS should be monitored to ensure sufficient and accurate MO information.

#### **5.4.3 Recommendation 3: Provision of sufficient resources**

It is essential that the SOCIU units within the DPCI focusing on the investigation of CIT robberies should be capacitated with armoured vehicles and helicopters to respond to the CIT robberies. The SOCIU units should be capacitated, decentralized, and adequately supported in terms of human resources and financial backing/funding. This study recommends that the SAPS should be capacitated with resources and skills to enable them to be able to investigate CIT robbery. The members from SAPS, FSL, NPA, CITASA, SABRIC and intelligence agency should be incorporated (integrated-multidisciplinary approach) under this unit and CIT robbery should only be their main functions and/or priority, as illustrated in Figure 5.1.

#### **5.4.4 Recommendation 4: Specialised training**

CIT robbery is a national priority violent crime that needs national prevention or investigation, which requires specialised expertise in the investigation and prevention thereof. Highly trained investigators should handle this crime. The MO of CIT robbery syndicates has become more complex and sophisticated and may only be countered when the investigators are capacitated. There should be a minimum standard of instruction and training materials about MO that are available to all investigators. It is therefore highly recommended that specialised training be given to the investigators on the following areas:

- criminal investigation (meaning, types, and objectives);

- forensic investigation (meaning, types, and objectives).
- meaning of identification.
- different categories of identification.
- meaning of individualisation.
- meaning of Locard's Exchange Principle.
- meaning of organised crime.
- meaning of robbery.
- elements of robbery.
- meaning of CIT robbery.
- different types of CIT robberies.
- charges of CIT robbery.
- legislative framework which governs the police in South Africa.
- meaning of MO.
- purpose of MO.
- MO of CIT robbery perpetrators; and
- factors that influence MO in CIT robbery.

It is, therefore, imperative that the above-mentioned areas should also be emphasized during briefing sessions and parades with police officials. The SAPS officials should be taken for regular training for them to be able to properly investigate the cases of CIT robbery. By doing so, investigators will be informed of the latest techniques to solve CIT robbery cases by locating, linking, identifying, and arresting perpetrators through the utilisation of MO. Therefore, the training of the SAPS officials on these CIT robbery crimes is recommended as a matter of urgency.

#### **5.4.5 Recommendation 5: Installation of CCTV**

Owing to a lack of evidence and a high number of case dockets that are closed undetected, the researcher recommends that CIT armoured vehicles should be connected with CCTV satellite cameras both inside and outside. The CIT escort team should be deployed to patrol CIT routes and malls in unmarked private vehicles fitted with CCTV satellite cameras looking for possible perpetrators, while communicating with the police to stop and search all suspicious' individuals. Furthermore, the researcher recommends that the installation of CCTV cameras at hot spot areas and at the areas where CIT Companies render their services such as shopping malls, ATMs and retail stores.

#### **5.4.6 Recommendation 6: Harsher sentences for CIT robbers**

A severe punishment must be imposed on all CIT robbery perpetrators convicted of crimes and courts must be harsh on perpetrators. This includes not granting bail to serious and violent crime perpetrators. The researcher believes that one of the factors contributing to perpetrator recidivism is the ease with which they may obtain bail. Another factor contributing to the rise in CIT robbery is the belief that criminals engage in the crime because they know the police will not arrest them. Therefore, this study recommends the court impose harsh sentences and convictions on CIT robbers.

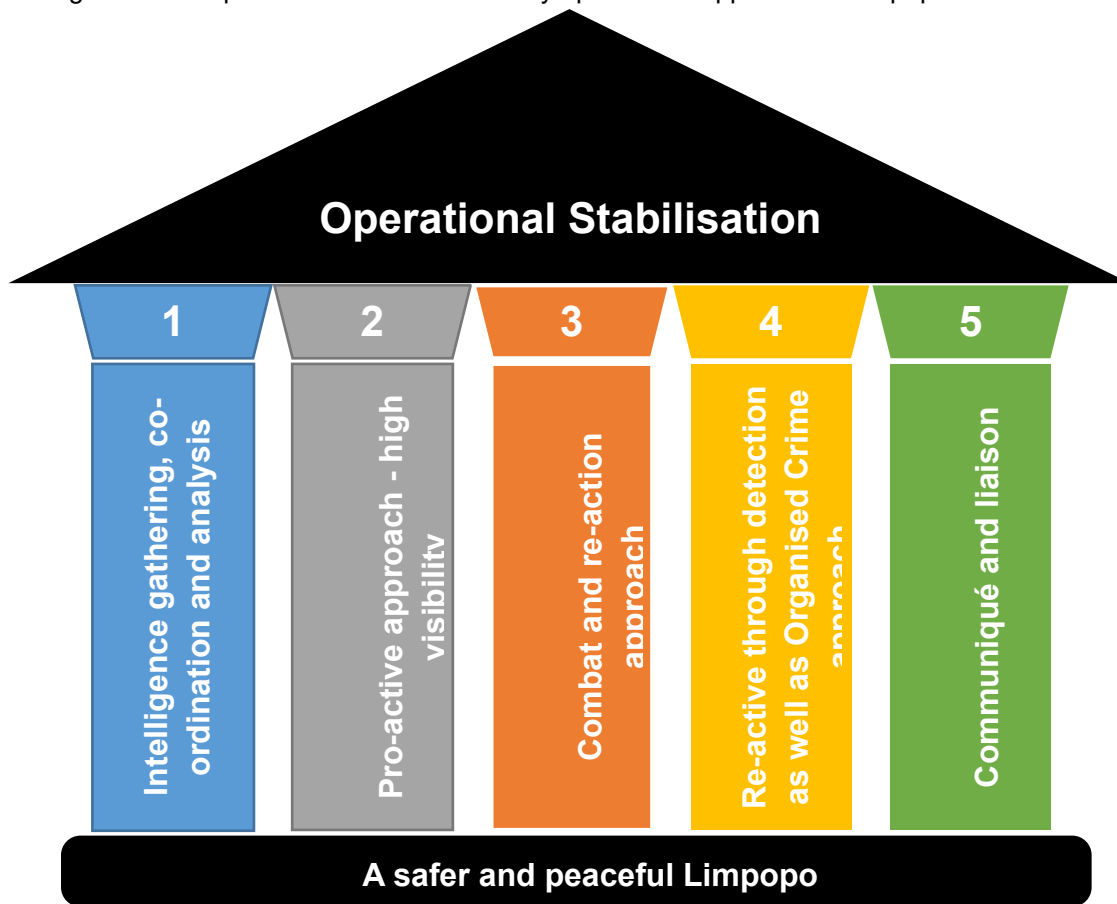
#### **5.4.7 Recommendation 7: Project driven investigation**

The researcher recommended that the SOCIU develop a threat assessment to identify hotspot precincts of focus for investigations. It is therefore recommended that a project-driven investigation to combat CIT robberies must be introduced at the national and provincial levels. Project management will serve as a police investigation that is managed using a project management framework. Furthermore, project management can help to enhance the efficiency of police investigators. The researcher believes that project management can help the investigating officers with innovation and learning.

### **5.5 PROPOSED MODEL OF CIT ROBBERY OPERATIONAL APPROACH**

A proposed model should be comprehensive, cohesive, and inclusive in dealing with the current and future needs in the investigation of CIT robberies. The proposed model is comprised of five main pillars, namely intelligence gathering, coordination, and analysis; pro-active approach - high visibility; combat and re-action approach; re-active through detection as well as organized crime approach; and communiqué and liaison (see Figure 5.1 below).

Figure 5.1: Proposed model of CIT robbery operational approach in Limpopo Province



Source: Researcher's own illustration

Figure 5.1 above depicts the five pillars of the proposed operational approach in Limpopo Province during CIT robbery investigations. The CIT operational approach model should focus on stabilizing crime in high-crime precincts and clusters/districts through the five pillars approach. The model comprises a multidisciplinary and integrated approach to the prevention, combating, and investigation of CIT robbery. The five-pillar approach is discussed below.

### 5.5.1 Pillar 1: Intelligence gathering, co-ordination and analysis

Pillar 1 includes:

- MO as the source of intelligence gathering, analysis, and coordination on all identified specific CIT robbery crime threats.
- Increasing ground coverage in the high-crime and staging precincts. Identifying CIT robbery syndicates and kingpins, as well as their methods of operation.
- Infiltration and neutralisation of identified criminal syndicates.

- Provision of MO information to tactical teams for operational implementation.
- Recruitment of trustworthy informant networks to aid in the battle against CIT robbery should be properly coordinated and maintained.
- Recognising and identifying repeat offenders. Conducting interviews and surveillance of perpetrators. Provide tactical information to operational organisations for execution purposes. Gathering, organising, checking, and evaluating the information and intelligence that is accessible.
- Regular updating and evaluation of MO data.
- Creating profiles and connecting wanted and detained offenders.
- Determining and assembling patterns and trends (by day and time). Creation of committees and centres for intelligence coordination.
- Combining all intelligence products that are now accessible.
- Distributing intelligence products for operational reasons to the appropriate role players. Coordinate with the affected CIT industry private sector.

All deployed personnel should be subject to screening and vetting before beginning of operational stabilisation.

### **5.5.2 Pillar 2: Pro-active and high visibility approach**

Pillar 2 includes:

- Ensuring early warnings are provided and compiling crime threat analysis.
- Mapping and plotting incidents.
- Tracing of perpetrators.
- Monitoring perpetrators on bail including on appeal or released on parole.
- Regularly interacting with the National Prosecuting Authority (NPA) on legal advice relating to matters.
- Co-ordinating with relevant stakeholders comprised of CIT Security Companies, South African Post Office (SAPO), Business Against Crime South Africa (BACSA), Private Security Industry Regulatory Authority (PSIRA), SASSA, CITASA and SABRIC. Visible patrol on identified major CIT routes by SAPS and Security companies. Monitor malls, ATMs, petrol stations, Post Offices, SASSA offices, and pay point cash centres.
- Rapid response to CIT and related crimes including hijackings and robberies.
- Roadblocks stop and searches of suspicious vehicles and persons.



### **5.5.3 Pillar 3: Combat and re-action approach**

The 10111-call centre will normally receive a call. They will interview the complainant and obtain full information about the CIT robbery incident. In response, they contact the closest vehicle to the incident and cluster Visible Policing (Vispol) Teams in the respective clusters to respond to the complaint. The first responders must gather the necessary MO at the scene regarding vehicles used, description of the suspects, number of firearms and type, as well as the direction in which perpetrators' vehicles fled if the initial caller was unable to provide it to the Police. MO information to be forwarded to DPCI, flying squad/highway way patrol, and K9 vehicles must be utilized for hot pursuits and observation duties on possible escape routes when CIT robbery incidents occur. The DPCI is to notify all Tactical Response Teams (TRT) who will dispatch resources to engage possible armed perpetrators, assist the Air Wing with apprehending the possible perpetrators, and conduct way lay duties. Next is Intelligence operations and hot pursuit and conducting a disruption operation at all identified and known perpetrators' residential areas.

### **5.5.4 Pillar 4: Re-active through detection as well as organised crime approach**

Pillar 4 includes:

- Crime scene management handling as described in the SAPS National Instruction 1 of 2015, which clarifies the roles and responsibilities of the first responders at the crime scene, the detective, and crime scene examiners by also enforcing quality standards at the crime scene.
- Cordoning off and protection of all crime scenes.
- All CIT robbery crime scenes should be cordoned off and protected.
- At crime scenes, forensic services assist with the processing, analysis, packing, and assessment of gathered evidence.
- Provision of evidence and DNA kits for investigation.

Centralized capturing and verification of all CIT robbery incidents as reported by SAPS, DPCI, CIT Companies, SASSA, SAPO, BACSA, PSIRA, SABRIC, and CITASA.

During the investigation, proper evidence collection and statement-taking should be obtained. Operational case docket management should be done including compulsory obtaining of DNA buccal samples from arrested perpetrators. The compulsory

obtaining of DNA buccal samples from arrested perpetrators assists in linking perpetrators with multiple crimes. There is a need for continuous liaison with the prosecution and coordination of all exhibits packaging, analysis, examination, and support of the operation. All generated cases must be continuously monitored. In addition, officers should ensure that dockets are completed within the time frame specified, a unified wanted suspect list is constantly updated and cleansed, bail processes are well managed, and national and provincial organised crime investigation units are constantly monitoring the situation. Pillar 4 recommends the establishment of the Organised Crime Secretariat, comprised of the NPA, SAPS, DPCI, and DCS, as well as the final investigation and prosecution procedures. Continuous consultation between the investigator and the prosecutor. Registered case dockets should be assigned to dedicated investigating officers and prosecutors, and the NPA evaluates all evidence and documents to decide whether a prosecution is successful.

#### **5.5.5 Pillar 5: Communiqué and liaison**

Pillar focuses on:

- Media surveillance, social media communication, and weekly or instantaneous media statements on accomplishments, where both good and negative remarks are issued.
- Attending critical situations, communicating with media representatives, and handling crime scene liaison.
- Every day, social media platforms advertise the accomplishments of the CIT-related investigation unit and specialized units (Facebook, Twitter (X), Instagram, and other social media platforms). Facilitate continued engagement and liaison with external stakeholders such as NPA, SAPO, BACSA, PSIRA, SASSA, SABRIC, and CITASA.

Engaging in an Integrated Multidisciplinary approach through joint disruptive operational and intelligence structure to eradicate CIT robbery incidents. Regular communiqué and liaison, including briefing and debriefings, involving stakeholders, will be used to optimize the operational approach.

## **5.6 RECOMMENDATIONS FOR FUTURE RESEARCH**

There are possible avenues of future research that may add value to the emerging body of knowledge on CIT robbery in Limpopo Province, South Africa. Future research studies should be conducted to prevent and combat CIT robbery in the selected Limpopo Province areas, across the Republic of South Africa and elsewhere. The SAPS research division, academic institutions, and CIT companies should conduct more research on CIT robberies. This should entail detailed interviews with convicted CIT robbers to gain more information regarding their MO as well as to establish a complete profile of CIT robbers and syndicates. From this study, there is a need for further research to be carried out in the following areas:

- The role of social media as a mechanism in combating CIT robberies in the Limpopo Province, South Africa.
- To examine the effectiveness of CIT companies' security measures.
- To conduct a qualitative study on the role of first responder police performance in a CIT robbery crime scene in South Africa. Future research should utilize more instruments in data collection, and data gathered through interviews to create more validity and reliability in the findings.

## **5.7 CONCLUSION**

In conclusion, this study discovered both positive and negative research findings relating to the phenomena under investigation. Therefore, the negative findings of this study have highlighted an uninspiring interpretation of the subject matter under investigation. The aim of this study was to analyse the use of MO as an identification technique in investigating CIT robberies. The research findings indicate that CIT robbery is a challenging issue in the Limpopo Province, South Africa. This study also outlined the nature and extent to which CIT robbery occurs in South Africa. This study made empirical and significant contributions by exploring and describing the MO used by perpetrators in the commission of CIT robberies. Therefore, should the SAPS and other relevant stakeholders consider the implementation of the recommendations discussed in this Chapter, it would greatly curb CIT robberies. In addition, the MO of CIT robbers could be established, case linkage could be made, re-opening of undetected case dockets could be made, and increased arrests could be effected. As a result, the community members and CIT companies will have more trust in the police

if the cases are sufficiently investigated and result in the successful prosecution of the perpetrators.

The importance of utilization of MO in the investigation of CIT robbery cases is of paramount importance when it comes to addressing serious and violent crimes such as CIT robberies. In addition, MO has been successfully utilized internationally as a perpetrators' identification technique to link multiple cases and identify responsible perpetrators for committing crimes. This study proposed an integrated multidisciplinary operational approach model in response to CIT robbery, comprising of five pillars as illustrated in Figure 5.1, which forms a practical solution to effectively deal with CIT robbery in Limpopo Province.

The study was underpinned by the qualitative approach and interpretive paradigm. In that respect, purposive sampling was adopted to select a sample of fifteen experienced DPCI–SOCIU investigators to unearth insights. In the end, the researcher noted that the study successfully addressed the problem statement, achieved the research objectives, and answered the research question.

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## ANNEXURE A: SAPS PERMISSION TO CONDUCT RESEARCH

SUID-AFRIKAANSE POLISIEDIENS  SOUTH AFRICAN POLICE SERVICE

Privaatsak/Private Bag X 94

Reference:	3/34/2
Enquiries:	Col (Dr) Smit W/O Thenga
Telephone:	(012) 342 7866 082 778 8629
Email	<a href="mailto:ThengaS@saps.gov.za">ThengaS@saps.gov.za</a>
Address:	

THE HEAD: RESEARCH  
SOUTH AFRICAN POLICE SERVICE  
PRETORIA  
0001

The National Head  
**DIRECTORATE FOR PRIORITY CRIME INVESTIGATION**

**PERMISSION TO CONDUCT RESEARCH IN THE SOUTH AFRICAN POLICE SERVICE: UNIVERSITY OF SOUTH AFRICA: MASTERS DEGREE: AN ANALYSIS OF THE USE OF MODUS OPERANDI AS AN IDENTIFICATION TECHNIQUE IN THE INVESTIGATION OF CASH-IN-TRANSIT ROBBERIES IN LIMPOPO PROVINCE: RESEARCHER: L RAMATSITSI**

1. Regarding the abovementioned heading refers.
2. The researcher, L Ramatsitsi, is conducting a study topic/titled: *“An analysis of the use of Modus Operandi as an identification technique in the investigation of Cash-In-Transit Robberies in Limpopo Province”* and requests permission to conduct research in the SAPS.
3. The research proposal was perused by the Component: Research according to the National Instruction 4 of 2022. Therefore, this office recommends that the research study be permitted, subject to the final comments and further arrangements by the office of the National Head: Directorate for Priority Crime Investigation.
4. The aim of the study is *“to analyse the use of Modus Operandi as an identification technique in the investigation of Cash-In-Transit Robberies”*. Furthermore, the researcher selected to conduct a qualitative research study to collect data by conducting interviews.

**PERMISSION TO CONDUCT RESEARCH IN THE SOUTH AFRICAN POLICE SERVICE: UNIVERSITY OF SOUTH AFRICA: MASTERS DEGREE: AN ANALYSIS OF THE USE OF MODUS OPERANDI AS AN IDENTIFICATION TECHNIQUE IN THE INVESTIGATION OF CASH-IN-TRANSIT ROBBERIES IN LIMPOPO PROVINCE: RESEARCHER: L RAMATSITSI**

5. The researcher, L Ramatsitsi, request to collect data by approaching fifteen (15) investigators at the Provincial Directorate for Priority crime Investigation: Limpopo in line with the proposed topic/title.
6. This office hereby requests your support on the condition that your office agrees with our recommendations and confirms the proposed official research is viable. Additionally, your office has the authority to set terms and conditions for the researcher to comply with set standards to be followed during the research study process and not harm the SAPS' image.
7. Kindly find the relevant documents of the requested application topic/titled "**An analysis of the use of Modus Operandi as an identification technique in the investigation of Cash-In-Transit Robberies in Limpopo Province**" for your consideration:

**Annexure A:** Application to conduct research;

**Annexure B:** Signed undertaking;

**Annexure C:** Research proposal; and

**Annexure D:** Research approval from University of South Africa.

8. The researcher will conduct the research at his/her own expense.
- 8.1 The researcher will conduct the research without the disruption of the duties of the participating members of the Service. **In addition, the researcher must communicate and make prior arrangements with the respective commanders of the participating members of the study.**
- 8.2 The researcher, L Ramatsitsi, should bear in mind that participation in interviews must be voluntary.
- 8.3 Information will at all times be treated as strictly confidential.
- 8.4 The researcher, L Ramatsitsi, will provide an electronic copy of the final report to the Service.
- 8.5 The researcher, L Ramatsitsi, will ensure that the research report complies with all conditions for the approval of research.

**PERMISSION TO CONDUCT RESEARCH IN THE SOUTH AFRICAN POLICE SERVICE: UNIVERSITY OF SOUTH AFRICA: MASTERS DEGREE: AN ANALYSIS OF THE USE OF MODUS OPERANDI AS AN IDENTIFICATION TECHNIQUE IN THE INVESTIGATION OF CASH-IN-TRANSIT ROBBERIES IN LIMPOPO PROVINCE: RESEARCHER: L RAMATSITSI**

9. Should your office be in agreement with this research request and to facilitate smooth coordination between your office and the researcher, the following information is kindly requested to be forwarded to our office within **18 days** after receipt of this letter.
- **Signed Certificate/Letter:** Confirm the proposed research request is viable;
  - **Contact person:** Rank, Initials and Surname; and
  - **Contact details:** Telephone number and email address.
10. Your cooperation will be highly appreciated.

  
**MAJOR GENERAL**  
**THE HEAD: RESEARCH**  
**DR PR VUMA**

Date: 2023-10-13

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Privaatsak Private Bag X94	Pretoria 0001	Faks No. Fax No.	(012) 432 7866
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Your reference/U verwysing:

My reference/My verwysing: **3/34/2**

THE HEAD: RESEARCH  
SOUTH AFRICAN POLICE SERVICE  
PRETORIA  
0001

Enquiries/Navrae: **Col (Dr) Smit**  
**W/O Thenga**  
**(012) 432 7866**  
Tel: **[ThengaS@saps.gov.za](mailto:ThengaS@saps.gov.za)**  
Email: **[ThengaS@saps.gov.za](mailto:ThengaS@saps.gov.za)**

**APPROVED**

**L Ramatsitsi**  
**UNIVERSITY OF SOUTH AFRICA**

**RE: PERMISSION TO CONDUCT RESEARCH IN THE SOUTH AFRICAN POLICE SERVICE:  
UNIVERSITY OF SOUTH AFRICA: MASTERS DEGREE: AN ANALYSIS OF THE USE OF  
MODUS OPERANDI AS AN IDENTIFICATION TECHNIQUE IN THE INVESTIGATION OF  
CASH-IN-TRANSIT ROBBERIES IN LIMPOPO PROVINCE: RESEARCHER: L RAMATSITSI**

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

The National Head: Directorate for Priority Crime Investigation:

- **Contact Person:** Brig RM Matthews
- **Contact Details:** 012 846 4315/082 563 5762
- **Email address:** [MatthewsR@saps.gov.za](mailto:MatthewsR@saps.gov.za)

4. Kindly adhere to paragraph 8 of our attached letter signed on **2023-10-13** with the same abovementioned reference number.

  
**MAJOR GENERAL**  
**THE HEAD: RESEARCH**  
**DR PR VUMA**

Date: **2023-11-30**

## ANNEXURE B: DPCI PERMISSION TO CONDUCT RESEARCH



Ref no: 3/34/2(84)

### INFORMATION NOTE

To: National Head  
Directorate for Priority Crime Investigation

**PERMISSION TO CONDUCT RESEARCH IN THE DIRECTORATE FOR PRIORITY CRIME INVESTIGATION: UNIVERSITY OF SOUTH AFRICA: MASTERS DEGREE: AN ANALYSIS OF THE USE OF MODUS OPERANDI AS AN IDENTIFICATION TECHNIQUE IN THE INVESTIGATION OF CASH-IN-TRANSIT ROBBERIES IN LIMPOPO PROVINCE: RESEARCHER: L RAMATSITSI**

#### 1. Purpose

- 1.1. The purpose of the information note is to seek the approval of the National Head for research to be conducted by Researcher: L Ramatsitsi within the Directorate for Priority Crime Investigation (DPCI).


#### 2. Background

- 2.1. The Researcher: L Ramatsitsi is conducting a study titled: "An analysis of the Modus Operandi as an identification technique in the investigation of cash-in-transit robberies in Limpopo Province".
- 2.2. The researcher is requesting permission to interview fifteen (15) members from Limpopo Province, Serious Organised Crime Investigation (SOCl).

#### 3. Attachments

- 3.1. Application letter from Division: Research with ref. number 3/34/2 dated 2023-09-21
- 3.2. Research proposal (Detail of studies) which contains the following:
  - Problem statement
  - Research objectives
  - Research questions
- 3.3. The research application has been perused and recommended for permission by the Division: Research and found to be compliant with the National Instruction 1 of 2006: Research in the South African Police Service.

PERMISSION TO CONDUCT RESEARCH IN THE DIRECTORATE FOR PRIORITY CRIME INVESTIGATION: UNIVERSITY OF SOUTH AFRICA: MASTERS DEGREE: AN ANALYSIS OF THE USE OF MODUS OPERANDI AS AN IDENTIFICATION TECHNIQUE IN THE INVESTIGATION OF CASH-IN-TRANSIT ROBBERIES IN LIMPOPO PROVINCE: RESEARCHER: L RAMATSITSI

  
BRIGADIER  
SECTION HEAD: STRATEGIC MANAGEMENT: GOVERNANCE AND CORPORATE SERVICES  
DIRECTORATE FOR PRIORITY CRIME INVESTIGATION  
RM MATTHEWS

Date: 2023-10-18

Application recommended/ ~~not recommended~~

Comments:

  
MAJOR GENERAL  
COMPONENT HEAD: GOVERNANCE AND CORPORATE SERVICES  
DIRECTORATE FOR PRIORITY CRIME INVESTIGATION  
DM MOLATJANA

Date: 2023/10/18

Application recommended/ ~~not recommended~~

  
LIEUTENANT GENERAL  
DEPUTY NATIONAL HEAD: DIRECTORATE FOR PRIORITY CRIME INVESTIGATION  
ST NKOSI

Date: 2023-10-19

PERMISSION TO CONDUCT RESEARCH IN THE DIRECTORATE FOR PRIORITY CRIME INVESTIGATION: UNIVERSITY OF SOUTH AFRICA: MASTERS DEGREE: AN ANALYSIS OF THE USE OF MODUS OPERANDI AS AN IDENTIFICATION TECHNIQUE IN THE INVESTIGATION OF CASH-IN-TRANSIT ROBBERIES IN LIMPOPO PROVINCE: RESEARCHER: L RAMATSITSI

Application approved/~~not approved~~

Comments:



LIEUTENANT GENERAL  
ACTING NATIONAL HEAD: DIRECTORATE FOR PRIORITY CRIME INVESTIGATION  
ST NKOSI

Date: 2023-10-20



## ANNEXURE C: UNISA ETHICAL CLEARANCE



College of Law\_RERC

Date: 11/09/2023

Dear: Mr Ramatsitsi Lufuno

Ref #: 1514

Name: Mr Ramatsitsi Lufuno

Student #: 59589884

**Decision: Ethics Approval from  
11/09/2023 to 11/09/2026**

**Researcher:** Mr Ramatsitsi Lufuno

DPCI Limpopo, Musina Serious Organised Crime Investigation, Mbilwi Street, SIBASA  
Polokwane

59589884@mylife.unisa.ac.za 0727639024

**Supervisor:** Dr Dumisani Quiet Mabunda mabundq@unisa.ac.za

### **AN ANALYSIS OF THE USE OF MODUS OPERANDI AS AN IDENTIFICATION TECHNIQUE IN THE INVESTIGATION OF CASH-IN-TRANSIT ROBBERIES IN LIMPOPO PROVINCE**

**Qualification:** Master of Arts in Criminal Justice

Thank you for the application for research ethics clearance by the College of Law\_RERC for the above mentioned research study Ethics approval is granted for three years.

The **medium risk application** was **reviewed** by College of Law\_RERC on **11/09/2023** in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the College of Law\_RERC.
3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.

5. 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. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
7. No field work activities may continue after the expiry date 11/09/2026. Submission of a completed research ethics progress report will constitute an application for renewal, for Ethics Research Committee approval.

**Additional Conditions**

1. Disclosure of data to third parties is prohibited without explicit consent from Unisa.
2. De-identified data must be safely stored on password protected PCs.
3. Care should be taken by the researcher when publishing the results to protect the confidentiality and privacy of the university.
4. Adherence to the National Statement on Ethical Research and Publication practices, principle 7 referring to Social awareness, must be ensured: "Researchers and institutions must be sensitive to the potential impact of their research on society, marginal groups or individuals, and must consider these when weighing the benefits of the research against any harmful effects, with a view to minimising or avoiding the latter where possible." Unisa will not be liable for any failure to comply with this principle.

**Note**

The reference number 1514 should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Kind regards,



Prof Lincoln Fitz  
Chair of College of Law\_RERC  
E-mail: fitzlg@unisa.ac.za



Executive Dean / By delegation from the Executive Dean of College of Law\_RERC  
E-mail: koleoj@unisa.ac.za

## **ANNEXURE D: PARTICIPANT INFORMATION SHEET AND PRIOR INFORMED CONSENT FORM**

Ethics Clearance Reference Number. #1514

Research Permission Reference Number: 3/34/2

2023-09-11

Title: An analysis of the use of *modus operandi* as an identification technique in the investigation of Cash-In-Transit robberies in Limpopo Province, South Africa

### **Dear Prospective Participant**

My name is Mr Lufuno Ramatsitsi and I am doing research with Prof DQ Mabunda, a professor in the Department of Police Practice towards a Master of Arts in Criminal Justice at the University of South Africa. We are inviting you to participate in a study entitled: An analysis of the use of *modus operandi* as an identification technique in the investigation of Cash-In-Transit robberies in Limpopo Province, South Africa.

### **PURPOSE OF THE STUDY**

The aim of this research study is to analyse the use of *modus operandi* as an identification technique in investigating Cash-In-Transit robberies in Limpopo Province.

### **WHY AM I BEING INVITED TO PARTICIPATE?**

The research study targets the police investigators attached to Polokwane, Phalaborwa and Musina Serious Organised Crime Investigation Unit, of the Directorate for Priority Crime Investigation in Limpopo Province to give insight into the use of *modus operandi* as an identification technique when investigating Cash-In-Transit robbery cases. The police investigators of Cash-In-Transit robberies purposively sampled by the researcher, as they are known to be the custodians of investigating all CIT robbery incidents in Limpopo Province.

### **WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?**

The participant will be expected to participate in audio taping semi-structured interviews or face-to-face interviews for a duration of at least 30 – 60 minutes, whereby

interview questions will be asked in accordance with the interview schedule. Follow up questions will be asked where clarity is needed.

### **CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?**

Participation in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw from the study at any time, and do not need to give a reason for your decision. All data will be destroyed and not used in the study if you should choose to withdraw from it.

### **WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?**

There will be no financial benefits from participating in this study. However, the participants will benefit because the information that they will provide will assist the police in their strategies, operations and investigations of CIT robbery. The researcher hopes that by participating in the study the participants will assist in providing insight into the problem that may stimulate future research and thus be of even greater benefits in the future. The research will also empower and shed law enforcement bureaucrats about *modus operandi* as a technique that can assist to fight CIT robbery.

### **ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?**

The topic of this study does not deal with any personal and emotional issue that could be potentially sensitive. The data collected in this study will focus on your experience and perspective, which will not include any personal information.

### **WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?**

You have the right to anonymity and confidentiality. If you wish to remain anonymous your answers will be provided a pseudonym and will therefore be referred to in this way in the study, or any other research reports.

Your answers may be reviewed by people responsible for making sure that research is done properly, including the transcriber, external coder, and member of the Research Ethics Review Committee. Otherwise, record that identify you will be

available only to people working on the study, unless you give permission for other people to see the records. The anonymous data may be used for other purposes, such as research report, journal articles and/or conference proceedings. Your privacy will be permission for other people to see the records.

### **HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?**

Hard copies of your answers will be stored by the researcher for the mandatory five-years in a locked strong safe for future research or academic purposes; electronic information will be stored in password protected computer. After the five-year period, hard copies and data will be shredded, and electronic copies will be permanently deleted from the hard drive of my computer using a relevant software programme. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable.

### **WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?**

All participation is voluntary; there will be no compensation or remuneration for participating in this study.

### **HAS THE STUDY RECEIVED ETHICAL APPROVAL?**

This study received written approval from the Research Ethic Committee of the College of Law, Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

### **HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?**

Findings from the study will be available after completion of the examination process. You are welcome to contact me if you wish to be informed of the research findings or require any further information about the study. My contact details are: Mr Lufuno Ramatsitsi on 072 763 9024 or E-mail: [59589884@mylife.unisa.ac.za](mailto:59589884@mylife.unisa.ac.za). The findings are accessible for five years.

Should you have concerns about the way in which the research was conducted, you may contact Prof DQ Mabunda on E-mail: [mabundq@unisa.ac.za](mailto:mabundq@unisa.ac.za) or Tel: 012 433 9467. Contact the research ethics chairperson of the CLAW Research Committee,

Prof LG Fitz on E-mail: [FitzLG@unisa.ac.za](mailto:FitzLG@unisa.ac.za) or Tel: 012 433 9426 if you have any ethical concerns.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you

A handwritten signature in black ink, appearing to read 'L Ramatsitsi', is positioned above a horizontal line.

Mr Lufuno Ramatsitsi

## CONSENT TO PARTICIPATE IN THIS STUDY

I, \_\_\_\_\_ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the semi-structured interviews. Further, the semi-structured interview will be audio recording for purposes of this study.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname..... (please print)

Participant Signature.....Date.....

Researcher's Name & Surname.....(please print)

Researcher's signature.....Date.....

## **ANNEXURE E: INTERVIEW SCHEDULE**

**PARTICIPANT NUMBER:** \_\_\_\_\_

**TOPIC:** An analysis of the use of *modus operandi* as an identification technique in the investigation of Cash-In-Transit robberies in Limpopo province, South Africa

### **RESEARCH AIM:**

- The aim of this study is to analyse the use of *modus operandi* as an identification technique in investigating Cash-In-Transit robberies.

### **RESEARCH QUESTION:**

- How can *modus operandi* be used as an identification technique in the forensic investigation of Cash-In-Transit robberies?

Dear participants,

You are kindly requested to answer the following questions in this interview schedule, for the researcher. The questions, responses and the results will be revealed.

Privacy will be maintained throughout the study, the researcher will ensure that all participants are treated equally regardless of their socio-economic status. The information given will be treated with confidentiality and no other person will have access to interview data. The researcher will ensure that participants are treated equally regardless of their socio-economic status whether illiterate or learned and privacy will be maintained throughout the study. The participants to the research will remain unanimous. The information you provide will be used in a research project for a Master of Arts in Criminal Justice registered with the Programme Group: Police Practice at the University of South Africa. The analysed and processed data will be published in a research report.

The interviewer himself, on paper, will note your answers. Should any question be unclear, please ask the researcher for clarification. Only one answer per question is required. When answering the question, it is important to give your own opinion.



Written permission has been obtained from the UNISA CLAW Ethics Review Committee and South African Police Service (SAPS) in advance, for the interview to be conducted.

## **PARTICIPANT**

I hereby give permission to be interviewed and that information supplied by me can be used in this research.

YES	NO
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### **SECTION A: BACKGROUND INFORMATION**

1. Where are you working?

2. What is your rank?

Constable	Sergeant	Warrant Officer	Captain	Lt-Colonel	Colonel
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3. How long have you been in a place of employment?

1 – 5 Years	5 – 10 Years	10 – 15 years	15 – 20 years	20 years and above
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4. Do you currently investigate Cash-In-Transit (CIT) robbery cases?

YES	NO
-----	----

5. For how long have you been investigating CIT robbery cases?

6. Did you undergo basic detective training or course?

YES	NO
-----	----

7. Did you receive any training in Cash-In-Transit robbery?

YES	NO
-----	----

8. What is your highest qualification?

**SECTION B: HOW CAN *MODUS OPERANDI* BE USED AS AN IDENTIFICATION TECHNIQUE IN THE FORENSIC INVESTIGATION OF CASH-IN-TRANSIT ROBBERIES?**

1. What do you understand regarding the concept of 'criminal investigation'?

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.....  
.....

2. What do you understand regarding the concept of 'forensic investigation'?

.....  
.....  
.....

3. What does the term identification mean?

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.....  
.....

4. Describe the different categories of identification?

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.....  
.....

5. What does the term individualisation mean?

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.....  
.....

6. What do you understand by the term Locard's Exchange Principle?

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7. What do you understand by the term organised crime?

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.....

8. Define the concept robbery?

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9. What are the elements of robbery?

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.....

10. What is your understanding of the concept of 'Cash-In-Transit robbery'?

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.....

11. What are the different types of Cash-In-Transit robberies you come across during your years of experience?

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.....  
.....

12. Stipulate the charges that are used for Cash-In-Transit robbery cases?

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13. What are the legislative frameworks governing the police in South Africa?

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14. How would you define 'Modus Operandi'?

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.....

15. In your experience, what is the purpose of modus operandi in the investigation of Cash-In-Transit cases?

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16. How can modus operandi be used to identify Cash-In-Transit robbery perpetrators?

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.....  
.....

17. What is the modus operandi of perpetrators in Cash-In-Transit robbery cases in Limpopo Province? Please elaborate?

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.....  
.....

18. Based on your experience, what are some of the factors that influence modus operandi in Cash-In-Transit robbery?

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.....  
.....

19. Through your experience, have you used modus operandi to investigate any cases?

YES	NO
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20. If your answer to Question 19 is 'yes', under what circumstances did you use modus operandi?

.....  
.....  
.....

Thank you for your participating in this interview.

**ANNEXURE F: RELATED FIGURES**



**\*Static Armoured vehicle attack**



**\*Armoured vehicle on road attack**



**\*Gate away perpetrators vehicle**



**\*Armoured vehicle on road attack crime scene contamination**





**\*Targeted CIT cross-pavement carriers or cash warrior bag**



**\*Currency protection device**



**\*Dye stain cash notes**

## ANNEXURE G: CONFORMATION OF LANGUAGE EDITING CERTIFICATE

Independent Editor Dr Nhlankhla Landa	landamasuku@gmail.com +27835841854
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Professional  
**EDITORS**  
Guild

**CERTIFICATE OF EDITING**

This document certifies that a copy of the dissertation whose title appears below was edited for proper English language usage, grammar, punctuation, spelling, and overall style by Dr Nhlankhla Landa whose academic qualifications and professional affiliation appear in the footer of this document. The research content and the author's intentions were not altered during the editing process.

**TITLE: AN ANALYSIS OF THE USE OF *MODUS OPERANDI* AS AN IDENTIFICATION TECHNIQUE IN THE INVESTIGATION OF CASH-IN-TRANSIT ROBBERIES IN LIMPOPO PROVINCE, SOUTH AFRICA**


**AUTHOR: LUFUNO RAMATSITSI (STUDENT NUMBER 59589884)**

Note: The edited work described here may not be identical to that submitted. The author, at their sole discretion, has the prerogative to accept, delete, or change amendments made by the editor before submission. The completeness and accuracy of the reference list remain responsibilities of the client. Equally, the overall quality of the document is the responsibility of the client.

DATE: 10 NOVEMBER 2024

**EDITOR'S COMMENT**

The author was advised to effect suggested corrections regarding clarity of terms, consistency in structure and logic, in-text references, and expression. The reference list was not edited.



Signature

PhD Applied Linguistics (UFH), MA Applied Linguistics (MSU), BA (Honours) English and Communication (MSU)  
Professional Membership: A member of the Professional Editors Guild, South Africa



## ANNEXURE H: TURNITIN REPORT

Similarity Report	
PAPER NAME	AUTHOR
<b>Lufuno Ramatsitsi completed dissertation edited.docx</b>	<b>LUFUNO RAMATSITSI</b>
WORD COUNT	CHARACTER COUNT
<b>42456 Words</b>	<b>246958 Characters</b>
PAGE COUNT	FILE SIZE
<b>170 Pages</b>	<b>12.4MB</b>
SUBMISSION DATE	REPORT DATE
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