

**EVALUATION OF MODUS OPERANDI AS A PERPETRATOR IDENTIFICATION
TECHNIQUE IN THE INVESTIGATION OF RAPE CASES**

by

FIKRE WOLDEGBEBRIEL BADORE

Submitted in fulfilment of the requirements for the degree of

**MAGISTER TECHNOLOGIAE
(FORENSIC INVESTIGATION)**

SCHOOL OF CRIMINAL JUSTICE

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: DR. H.T. LOCHNER

JANUARY 2018

DECLARATION

I, Fikre Woldegebriel Badore, student number 37019031, hereby declare that this dissertation, "**Evaluation of modus operandi as a perpetrator identification technique in the investigation of rape cases,**" is my own work and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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

Fikre Woldegebriel Badore
SIGNATURE



DATE 20 Jun 2018

DEDICATION

I dedicate this research to the late Assistant Commissioner Tsegaye D.Baffa, who sadly passed away on 29 July 2013 after a short illness. Tsegaye was the former Director of Ethiopian Police University College (EPUC), Sendafa, Ethiopia. Tsegaye D.Baffa was a senior researcher in the conflict management of the Institute for Security Study (ISS). He was also a doctoral candidate at the School of Business Leadership, University of South Africa. It is due to his influence and exemplary leadership that I started to conduct this research.

ACKNOWLEDGEMENTS

A number of people contributed to the completion of this dissertation. To them my sincere thanks:

- Dr Hennie Lochner, my supervisor, for his utmost patience, invaluable guidance and support, who helped me to maintain my focus through this research, and also for his mentorship within my work environment;
- The University of South Africa for the facilities they have put at my disposal during the research;
- The Ethiopian Federal Police Service (EFPS) who granted me permission to conduct the study and access the information at their disposal;
- Abebaw Faris (Inspector) my friend, thank you for your utmost patience and support of invaluable editing, which helped to finish my work.
- Chief Sergeant Melkamu Legese and Sergeant Senkenesh Tesfaye who assisted me in accessing the participants at the individual police stations for the interviews;
- All the participants who were willing to grant me interviews;
- Earetero Abo my friend, thank you for your continuous encouragement in very low and high times, always giving advice at the right time, helping me immensely in all you do and achieve;
- My sister Abebech Woldegebriel, for your never ending love, support and the times you took care of our family. The support that I have received from you has been tremendous;
- Martha Mulegeta, my wife, for your constant love, support and encouragement through very difficult times during this research. You never stopped believing in my capability to finish this research;
- Finally, a special word of thanks to my children Emanuel and Biruktawit, who had to sacrifice so many hours of our precious family time to grant me the opportunity to do the research.

LANGUAGE EDITOR CERTIFICATE OF COMPLETION

This is to certify that I, the undersigned, have edited the dissertation entitled Evaluation of Modus Operandi as a Perpetrator Identification Technique in the Investigation of Rape Cases by Fikre Woldegebriel. The edit has been carried out according to the following criteria.

Edit to consist of checking grammar, spelling, punctuation etc. Content is author's responsibility. Editor will not impose a style of formatting on the document, but will ensure that the author's style is consistently applied.

Edit will include checking of basic factual data, but will **exclude** verification of technical or specialist data, terminology etc. Editor will **not** verify accuracy of quotations, references and source documentation. Edit **excludes** rewriting or overwriting of script.

Editor will make every effort to ensure that publication does not transgress laws of libel, defamation etc., or norms of decency; ethical standards etc., but takes no responsibility should such be found to be inherent in the publication.

I confirm that the edited document is, subject to the corrections referred to above, substantially the same as that which was submitted for editing, and that no changes to the content have been made by the editor. I have made certain suggestions as to the presentation of the dissertation, but acceptance and inclusion of such suggestions remains in the hands of the author.

Signed



David Graham Townshend
Associate Member

Membership number: TOW001
Membership year: March 2017 to February 2018

+44 (0) 1788 461 987
+44 (0) 7388 411 580
grahamtownshend@gmail.com

www.editors.org.za

ABSTRACT

Rape is a serious crime and is a huge problem in Ethiopia. It has a devastating effect on the victim and society as a whole. The Ethiopian news is peppered with reports of this crime. An organized and sophisticated way in which the perpetrators of rape can be identified is by the use of modus operandi information.

The aim of this research is to evaluate how modus operandi can be used as a perpetrator identification technique in the investigation of rape cases in the Gulele policing area. For any investigation to be successful, the investigator must have the objectives of crime investigation in mind.

In the investigation of crime, the collection of evidence is important and there are two basic important principles, namely Locard's principle and the chain of custody that investigator must comply with. These will ensure that evidence is admissible during a trial.

Evidence is found on a crime scene. In rape cases, the body of the perpetrator and the victim can be seen as the crime scene. For evidence to be applicable to the investigation, it must first be identified and then individualised.

It is important for investigators to be familiar with the concept of modus operandi, and the influencing factors. The purpose of this research is to provide practical recommendations on the best practices for the use of modus operandi.

Key terms

Rape, modus operandi, crime scene, the body of the victim and perpetrator as a crime scene, Locard's principle, contamination of evidence, chain of evidence, objectives of crime investigation.

TABLE OF CONTENTS

DECLARATION	i
DEDICATION	ii
ACKNOWLEDGEMENTS	iii
LANGUAGE EDITOR CERTIFICATE OF COMPLETION	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF ABBREVIATIONS	ix
1. CHAPTER ONE: GENERAL ORIENTATION	1
1.1 Introduction	1
1.2 Problems experienced during the research	1
1.3 Problem statement	1
1.4 Aim of the research	2
1.5 Purpose of the research	2
1.6 Value of the research	3
1.7 Research questions	4
1.8 Definition of key theoretical concepts	4
1.9 Research design and approach	5
1.10 Target population and sampling	6
1.11 Data collection	7
1.12 Data analysis	8
1.13 Trustworthiness	9
1.13.1 Credibility	9
1.13.2 Transferability	9
1.13.3 Dependability	10
1.13.4 Conformability	10
1.14 Ethical consideration	10
1.15 Research structure	11
2. CHAPTER 2: CRIME INVESTIGATION	13
2.1 Introduction	13
2.2 Criminal investigation	13
2.2.1 The reconstruction of past events	14
2.2.1.1 Reconstructive process	14

2.2.2	Systematic.....	15
2.2.3	The truth.....	16
2.2.4	Objective and subjective clues	16
2.2.4.1	The investigator’s role in crime investigation.....	18
2.2.4.2	Characteristics of an investigator	19
2.3	The objectives of criminal investigation	21
2.3.1	To determine whether a crime has been committed	21
2.3.2	To collect evidence	22
2.3.2.1	Contamination of evidence.....	22
2.3.2.2	Chain of custody	23
2.3.3	Arrest the suspect	25
2.3.4	To recover stolen property	25
2.3.5	To present the best possible case to the prosecutor.....	25
2.3.6	To identify the perpetrator	25
2.4	The crime scene.....	26
2.4.1	The Locard principle.....	26
2.4.2	The place where a crime is committed.....	27
2.4.3	The value of a crime scene	28
2.5	Different types of scenes.....	29
2.5.1	Primary crime scene	29
2.5.2	Secondary crime scene.....	30
2.6	Victims and perpetrators body as a scene of crime.....	30
2.6.1	The victim’s body	30
2.6.2	The perpetrator’s body	33
2.7	Medical examination	33
2.8	Summary.....	34
3.	CHAPTER 3: MODUS OPERANDI	36
3.1	Introduction	36
3.2	Identification and individualization.....	36
3.2.1	Identification	36
3.2.2	Individualisation.....	38
3.3	Meaning of modus operandi information	38
3.4	Modus operandi as an identification technique	40

3.4.1	Modus operandi information found on rape crime scenes.....	41
3.4.2	Difference between modus operandi and the signature of a perpetrator	42
3.5	Factors that can influence the modus operandi perpetrators of rape	43
3.6	The value of recorded modus operandi information	45
3.7	Summary.....	46
4.	CHAPTER 4: FINDINGS AND RECOMMENDATIONS.....	47
4.1	Introduction	47
4.2	Findings.....	47
4.2.1	Primary findings	47
4.2.2	Secondary findings.....	48
4.3	Recommendations	49
4.4	Conclusion	50
5.	LIST OF REFERENCES.....	51
6.	APPENDIXES.....	57
6.1	Appendix A: Interview schedule	57

LIST OF ABBREVIATIONS

AAPC	Addis Ababa Police Commission
CFDRE	Constitution of the Federal Democratic Republic of Ethiopia
CPCE	Criminal Procedure Code of Ethiopia
DNA	deoxyribonucleic acid
EFPS	Ethiopian Federal Police Service
EPS	Ethiopian Police Service
EPUC	Ethiopian Police University College
FCSU	Family Violence, Child Protection and Sexual Offence Unit
FDRE	Federal Democratic Republic of Ethiopia
ISS	Institute for Security Studies
UNISA	University of South Africa

1. CHAPTER ONE: GENERAL ORIENTATION

1.1 Introduction

In crime investigation, it is imperative that the investigator use all possible lawful resources, methods, and techniques to investigate the crime, to identify the perpetrator and to establish the truth. To determine the identity of the perpetrator or suspect of a criminal act is the principle objective of crime investigation. The collection of information and facts is done to determine the identity of the offender, and this remains the crux of any investigation. In the investigation of crime, there are well-established methods to determine the identity of the perpetrator. One of these methods is the use of modus operandi information.

According to Locard's principle, a rape crime scene will contain a significant amount of evidence and information. This information can include the modus operandi of the perpetrators.

1.2 Problems experienced during the research

During the research, the researcher was sent for long periods on peacekeeping missions to the Republic of Sudan. This prolonged the research and rendered the information in the problem statement as old. The majority of the interviews were done before the last two missions, which may have an influence on the answers of the participants if the same questions were asked now because of more training received and experienced gain. The interviews were conducted in English, which is not the participants' mother tongue. The researcher, however, made sure that the participants did understand the questions and where the answer provided was not in English, the translation of the information was explained to the participants.

1.3 Problem statement

According to De Vos, Strydom, Fouche, Delport (2011:108) and Hofstee (2006:85), the researcher must take time to formulate a proper problem statement. They state that without a good problem statement there can be no research. The main reason for undertaking this research is that there are rape cases in Ethiopia, analysis of which indicate that investigators know little about the use of modus operandi in the investigation of rape cases. To determine the extent of the problem the researcher had a discussion during the pre-investigation to the research with Atsede (2012), a

deputy commander at Addis Ababa Police Commission (AAPC), Family Violence, Child Protection and Sexual Offences Unit (FCSU). The researcher was informed that out of 912 rape cases reported for the period January 2010 to December 2011, only 9.8% ended up in convictions of the perpetrators. According to Atsede (2012), the Ethiopian Police Service (EPS) is neglecting the use of modus operandi information when it comes to the investigation of rape cases.

The researcher observed in his capacity as a commissioned police official in the Gulele policing area that modus operandi in rape cases are not used in an effort to identify perpetrators. Through the researcher's experience as a detective in the EPS and inspections of case dockets as part of his official duty, it was evident that investigators do not use modus operandi information to identify and link rape suspects to the crime, crime scene and the victim. In most instances, the investigators rely only on the evidence of the complainant, despite the fact that modus operandi evidence is available and documented in the case docket. The analysis of dockets also revealed that when investigating officers disregard modus operandi, which are available, it leads to suspects not being identified and therefore not being arrested. This results in a low conviction rate as dockets are not placed on court rolls.

To focus on the problem, which is interesting, necessary and researchable, the researcher decided to do research on how modus operandi can be used as an identification technique to investigate rape cases in the Gulele policing area (De Vos et al., 2011:108 and Leedy & Ormrod, 2010:48).

1.4 Aim of the research

Flick (2011:89), Leedy and Ormrod (2010:48) and Mcniff & Whitehead (2010:11), emphasize that research aims are a statement of intent and are formulated to generate new knowledge. The researcher's claim to new knowledge has been generated by formulating the following aim: Evaluation of modus operandi as a perpetrator identification technique in the investigation of rape cases.

1.5 Purpose of the research

According to Babbie and Mouton (2011:85,323), Denscombe (2002:25), De Vos et al. (2011:95), and Singleton and Straits (2010:107), there may be different possible

purposes for doing research. With this in mind, the researcher focuses on the following as the purposes of this study:

- The researcher explored how investigators, both nationally and internationally, use modus operandi information to link suspects with the crimes, crime scenes and victims.
- The research is intended to apply the new knowledge of international practice to develop good practice in Ethiopia with regard to the use of modus operandi information in the investigation of rape cases. Recommended new procedures to enhance the investigation of rape cases where modus operandi is used as an identification technique to improve the conviction rate in court cases.
- To empower and educate investigators of rape cases on how to use modus operandi information to link perpetrators of rape with crimes, crime scenes and victims in order to become better and more effective and efficient in their investigations of rape cases. Other individuals who will also be empowered by this research are detectives who investigate other crimes by providing experience and new knowledge concerning the use of modus operandi information. In addition, the researcher attempts to empower his managers and commanders in the EPS by reporting the findings and providing recommendations on the research topic.
- To evaluate and analyze the use of modus operandi information in rape investigations. The research has analyzed literature and policies of the EPS with the intention of evaluating their strengths and weaknesses and to consider how things might be improved. To develop good practice, the newfound data were used to solve the research problem and make recommendations to address the problem under research.

1.6 Value of the research

Denscombe (2010:24) and De Vos et al. (2011:107), are of the opinion that the research must be able to be used for practical purposes and should be useful for the intended target group. It is expected that from the nature of this research, the EPS may benefit by considering implementing the research results. It is also expected that the general and specialised detectives within EPS will benefit, as it will be used to enhance investigation skills and to be used in training programs.

The academic community and the University of South Africa (UNISA) will benefit from the result of this research because it will contribute to the academic knowledge, and it will be valuable for curriculum development and for further research by academics and students. The society in the Gulele policing area will also benefit because there will be a decrease in the total number of rape cases because of the technique emanating from this research.

1.7 Research questions

According to Leedy and Ormrod (2013:39) questions can be an excellent way of collecting data and will provide guidelines on how the researcher should analyse and interpret data. De Vos et al. (2011:352) and Flick (2011:90) advise the researcher to follow a logical sequence and to limit the number of research questions. The researcher intends to focus on the following questions to guide the research study and achieve the research goal.

- What does criminal investigation entail?
- How can modus operandi be used as a perpetrator identification technique in the investigation of rape cases in the Gulele policing area?

1.8 Definition of key theoretical concepts

According to Leedy and Ormrod (2013:44-45) and Maree (2007:31) articulate key concepts of research must be defined operationally, i.e. the definition must interpret the term as it is used in relation to the research. For the purpose of this study the following concepts are contextualized below:

- **Criminal investigation**

Criminal investigation is the process of discovering, collecting, preparing, identifying and presenting evidence, to determine what happened and who is responsible (Bennett & Hess, 2007:06).

- **Modus operandi**

According to Turvey (2008:310) modus operandi is a Latin term that means 'method of operating.'

- **Evidence**

Evidence has been defined as the means employed for the purpose of proving an unknown or disputed fact (Ingram, 2009:24).

- **Identification**

Identification is defined as the collective aspect of the set of characteristics by which a thing is definitively recognizable or known (Ogle, 2004:6).

- **Perpetrator**

Bennett and Hess (2007:161) see a perpetrator as a person considered to be directly or indirectly connected with the execution of a crime, either by an overt act or by planning or directing it.

- **Rape**

According to Act 414 of 2004 the Criminal Code of the Federal Democratic Republic of Ethiopia (FDRE) proclamation rape is having sexual relations with another person under the following circumstances: (1) against the person's will, (2) while the person is under the influence of alcohol or drugs, (3) with a person who is feeble-minded or insane and (4) with a child who is under the age of consent as fixed by statute (Ethiopia, 2004:361).

- **Crime scene**

According to Lochner and Zinn (2015:10) a crime scene is the place where clues and evidence are found that will steer the investigation forwards.

1.9 Research design and approach

According to De Vos et al. (2011:143), and Singleton and Straits (2010:11) a search design is a plan of how the researcher intended to collect and analyse the data.

To support the empirical design, as described by Boeije (2010:11) and Denscombe (2010:109) the qualitative approach followed in this research did allow for 'flexibility and adaptability' within the research. The topic under investigation was explored in the natural setting and the semi-structured interviews allowed the participants to freely give of their experience. Provision was also made for additional questions to

clarify and explain incomplete answers. The interviews with the participants were conducted in their natural environments to obtain direct new information in their understanding and interpretation of the researched topic.

The design for this research is empirical because the production of knowledge for this research is based on experience and real-world observation of the participants (Singleton & Straits, 2010:11). In this research, the researcher purposefully sought the necessary information that was based on the experience of rape investigators.

1.10 Target population and sampling

The population is the totality of all the possible participant who meet the criteria set for a particular research project (Leedy & Ormrod, 2013:97). In this research the population will be the 25 investigators who investigated rape cases in the Gulele policing area in greater Addis Ababa Region. Because of time and financial constraints, the researcher was not able to interview all these investigators. From the population the researcher have drawn a random sample. In random sampling, each element has an equal and independent chance of selection. Leedy and Ormrod (2013:97) are of the opinion that in qualitative research the researcher selects a few participants, which can shed the best light on the phenomenon. The aim when selecting a sample in this qualitative research was to select the participants that could give robust and rich information of the phenomenon that was under investigation. This means that everyone that was selected had to be experienced investigators that investigate rape cases. Their experience ensured that they meet the criteria of people who lived or experience the circumstances of the phenomenon that was under investigation (Gray, 2014:208). In qualitative research there is no rules to the appropriate sample size, but because of the in depth interviews the sample size intend to be small (Wagner, Kawulich & Garner, 2012:88). With this information in mind an alphabetic name list was obtained from all the investigators that investigate rape cases in Gulele policing area. Their names were written on 25 pieces of paper and put in a bowl. Ten investigators were randomly selected. The findings of this research will only be applicable to the Gulele policing area.

1.11 Data collection

The qualitative research approach involves different methods of data collection. In this research a comprehensive literature study and semi-structured face to face individual interviews were conducted. Marshal and Rossman (2011:59) indicate that qualitative research can also be based on the experience of the researcher. This researcher has three years' experience in the field of rape investigations and had dealt with such incidents on a regular basis.

Maxfield and Babbie (2005:209) emphasise that the value of research depends on how the data is gathered. The manner in which the data is collected will depend on the type of research and the purpose of the research. According to De Vos et al. (2011:328, 341,376), Flick (2011:119,122) and Leedy and Ormrod (2010:146), documentation, observation, interviews, literature studies and case studies are all part of data collection methods. The researcher used the following methods to collect data:

- **Literature**

Various newly published national and international textbooks on the subject matter were used in this research with the object of answering the research questions and addressing the research problem. The sources also included articles and publications on websites, research dissertations and theses. Where applicable and relevant, the latest literature sources available were used as a reference in the study. The data that was obtained from the participants were compared with the literature sources. The information obtained from each of these the data collection techniques were integrated and compared with data already collected and correlated with each other.

- **Interview**

Personal interviews are the richest form of qualitative data and for this reason, the researcher conducted face-to-face interviews with investigators who have experience in investigation of rape cases. By conducting interviews, new factual and first-hand information on the topic, research problem and research questions were obtained. Participants were allowed to tell their stories in their own words.

To obtain the participants' views and opinions the researcher used semi structured interviews (Leedy & Ormrod, 2010:188). Ten interviews were done to give the researcher the opportunity to obtain elaborative and comprehensive views of the participants'. The semi-structured interviews were flexible to make provision for additional questions to clarify and explain vague responses from the participants. The interview questions were based on the research questions and aim of the research.

An interview schedule with open-ended questions, as described by Leedy and Ormrod (2005:147), was used, because this allows the participants to formulate their answers themselves. Before conducting the interviews, the researcher submitted the interview schedule to his supervisor at Unisa for review and comments. The answers of the participants' have been comprehensively recorded by the researcher. All interview records have been kept for later reference and transcription.

The researcher has 32 years of practical policing experience within the EPS, of which sixteen years were spent in the field of police training at the Ethiopian Police University College (EPUC). The researcher holds the rank of commander in the EPS and is currently a head of Forensic Investigation Directorate at the Ethiopian Federal Police Crime Investigation Bureau. The researcher made use of the personal practical experience that he has gained within the EPS in the field of Police Basic and Specialised Training Programs and in the investigation of rape cases and crime.

The researcher obtained a B-Tech degree in Policing from UNISA, an LLB degree in Law from the University of Ethiopian Civil Service, an Advanced Diploma from the EPUC, a Certificate in Policing from Legedadi Basic Police Training Centre. The researcher received internal as well as external training in the EPS.

1.12 Data analysis

According to De Vos et al. (2011:397), data analysis is the process of bringing order, structure and meaning to the mass of collected data. The researcher used the spiral method to analyse data (Leedy & Ormrod, 2010:153). The data collected by the researcher was analysed by breaking it down into convenient cognized trends and

patterns and to compare it with national and international literatures on rape cases. The data analysis process that was used is the four-step of spiral method to analyse data as described by Leedy and Ormrod (2010:153):

- The researcher organized the data by using a computer database.
- The researcher perused the entire data set several times to get a sense of what it contains as a whole.
- General themes and categories were identified, as well as subcategories and subthemes and then each piece of data was classified accordingly.
- The data was finally integrated and summarized. The outcome of the data analysis enabled the researcher to make findings and recommendations regarding the research questions.

1.13 Trustworthiness

Du Plooy-Cilliers, Davis and Bezuidenhout (2014:258) and Wagner et al. (2012:137), state that the term trustworthiness is used for validity and reliability in qualitative research. The researcher adhered to the following aspects to ensure that trustworthiness was maintained:

1.13.1 Credibility

In this research the data was correctly recorded as it was received from the participants. Multiple sources of data collection were used and extensive interviews were conducted. To ensure credibility, the interviews were open, relaxing and held in a safe environment. The latter helped the researcher to obtain a better understanding of the participants' insights to the problem. The fact that the findings are believable from the participant's point of view will increase the credibility of this study. Furthermore, the researcher remained neutral at all times during the study. Evidence and information were gathered based on the research questions to ensure that they measured what they were intended to measure as accurately as possible.

1.13.2 Transferability

The theoretical knowledge obtained from this qualitative study can be applied to other similar individuals, groups or situations. If another researcher applies the

findings to similar circumstances and use the same qualitative methods, the same results will be obtained.

1.13.3 Dependability

The researcher made sure that the research process and the data collection techniques were logical, traceable and clearly documented. Information regarding the methodology, data collection methods and coherent linkages between the data and reported findings is available. In this study, several methods were used to collect data to measure the same aspect.

To prevent erroneous deductions being made, the spiral method was used to analyse the data. The researcher was cautious and did not make his own deductions or suggestions to direct the opinions of the participants. The researcher also did not manipulate the data to fit a certain viewpoint.

1.13.4 Conformability

To ensure conformability, the researcher kept a detailed record of all literature consulted in order to show that the findings and the interpretations of those findings did not derive from the researcher's imagination. Information is linked to data and the findings and interpretations of the research study relate to the data collected. Since the researcher used the spiral method to analyse data, conformability was ensured. The detailed explanations of how the data was collected and analysed will enable other researchers to scrutinise the research design and, should they examine the data which was collected, they would be drawn to similar conclusions.

1.14 Ethical consideration

According to Creswell (2009:87) and Leedy and Ormrod (2010:101-104), ethical guidelines must be followed by the researcher at all times. The researcher did adhere to the following ethical issues during research:

- **Protection of the participants from harm.** The researcher conducted the interviews under circumstances where the participants were comfortable and not exposed to stress or embarrassment.
- **Obtain informed consent.** Participation in this study was voluntary. Participants were given sufficient information concerning the research in order to help them

to make an informed decision regarding their participation. Participants could withdraw at any stage. The necessary consent from the participants was obtained in writing.

- **Right to privacy should be respected.** No response by a participant will be disclosed in a manner that exposes the specific participant. The researcher allocated a code number to participants to honour their privacy.
- **Honesty with professional colleagues.** Researcher did not fabricate data to support a specific finding. All sources used in this research are acknowledged to avoid plagiarism.

1.15 Research structure

To address the research questions and to ensure that the problem under investigation is properly discussed, the researcher divided the report into the following chapters:

Chapter One

General orientation: This chapter provide a general introduction on the research topic, the aims, purpose and value of the research and the research methodology used in this research.

Chapter Two

Criminal Investigation: This chapter begins with an overview of the concepts of criminal investigation, the principles of investigation and, the objectives of criminal investigation; it also examines the characteristic that an investigator must possess to successfully investigate rape cases. In this chapter the two important investigation concepts, namely the Locard principle and chain of evidence is elaborated on. Finally, the chapter explains why a victim's body can be seen as a crime scene in the investigation of rape cases.

Chapter Three

Modus operandi: This chapter deals with the concept of identification and individualisation. The chapter further deals with the concept of modus operandi, factors that influence modus operandi during a criminal act, and why it can be used as a perpetrator identification technique.

Chapter Four

Findings and Recommendations: This chapter dealt with what the researcher found during the research and includes various recommendations on processes to be followed to enhance the use of modus operandi as an identification technique in the investigation of rape cases.

2. CHAPTER 2: CRIME INVESTIGATION

2.1 Introduction

Sexual assault, which includes rape, is one of the most traumatic types of crime, and which does have an emotional and physical effect on the victim. The emotional trauma is in most cases greater than the physical trauma. Rape happens on a daily basis, and it is the talking and discussion point of national and local television as well as of the printed media. According to the Constitution of the Federal Democratic Republic of Ethiopia (CFDRE) (1995), the members of the EFPS are mandated to prevent and investigate crime. It is, however, a fact that absolute prevention of a crime is impossible, and thus the police are bound to investigate crime that has been committed. Criminal investigations do not happen by themselves, and not everyone can be a criminal investigator. Investigation is the systematic search for the truth that often requires a person with important skills and abilities to conduct effective investigations. The success of any criminal investigation depends on the person conducting the investigation, who is called the investigator. It is the responsibility of an investigator to collect evidence when a crime is committed, to bring the perpetrator to trial and then submit the evidence required, in order to reveal the unlawful action of the offender.

This chapter begins with an overview of the concepts of criminal investigation, the principles of investigation and, the goals and objectives of criminal investigation. It also examines the characteristics that an investigator must possess to successfully investigate rape cases. In this chapter the important investigation concepts, namely the Locard principle and chain and contamination of evidence, is elaborated on. Finally, the chapter explains the difference between objective and subjective evidence and why a victim's body can be regarded as a crime scene.

2.2 Criminal investigation

According to Lochner (2014:4) a criminal investigation does not happen by itself. It needs a knowledgeable and skilful person to conduct any investigation, including the investigation of crime. Crime investigation is concerned with the reconstruction of past events and finding the truth by using objective and subjective clues. This is discussed below.

2.2.1 The reconstruction of past events

According to Benson, Jones and Horne (2015:11), Greene (2007:356) and Lyman (2013:34) criminal investigation is the reconstruction of a past event, through which police personnel solve crimes. Benson et al. (2015:11), see this as being able to determine what happened in the past. In addition, Brandl (2014:3) and Hess and Orthmann (2010:06) state that criminal investigation is the process of discovering, collecting, preparing, identifying and presenting crime related evidence, to determine what happened in the past and who is responsible.

Hess and Orthmann (2010:6) see criminal investigation as a patient, step-by step inquiry or observation, or a legal inquiry into past events, which they regard as part of a reconstructive process. Lushbaugh and Weston (2009:4), define the term criminal investigation as the lawful search for people and things, which can be useful in reconstructing all illegal past acts or events. For Gilbert (2010:34), Lushbaugh and Weston (2009:4) and Osterburg and Ward (2010:1), the search for past events must be made in a systematic manner. According to them, it starts from the identified and progresses to the unidentified, moving backwards in time. This is done in a reconstructive process to determine the truth.

2.2.1.1 Reconstructive process

Greene (2007:356), Hess and Orthman (2010:6) and Lushbaugh and Weston (2009:4), regard criminal investigation as a reconstructive process in which a conclusion follows from specific facts to solve crimes. Furthermore, these authors explain that, during the reconstructive process, specific pieces of evidence will be gathered by investigators to establish proof and that this will help to reconstruct past events. By doing so, it is possible to prove that the person who is suspected of committing an offence is guilty. Greene (2007:356) also points out that detective or other investigative personnel consider numerous factors when they use the reconstructive process to reconstruct past events; however, he did not elaborate on these factors.

In the process of reconstructing past events Marais (1992:1) viewpoint is that criminal investigation also involves the lawful tracing of the people and instruments which may, directly or indirectly, contribute to the reconstruction of a crime that was

committed. Gilbert (2010:34), Marais (1992:1), Osterburg and Ward (2010:1), Stelfox (2009:1) and Van Rooyen (2004:4) point out that the gathering of information is part of the reconstruction process. However, for Stelfox (2009:1) it is important that to succeed in the reconstruction process, evidence should be located and gathered in terms of the law.

Lochner (2014:6), in his reference to criminal investigation, reminds the reader that there are many definitions of the term 'criminal investigation', and according to him and Benson et al. (2015:19), it was formulated over a period of time. Lochner (2014:6) states that the understanding of the concept of criminal investigation depends on one's interpretation. When analysing Lochner's (2014:67) explanation of crime investigation, it is clear that his reference to criminal investigation is about reconstructing past events. In his reference to past events, he also includes the state of mind of the accused during commitment of the crime. According to Lochner (2014:6), criminal investigation is described as:

“... the legal tracing of persons and objects through which the true circumstances of an illegal act, crime, transgression, incident or omission, as well as the reprehensible state of mind that accompanied it, is reconstructed.”

In analysing the explanations of crime investigation by Benson et al. (2015:19), Gilbert (2010:34), Lochner (2014:6-7), Lushbaugh and Weston (2009:4), Monckton-Smith, Adams, Hart and Webb (2013:2), Osterburg and Ward (2010:1), Van Heerden (1984:189) and Van Rooyen (2008:13) there are three very important concepts that form the basis of criminal investigations. These three concepts are:

2.2.2 Systematic

Based on the above-mentioned authors 'viewpoint, criminal investigation is a highly disciplined field in which the work must be done in an orderly, logical and, most importantly, in a systematic manner. This viewpoint demonstrates that criminal investigation should not be approached in accidental or disorganized manner. Lochner (2016:43) gives a brief and concise explanation of the systematic approach to crime investigation. According to him, investigation of crime cannot be carried out on an unplanned, unorganized, unstructured, haphazard and random way. Criminal investigation requires a systematic plan of action, or investigative process whereby

information is gathered. Without a systematic and planned process, very important and relevant evidence may be overlooked or ineffectively collected; with the result, that incorrect deductions are made that will sent the investigation of these authors' definitions on crime investigation highlights a very important fact, which emphasises the importance of a systematic plan. If a systematic plan is followed, it will arrange and direct the investigation and assist the investigator in:

- determining whether a crime has been committed;
- who the perpetrator is; and
- the process of proving conclusively the guilt or innocence of the suspected person.

In other words, criminal investigation can be described as a systematic search for the truth aimed at solving the crime, which is discussed below.

2.2.3 The truth

Seeking the truth is the primary purpose of criminal investigation. According to Lochner (2014:6), it would be wrong to assume that truth is only a reference to a guilty verdict. The truth also proves the innocence of a person. For Lochner (2016:44) and Monckton-Smith et al. (2013:2), the truth sometimes does not reflect the true version of what actually happened, and one should rather present an acceptable version as the truth to the court. This researcher feels that this viewpoint itself needs further research.

2.2.4 Objective and subjective clues

According to Gilbert (2010:34), Lochner (2014:6-7), Osterburg and Ward (2010:1) and Van Rooyen (2008:13), objective clues are known as indirect or physical evidence. Physical evidence or objective evidence can be presented in court as factual proof. It consists of items that can be observed, analysed and measured (Lochner & Zinn, 2015:39-40) and (Ogle, 2012:8). According to Ogle (2012:2) and Van Graan and Budhram (2015:55), objective evidence includes a large variety of objects and any object, substance, trace or impression could constitute objective evidence.

According to Baxter (2015:225), Lochner and Zinn (2015:40) and Ogle (2012:4), objective evidence is possibly considered superior to all other types of evidence. They state that objective evidence serves one primary purpose and that is to answer the investigative questions, namely who, why, what, when, and where. These authors regard objective evidence as the most reliable and the most accurate of all types of evidence. Ogle (2002:7) points out that objective evidence can establish the identity of the offender, the situation of the crime, or any other fact determined to be important to the case.

Ogle (2012:9) also mentions that biological evidence is objective evidence since it includes deoxyribonucleic acid (DNA) which allows evidence to be linked to the suspect or to the crime scene. Biological evidence in rape cases such as blood, semen, saliva, vaginal secretions, skin cells, hair, perspiration, urine and vomit can be found on the scene or on the rape victim (Brandl, 2014:111). Ogle (2004:208), Van der Westhuizen (1996:5) and Van Graan and Budhram (2015:63) mention additional objective evidence associated with rape cases. According to them, this evidence includes anything obtained from the suspect or the victim who may contain body fluids, or any other material, for example, soil, footwear impressions, fingerprints, clothing or articles from the suspect or victim.

Ogle (2012:9) elaborates on the advantages of objective evidence. They are of the opinion, with which the researcher agrees (based on his experience), that objective evidence does not suffer from memory loss, cannot be distorted and can be independently tested. Lochner and Zinn (2015:40) and Ogle (2012:4-22), explain that if objective evidence is properly managed it can:

- provide information on the facts of the crime;
- help to determine the modus operandi of a suspect;
- help to disprove or corroborate (back up) the statements of witnesses or the suspect;
- help to identify suspect;
- help with reconstruction of a scene; and
- help to develop other leads that can help with the investigation.

According to the authors mentioned above, subjective evidence is that obtained from persons, such as victims, complainants, eyewitnesses and perpetrators, who are directly or indirectly involved in the commission of the crime. It can thus be inferred that the distinction between objective and subjective evidence is that where a human being is the source of the information, that information will always be subjective because of the role played by the human's own opinions and viewpoints.

From the explanations of participants to an open-ended question as to what they regard criminal investigation to be, the majority see it as a police function. According to them, crime investigation entails the arresting of suspects, the collection of evidence and the interviewing of suspects and victims. One participant provided an answer, which deserves to be directly quoted. He was of the opinion that "crime investigation is a systematic process that involves the investigator to make (do) interviews to collect evidence that can help them to find the truth."

The role of an investigator in any investigation cannot be underestimated. They are the persons who will ultimately have an influence in the investigation. This is more evident in the investigation of rape cases (Lochner, Zinn & Horne, in press). It is therefore important to examine the investigators' role in the investigation.

2.2.4.1 The investigator's role in crime investigation

According to Petherick (2009:293), the investigator is the official responsible for the overall case. The responsibilities of the investigator are to deal with the human side of the investigation. The investigator talks to witnesses, victims and sometimes to suspects. The investigator will sometimes be asked to process the scene and to gather evidence. It is important for any investigator to achieve the objectives of criminal investigation (see paragraph 2.3) (Petherick, 2009:293).

All participants of the survey were of the opinion that the main responsibility of an investigator is to investigate the crime assigned to him. From the responses received, the responsibilities of an investigator include the collection of evidence, the finding of witnesses and the interviewing of suspects and witnesses. One participant believed that the successful investigation of a crime could be seen as maintaining public peace and security of the Nation.

Not every person can be a successful investigator. According to the researcher's own experience, the investigator stands central to the achievement of the objectives of crime investigation. According to Lochner and Zinn (2015:8) and Zinn and Dintwe (2015:445) an investigator is described as the person responsible for the careful investigation of a crime. They are adamant that the investigator is the most important person in the investigation. They strongly believed that a competent investigator is a person who employs sound fundamental investigation practices and possess important attributes.

2.2.4.2 Characteristics of an investigator

According to Fisher and Fisher (2012:50), Lochner et al. (in press), and Lyman (2013:21) amongst the most important attributes an investigator must possess are a sound knowledge of the law, honesty and integrity, an ability to communicate and to pay attention to detail. Lochner and Zinn (2015:8) are of the opinion that if an investigator possesses the above-mentioned attributes, he or she can be seen as a competent investigator. In addition, Petherick (2009:294) states that criminal investigation requires a person with good skills and abilities and who has the right personality profile and traits.

Birzer and Roberson (2011:14) and Lochner et al. (in press), believes that investigators must have skills and knowledge of, the following:

- criminal and procedural law;
- method of interrogation;
- understanding what a crime scene is;
- skills to develop a case for prosecution;
- an understanding of modus operandi and patterns in criminals' behaviour; and
- an understanding of the causes of criminality.

Dutelle (2011:54) and Orthmann and Hess (2013:12), add further skills and traits and point out that a good investigator needs to be, creative, and able to apply technical knowledge, to be self-disciplined, self-confident, objective and logical, and yet remain open-minded.

Benson et al. (2015:29), Lochner and Zinn (2015:23-24), Orthmann and Hess (2013:12) and Pena (2000:18-22) elaborate on the skills and characteristic of an investigator and they underline the fact that a good investigator has sound morals and an ethical character, is an analytical thinker and is persistent. These authors are of the opinion that, regardless of title, pay or rank, investigative officers are more effective when they possess the following specific characteristics:

- **Intellectual characteristics.** This is an important aspect to ensure that effective investigators should obtain and retain information. They are also culturally skillful, i.e. skilled in interacting across gender, ethnic, generational, social and political group lines.
- **Psychological characteristics.** Investigation is viewed as being highly stressful and involving much decision-making. It therefore requires emotional stability. In this regard, effective investigators are emotionally well balanced, detached, inquisitive, suspecting, discerning, self-disciplined and persevering.
- **Physical characteristics.** Further, it is advisable for investigators to have good health and high energy levels; because the hours spent, performing investigative duties can be long and demanding. In this regard, effective investigators must be physically fit and have good vision and hearing.

To the questions of what participants regard the characteristic an investigator of crime should possess, the overwhelming majority of the participants were of the opinion that investigators must not be corrupt. On a probing question of what they regard as corrupt, the following combined responses were offered: 'Professional investigators are not corrupt; they work hard and have the ability to work with other investigators and police officials.' One participants' answer is directly quoted to highlight the overwhelming viewpoint of the participants on ethical behaviour. His response was "Not to be corrupt means you are committed to the constitution of the nation."

It is of concern that four participants could not provide any answers. The possible reason (for not providing an answer to the question), according to their biographic information, may be the lack of proper specialised training.

It is pointed out by Petherick (2009:295-296) that a rape investigator must have the ability to pay attention to detail, and be a professional investigator with sufficient experience in the investigation of rape cases.

In response to the question on what characteristics should an investigator who investigates rape cases possess, none of the participants could provide a reasonable answer. From the researcher's practical experience, he knows that any investigator who is a professional and who has a positive attitude towards investigation will always have the objectives of crime investigation in mind. In the next paragraph, the objectives are examined.

2.3 The objectives of criminal investigation

Benson et al. (2015:23), raise a very important point regarding the goals and objectives of criminal investigation. According to them, the goals and the objectives of crime investigation are often used interchangeably. Benson et al. (2015:13), Brandl (2014:4), Gilbert (2010:49), Greene (2007:36), Hess and Orthman (2010:8), Osterburg and Ward (2010:5-6), Pena (2000:3), Petherick (2009:293) and Van Rooyen, (2008:57), all state that the principle objective of criminal investigation is to solve cases in a legal manner. Brandl (2014:4) states that to solve a crime in a legal manner, crime-related information is collected. Crime related information is, according to Brandl (2014:3), facts and knowledge that relate to a specific crime or perpetrator. Horgan (1979:9) and the authors mentioned above identify the following primary objectives of criminal investigation:

2.3.1 To determine whether a crime has been committed

The first objective of crime investigation is to determine whether a crime was committed. This can be seen as situation identification, whereby it is established whether a crime has been committed (Marais & Van Rooyen, 1990:7). According to Siegel, Saukko and Houck (2013:13), for investigation to take place the crime must first come to the attention of the police and then the sequence of events to investigate begins. To determine if a crime was committed the investigator must have knowledge of criminal law and must have the ability to recognise the elements of each crime (Gilbert, 2010:52 and Osterburg & Ward, 2010:6). The next section examines the collection of evidence of proof of the elements of the crime.

2.3.2 To collect evidence

The collection of evidence is the second objective of crime investigation and begins at the crime scene, whereby the evidence of witnesses is documented, and other objective clues and evidence, which are visible or hidden, are gathered. According to Gilbert (2010:52), Osterburg and Ward (2010:91-92) and Palmiotto (2013:29), evidence is all relevant information that is admissible in court.

According to Van der Merwe (2010:111) evidence comprises of all the information and material submitted to the court by the parties, to enable the presiding officer to judge and settle a dispute. From a forensic science viewpoint, Lyle (2012:21) reasoned that evidence can determine whether crime has been committed, link a suspect to a crime scene, corroborate or refute alibis and witness statements, identify a perpetrator or victim, exonerate the innocent, induce confessions and help direct further investigations.

According to Lee, Palmbach and Miller (2003:1) the success of the investigation of any crime is based on the ability of investigators to recognise the potential of objective and other forms of evidence and then to collect them according to standard procedures. According to Gardner (2005:3), Gilbert (2010:52) and James, Nordby and Bell (2014:28-29) evidence serves two very important functions, which they refer to as inculpatory evidence and exculpatory evidence. This means that the presence of evidence can either include or exclude a person as the source. This in turn means that a person can be incriminated or exonerated. In practice, it can be argued that if the blood of a suspected person is found on a rape victim, he is incriminated.

From practical experience, the researcher knows that for evidence to be admissible the integrity of the evidence must be maintained. Integrity of evidence is maintained when evidence is not contaminated and the chain of evidence stays intact. These two aspects are discussed in the next paragraphs.

2.3.2.1 Contamination of evidence

Byrd (2004:1) states that the collection of enough evidence on the crime scene must be carried out in accordance with crime scene procedures and policies to prevent

contamination. An investigator is strongly advised not to smoke, drink, or do anything else at the crime scene that might compromise the crime scene or the evidence (Dutelle, 2011:225 and Van der Watt, 2014:117). These viewpoints correlate with Lochner and Zinn (2015:20), who argue that evidence which is handled without protective clothing, will top the list of contaminated evidence. Lochner and Zinn (2015:20) point out that weather conditions and uncontrolled activities at the scene can also be regarded as conditions that can cause contamination. Lochner and Zinn (2015:20) and Lochner et al. (in press), mentioned that it is important to remember that evidence collected should be stored and transported in a manner that will prevent it from contamination. From these authors' viewpoints, this will prevent contamination and ensure that the chain of custody of the evidence remains intact.

An open-ended question was posed to the participants namely: 'In your own words explain the concept contamination of evidence.' Only one participant provided an answer, which was vague. According to him, contamination refers to the not safekeeping of evidence.

In an additional question, the participants were asked how contamination in rape cases can be prevented. Only one participant could provide a reasonable answer. He stated that contamination can be prevented through the use of gloves and scientific equipment. What is alarming is the fact that the rest of the participants could not provide any answer at all.

2.3.2.2 Chain of custody

The chain of custody or continuity of possession is the identification and continued safekeeping of objective evidence from the moment it has been found until presented as evidence in court (Bertino, 2012:22 and Van der Watt, 2014:117). Van der Watt (2015:199) sees this concept as the fundamental principle in investigation of crime because according to him it is intertwined with just about every phase of the investigation process. From a crime reconstruction and crime scene investigation perspective, Chisum and Turvey (2011:652), Fisher, Miller, Braswell and Wallace (2014:22) and Van der Watt (2014:117) hold that the chain of evidence is a record of each person or agency who has controlled or taken custody of

examined or tested evidence or had any other kind of contact with evidence from its discovery to the present day.

The purpose of maintaining the chain of evidence is to ensure that the evidence remains intact and is presented in court in the same condition as when it was found. According to James et al. (2014:566), if the chain of custody is maintained it will prove that evidence has not been tampered with or altered. According to Lochner et al. (in press), evidence should be collected in such a manner that the continuity of possession and chain of evidence is never in doubt.

Van der Watt (2015:163) states that a systematic, planned and organised approach to investigation is the most effective defence against evidence contamination and the best way to maintain the chain of evidence. From the moment of the collection of evidence, every effort should be made to protect and preserve that evidence and to prevent contamination until its presentation at a relevant court hearing (James et al., 2014:54 and Van der Watt, 2015:163).

The participants to the survey were prompted of their understanding of the concept of chain of custody. Only one participant could offer an answer. His explanation was the following: 'It can be regarded as a process of collecting evidence.' What is of great concern was the answers provided by the rest of the participants. Their answers are quoted directly to emphasise the researcher's concern. The following answer was provided: "I don't have an idea and was not sure what so say." The only possible explanation for this, if the participants' biographical information is taken into account, is either a lack of training or the appointment of the wrong people to investigate rape crimes.

The research participants were probed to provide their experience on what they do to maintain evidence in rape cases. None of the participants provided any answer. This phenomenon cannot be explained, because all the participants have crime investigation experience and did attend a crime investigation course. The researcher will suggest that this phenomenon should be further researched.

2.3.3 Arrest the suspect

The third objective of crime investigation is to arrest the suspect in order to ensure the presence of the accused at the trial (Marais, 1989:19). This can take place upon positive identification and individualisation of the offender. When an arrest has been made, it should have been done in terms of the law and decided cases (Pena, 2000:6). In this regard, The Criminal Procedure Code of Ethiopia (CPCE) (1961) stipulates that a criminal can also be brought before the court by the use of different methods. For example, a suspect can be summoned to appear in court, or by means of a written arrest warrant (see section 2 of Art. 21 of CPCE, 1961).

2.3.4 To recover stolen property

The fourth objective is to recover stolen property. Property recovered in an investigation is not limited to what was stolen from the victim or complainant but may include other exhibits such as tools used to commit the crime. In a rape case, the instrument that was used such as a firearm or knife can be recovered if it was stolen from the scene or used to commit the crime. This will serve as evidence and can even be examined for objective evidence (Marais & Van Rooyen, 1990:21). Blood or other DNA evidence from the victim can be found on the firearm or knife.

2.3.5 To present the best possible case to the prosecutor

The fifth objective is to assist the public prosecutor in the prosecution process, to present the evidence and to reconstruct the crime in court (O'Hara & O'Hara, 2003:16). Most often, the successful prosecution of criminals depends largely upon the skill and efficiency of the investigator and the completeness of the case docket. The investigator also has the responsibility of ensuring that all the witnesses attend the trial and that the exhibits are available during the trial, without comprising the integrity of the evidence (Van der Westhuizen, 1996:7).

2.3.6 To identify the perpetrator

The last objective is to identify the perpetrator, to justify a legal arrest. This involves linking the offender with the crime, through available information. The investigator is responsible for identifying the perpetrator, which Becker (2009:11), Bennett and Hess (2007:5), Dowling (1979:2), Gilbert (2010:34), Osterburg and Ward (2010:8), Pena (2000:3) and Petherick (2012:294) see as the primary objective of crime

investigation. In this regard, Benson et al. (2015:20), Brandl (2014:4) and Van der Westhuizen (1996:7) see the identification of the suspects as the link between the crime and the facts and evidence that were collected during the investigation. The ability to identify and bring the suspect to justice depends on the evidence needed for conviction. There are several methods that can be used to identify a perpetrator and, according to Horgan (1979:9) and O'Hara and O'Hara (2003:15), perpetrators of rape can be identified through objective evidence such as semen, other form of DNA such as blood or saliva, eyewitnesses circumstantial evidence, possession of stolen property and modus operandi. Modus operandi is a perpetrator identification technique that is discussed in chapter 3.4.

The majority of the participants provided various non-applicable answers to the question of what they regard the objectives of crime investigation to be. A minority of the participants see the arrest of the person suspected for a crime committed as an objective. Two participants list the collection of evidence as an objective of crime investigation.

One of the objectives of crime investigation is to find evidence. Evidence is gathered during the investigation of a crime but Lochner et al. (in press), argue that the majority of evidence is found on a crime scene. In the next section the crime scene and the relationship between the Locard principle and a crime scene is examined.

The crime scene is discussed in the next section.

2.4 The crime scene

The Locard principle is, according to Lochner and Zinn (2015:12), the reason why crime scenes are searched for evidence. Lochner and Zinn (2015:13) and Lyman (2013:16) are adamant that this principle is still in use today, have never been proved wrong, and can be seen as one of the cornerstone of crime investigation.

2.4.1 The Locard principle

According to Bertino (2012:22), Gilbert (2004:26), Lochner (2014:7), Marais (1992:23) and Van Graan and Budhram (2015:44), Edmond Locard is attributed with an important basic principle of science in essence that 'every contact leaves a trace.' Lyle (2012:20), in his explanation of the Locard principle, argues that the

Locard principle is the basis, the heart and the soul of investigation. He refers to a rape scene in his explanation of the Locard principle and mentions that the investigator will find blood, other bodily fluids, fibre hair, fingerprints and shoe prints on a rape scene.

Locard believed that whenever two objects or people come into contact with each other, there is always transfer of material from one to the other (Lyle, 2012:2). Locard based his argument on the fact that it is impossible for an individual to act without leaving traces of his or her presence (Van Graan & Budhram, 2015:45). In other words, the Locard principle states with authority that the perpetrator will bring something in to the scene, leave something at the scene, and depart with something from the scene, Lochner and Zinn (2015:40-41) and Van Graan and Budhram, (2015:45). If one considers the nature of the crime of rape, it is clear that there will always be contact between the victim and suspect because rape has been classified as a contact crime. For this reason, we can safely argue that evidence will be transferred to a witness, suspect victim or complainant when the crime of rape is committed.

2.4.2 The place where a crime is committed

The place where evidence is transferred (according to the Locard principle) is called the crime scene. Dutelle (2011:28) is of the opinion that the crime scene includes all areas through which the criminal moved to commit the crime, which in turn includes the entering and exiting of the crime scene. Coetzee (2008:81), Lochner and Zinn (2015:33) and Van der Westhuizen (1996:20) refer to the scene of crime as 'the field laboratory' where objects of dispute can be located for laboratory testing at a later stage, thus referring to the use of natural science.

Crime Scene (2016) defines a crime scene as the locality where a crime took place, or another location where evidence of a crime committed may be found. Furthermore, in line with what the authors above have said, Osterburg and Ward (2010:91) and Van der Watt (2015:162) are of the opinion that the crime scene goes beyond the actual location where the incident occurred. Palmiotto (2013:97) holds that the crime scene is proof that a crime has been committed, that it is the initial

point where criminal investigation starts and that it contains evidence that would link the suspect with the crime scene.

The participants in this research were asked to define a crime scene. The majority of participants defined a crime scene 'as the place where a crime was committed. These answers can be attributed to the fact that the majority of the participants did receive training regarding crime scene investigation.

2.4.3 The value of a crime scene

Lochner and Zinn (2015:32) point out that the crime scene is the most vital and crucial part of any investigation. According to them, this applies to criminal, forensic and civil investigation. According to Bertino (2012:22), Coetzee (2008:77), Dutelle (2011:4-5), Gilbert (2004:91), Lochner and Zinn (2015:32), Osterburg and Ward (2010:91-92) and Stelfox (2009:126), the value of a crime scene is the fact that significant information and evidence relating to a crime can be found on the crime scene.

According to Brandl (2014:340), the crime scene is the location where objective evidence can be identified, marked, preserved and collected. Ogle (2012:6), in his discussion on the value of a crime scene, puts emphasis on the nexus between the perpetrator and the crime scene. According to him if the crime scene is correctly processed it will link the suspect with the crime scene and the crime. Ogle (2012:6) states that the crime scene and the evidence found on the crime scene will provide investigative leads for the investigator.

Ogle (2012:314) emphasises the role and importance of objective evidence that is found on a rape crime scene. He honours the opinion that objective evidence found on a crime scene will help to establish the elements of the crime and the identification of the suspect. In addition to the above authors, Coetzee (2008:80), in his reference to crime scene, reminds us that the objective of crime scene investigation is to collect as much evidence as possible, to develop conclusions on how and why the crime was committed and to identify a possible suspect[s].

Brandl (2014:340), in his explanation of a rape crime scene, argues that there is no such thing as a rape crime scene that is over-protected or over-documented. He

argues that investigators should, when they are in doubt about the evidential value of evidence on a rape crime scene, collect the evidence. In the next paragraph, the different type of scenes will be discussed.

2.5 Different types of scenes

Monckton-Smith et al. (2013:45), and Van der Watt (2015:162) declare that a crime scene is anything, place or area that needs to be investigated. This entails a location where a criminal act occurred or another location with which the offender may have had contact, leaving objective evidence that will need to be examined for leads. According to Coetzee (2008:81), Gardner, (2005:67-68), Lee et al. (2003:2-3), Lochner and Zinn (2015:34), Lyle (2012:28), Monckton-Smith et al. (2013:45) and Van der Watt (2015:162) the crime scenes can naturally be classified in five types, namely: primary, secondary, extended, macroscopic and microscopic. Brandl (2014:340) states that in a rape case there can be many crime scenes or places where the rape took place. These places include the following:

- the place where the victim was approached;
- where the victim was attacked;
- the place where the victim was disposed of; and
- the place where the perpetrator fled after the crime.

For the purpose of this research only the primary and secondary crime scenes will be discussed.

2.5.1 Primary crime scene

Crime Scene Forensics (2017) and Lyle (2012:28) explain that the term 'primary scene' is often used to refer to the place where the original crime or incident actually occurred. According to them, it is the place where the majority of the acts took place.

Gardner (2005:67-68), Horswell (2004:3), Lyle (2012:28) and Palmiotto (2013:164), are of the opinion that a primary crime scene is an area or place where the incident occurred or where the majority or a high concentration of physical evidence proving the majority most of the elements of the crime will be found. Lyle (2012:28) is adamant on what a primary crime scene is: his viewpoint is that any other

associated crime scene where the crime was not committed is deemed a secondary crime scene.

2.5.2 Secondary crime scene

Crime Scene Forensics (2017) and Lochner and Zinn (2015:34) refer to a secondary crime scene as any other location(s) or place which is not the same as the primary scene. According to them, it is a location related to the crime, but not where the actual crime took place. In this regard, the secondary scene can be seen as a different place or area, where physical evidence relating to the incident or crime can be found (Horswell, 2004:3). The concept of a secondary crime scene can be explained by means of the following example: if a suspect used a vehicle to transport the rape victim from his bedroom, where the rape occurred to another location or to a roadside, the vehicle and the roadside both ought to be considered as secondary crime scenes. These secondary crime scenes should therefore also be processed in the same way as the primary crime scene, to gather objective and other evidence (Lochner & Zinn, 2015:12).

2.6 Victims and perpetrators body as a scene of crime

Lyman (2013:363) and Ogle (2012:314) are of the opinion that the objective evidence in sexual assault investigation can be found at the crime scene or on the bodies of the victim and the perpetrator. Lyman (2013:366) includes the location, which is occupied by the perpetrator in his definition of the body of the perpetrator. According to Lyman (2013:363), evidence may take many forms but according to Ogle (2012:314) objective evidence that is, most often found on the rape crime scene (including the body of the victim or suspect) during the investigation of rape cases are: semen, hairs, fibres, fingerprints and blood. It is considered as the principle source of objective evidence in rape cases (Ogle, 2012:314).

2.6.1 The victim's body

Brandl (2014:339), Carney (2004:37), Coetzee (2008:77), Horswell (2004:3), Ogle (2012:314), Savino and Turvey (2011:120) and Van Graan and Budhram (2015:45) state that the body of victim is a crime scene, but they do not classify this scene as a primary or secondary scene. They based their argument for the victim's body to be classified as a crime scene on the Locard principle (see paragraph 2.4.1). If one

considers that rape is a contact crime as explained by Hess and Orthman (2010:326), it is clear that objective evidence will always be transferred from the perpetrator to the victim and to the crime scene.

The participants were asked whether they consider the body of a rape victim to be a crime scene. All the participants answered positive to this question. They were unanimous on the fact that evidence will be found on the victim's body.

- **Examination of the victim's body**

Carney (2005:37), Fisher (2004:328), Hess and Orthman (2010:16), Lee et al. (2003:189), Ogle (2012:315) and O'Hara and O'Hara (2003:82) are of the opinion that objective evidence is very important in rape cases, and can deteriorate as time passes. According to them great care is needed to preserve and protect objective evidence on the victim's body. Fisher (2004:330) and Ogle (2012:314-15) point out that in a rape cases the victim's body should not be approached in unintentional or disorganized method. In this regard, the investigators must determine what they are looking for.

Carney (2005:37), Fisher (2004:328), Lee et.al. (2003:189), Lyman (2013:367) and Ogle (2012:315) are of the opinion that the protection of victim's body starts the moment the first responder of the police arrives at the scene or when they interview the victim. Coetzee (2008:77) explicitly states that great care should be taken in protecting and processing the victim's body. If this is not done, objective evidence can be lost or damaged which would affect the investigation adversely. Therefore, their advice is (if possible) for investigators to prevent victims from changing clothes and to refrain from bathing. These authors suggest that if the victim has changed clothes, the clothes worn by the victim during the rape should be collected, preserved, and sent to the forensic laboratory for examination. These clothes and the body of the victim may contain significant objective evidence, which can be examined in a laboratory when it is collected in the correct manner.

- **The dual purpose of examining the victim's body**

According to Ogle (2012:321), O'Hara and O'Hara (2003:499) and Van Graan and Budhram (2015:162) the medical examination of the body of the victim is the basis

on which a rape investigation is built. Ogle (2012:321), Lyman (2013:367) and Van der Watt (2015:162) state that the medical examination of a rape victim's body has a dual purpose. The most important purpose is to examine the body for objective evidence that may lead to the arrest, prosecution and conviction of the perpetrator. The other purpose is to determine the victim's health, as well as for treatment for injuries and sexually transmitted diseases.

- **The right to dignity during the examination of a person's body**

Lyman (2013:367) alerts the reader to the fact that the victim should always be treated with dignity, compassion and respect when their bodies are examined for physical evidence. According to the CPCE (1961), the court authorizes sexual assault examinations. In this regard, medical examination results are accepted by the court only if they are performed and provided by medical practitioners who work in one of the government or privately owned hospitals in Ethiopia. The American viewpoint is according, to Lyman (2013:367) that the examination can be done by any medical practitioner and a trained nurse. Lyman (2013:367) suggests that the examination should always be done in the presence of a female law enforcement officer. According to him, this is to maintain the chain of evidence and to ensure that the victim is treated with dignity and respect.

- **Evidence found on a rape victims body**

Gilbert (2004:336), Hazelwood and Burgess (2001:371), Ogle (2004:214) and Savino and Turvey (2011:133) are of the opinion that a victim's body should be systematically examined for injuries and objective evidence. Brandl (2014:339) and Ogle (2012:317) list the following objective evidence that can be collected from the body namely: victim, oral, nasal, mucous, vaginal and rectal specimens, fingernail scrapings, foreign material or debris, pubic hair, photographs of bite marks, trace evidence¹ (objective) such as soil, vegetation, fingerprints and saliva. Injuries to the body of the victim can also be used as objective evidence. This, according to Ogle (2012:318) and Savino and Turvey (2011:133) includes lacerations and bruising marks and upper body area. The majority of the participants on question 15 on the

¹ A term used to describe any evidence small in size that is analyzed utilizing microscopic techniques.

interview schedule listed vaginal fluid, hair, blood, and male sperm as the evidence that can be found on a victim's body. In analysing and comparing the information, it is of great concern that the participants do not refer to trace evidence as listed by Ogle (2012:318) and Savino and Turvey (2011:133). Based on the Locard principle and from experience, the researcher knows that trace evidence can be found on any crime scene, which includes the body of victim.

2.6.2 The perpetrator's body

Bennett and Hess (2007:161) see a perpetrator as a person considered to be directly or indirectly connected with a crime, either by an overt act or by planning or directing it. Lyman (2013:363) and Ogle (2012:314) are of the opinion that the objective evidence in sexual assault investigation can be found on the perpetrator. For the same reason offered in paragraph 2.6.1, it can be argued that the body of the perpetrator can be seen as a crime scene, because evidence will be found on the body of the perpetrator.

Horswell (2004:3), Lyman (2013:366), Ogle (2012:331, 347) and Woods (2013:501) are of the opinion that there are different types of objective evidence that can be found on the perpetrators body. They list the following objective evidence: clothing of the perpetrator, smears, hair, fibres semen and other forms of visible and non-visible forms of DNA evidence. According to the above-mentioned authors, the perpetrator should have to go for a medical examination and all the possible visible and non-visible physical evidence found on the body must be collected. According to Horswell (2004:3) and Lyman (2013:366), the evidence collected from the perpetrator can include evidence and articles in the suspect's possession.

The participants were asked if they consider the body of a rape perpetrator as a crime scene. All answered in the positive, but did not give examples.

2.7 Medical examination

According to the CFDRE (1995) Art. 26 'everyone has the right to privacy. 'This right shall include the right not to be subjected to searches of his home, person or property, or the seizure of any property under his personal possession. However, according to the CFDRE (1995) Art. 26(3), no restrictions may be placed on the enjoyment of such rights except in compelling circumstances and in accordance

with specific laws whose purposes shall be the safeguarding of national security or public peace, the protection of crimes or the protection of health, public morality or the rights and freedom of others. According to the CPCE (1961) Article 32(1-2), medical examination can be performed in and on the suspects and the victim's body.

Furthermore, in terms of Section 2 of Article 34 of the CPCE, adults give permission for the examination of their bodies. It also requires the registered medical practitioners to record in writing the result of such examination. If the victim or suspect is a minor, interviews and examinations should be conducted in the presence of parents, guardian, juvenile authority, or social service worker (Section 2 of Article 34 of the CPCE, 1961).

2.8 Summary

Criminal investigation is the systematic search for the truth and is used to reconstruct past events. Crime investigation cannot be done in a haphazard manner and must be undertaken with the objectives of crime investigation in mind. The main objective is to gather objective evidence, with the sole purpose of presenting this evidence to a court. Information obtained from the literature indicates that investigators must possess certain characteristics and that their characteristics and traits do have an influence on the investigation of crime.

The body of the rape victim and that of the perpetrator can be seen as a primary crime scene. Crime scenes are the place where the majority of objective evidence is found, and this is the most reliable type of evidence. Objective evidence is used to link the perpetrator with the crime, victim or the crime scene.

Different types of objective evidence can be gathered from a rape crime scene including the victim's and the perpetrators bodies. For objective evidence that was collected during a rape investigation to be admissible in court, it should not be contaminated and there must be proof that the chain of evidence was maintained.

However, the ability to identify and bring the suspect to justice depends on the evidence needed for conviction. In this regard, when a rape crime has been committed, it will be of paramount importance for investigators to gather all types of information, which include modus operandi information. Modus operandi is an

identification technique used to identify the perpetrator. This will be discussed in the next chapter.

3. CHAPTER 3: MODUS OPERANDI

3.1 Introduction

Rape investigation represents significant challenges for the criminal investigators. Its investigation is insignificant without the determination of the identity of the perpetrator. The success of rape investigation method depends directly on the knowledge of investigators. It is the responsibility of the investigator to collect evidence when a rape crime has been committed in order to bring the perpetrator to trial. Investigators should make use all available methods and techniques to identify the perpetrator, which include the use of modus operandi information. The identification of criminals in terms of their modus operandi can make a valuable contribution in crimes such as rape. Understanding the methods criminals use to commit crime is the best way of searching for, and ultimately apprehending the suspect.

In this chapter the researcher will focus on the aim of the research, which is how modus operandi can be used as an identification technique. The reader is also informed what the concept of identification, individualisation entails. Modus operandi and the factors that influence the modus operandi of perpetrators are also examined.

3.2 Identification and individualization

There are various investigation methods and scientific techniques that can help to identify suspects. According to Lochner (2016:48), the ability to use these techniques depends on the experience and the willingness of the investigator. For this reason, it is important to discuss examine the concepts and the roles of Identification and individualisation in rape investigations.

3.2.1 Identification

For Benson et al. (2015:47), Lochner et al. (in press), and Marais (1992:19) the term 'identification' is regarded as a classification system that is completed when objects or subjects with similar characteristics are classified into one category (class) and a name given to that category. According to Horswell (2004:14), it needs further

examination to see if there are indicators of similarity, which will allow for screening before a more detailed examination is done.

Chisum and Turvey (2011:109) and Horswell (2004:16) are of the opinion the term 'identification' does not require or imply any uniqueness. Fisher (2004:5) and Lochner et al. (in press), give a broad explanation of identification. According to them identification is based in the principle that everything in the world has its own particular distinguishing class characteristics. Van Graan and Budhram (2015:47) and Lochner et al. (in press), see identification as a process. They are of the opinion that the term 'identification' can be defined as a process that utilises the class characteristics of an object or known substance to compare with evidence collected from a scene of incident.

Van Graan and Budhram (2015:47) link the value of objective evidence to class characteristics. They argue that that investigator who values and appreciates the potential value of objective evidence in rape cases must understand what class characteristics are. Van Graan and Budhram (2015:47) see class characteristics as characteristics of objective evidence that are common to a group of objects or persons. Furthermore, James et al. (2014:30), and Van Graan and Budhram (2015:47) refer to class or group characteristics as the features that place objects in a specific category, or characteristics of objective evidence that are common to a group but do not reference a specific suspect or accused. For example, at the scene of the crime, a crime investigator will identify a fingerprint on the window or possible blood on the body of a rape victim. This fingerprint or blood belongs to a specific class with certain characteristics. The fingerprint has now been positively identified as a fingerprint and the blood as blood. This means the fingerprint and the blood is not linked to a specific individual.

An analysis of the responses received from the participants suggests that they do not know what the investigation concept identification means. The answers provided are an indication that the lack of a specialised training could be the reason for lack of knowledge. Investigators who are selected and tasked to investigate rape cases should be properly trained and sent on courses on a regular basis.

3.2.2 Individualisation

Horswell (2004:14) argues that individuality and individualization are unique attributes that makes things different from all others that are similar to it. Marais (1992:19) and Van der Westhuizen (1996:6) are of the opinion that identification is a step towards individualisation. Individualisation is only possible if it is preceded by a series of identifications. According to Chisum and Turvey (2011:107), Greene (2007:563) and Lochner et al. (in press), individualisation refers to the demonstration that a particular sample is unique, even among members of the same class.

Ogle (2012:9) states that individualisation entails the comparison of disputed objects that are found at a crime scene with the ones of known origin. Bertino (2012:23) refers to the origin source as individual evidence and makes it clear that by narrowing down the identity to a single person who has a unique combination of characteristics; it could only belong to that one person.

The participants were asked what their understanding is of the concept of individualization. In response to the question, only one participant could give an acceptable answer. For these participants, individualization is to select or separate the individuals among many people. This lack of knowledge can be, according to the biographical information provided, and attributed to the lack of specialized training.

In rape investigation, individualisation is done on the objective evidence which includes the behaviour actions found at a crime scene. This is done to determine the individual perpetrators identity and involvement.

3.3 Meaning of modus operandi information

According to Hess and Orthman (2010:7), James and Nordby (2012:714), Lochner et al. (in press), Van der Westhuizen (1996:32) and Zinn and Dintwe (2015:447), modus operandi is a Latin term that means 'a method of operating.' It refers to the manner in which a crime has been committed and includes the choices and behaviours that are intended to assist the perpetrator in the executing of a crime. Labuschagne (2015:279) a leading researcher on rape investigations in South

Africa persuasively argues that *modus operandi* is the information that a criminal leaves behind on a crime scene and, according to him, this includes actions by the perpetrator and behavioural evidence.

Marais (1992:4) and Van Heerden (1982:189) point out that behaviour actions and evidence can be seen as perpetrator identification. *Modus Operandi* (2008) goes deeper in its explanation of *modus operandi* and links it to the successful execution of a crime. They argue that in criminal cases *modus operandi* is regarded as the actions taken by a criminal to perpetrate a crime successfully. *Modus Operandi* (2008) and Savino and Turvey (2011:408), explain that *modus operandi* in criminal cases most commonly describes the way a criminal does something. Bennet and Hess (2007:552) and Van der Westhuizen (1996:32) submit a more comprehensive description of the term as regards the habits and techniques of criminals, which have become stereotyped. These authors view it as a routine mode of conduct in which individualised techniques are employed by the perpetrator.

The participants were asked to define the concept *modus operandi*. Half of the participants did not offer any answer. The rest of the answers were not logical, clear and specific. One participant referred to *modus operandi* as a system that criminal used to commit crime. From the participants answers the researcher could determine their lack of knowledge on how to define the concept of *modus operandi*. The reason for the lack of knowledge regarding *modus operandi* is addressed by the researcher in the last chapter under findings and recommendations. Investigators should get sufficient knowledge and a proper understanding and training in the area in order to know the concept of *modus operandi* information in the investigation of rape cases.

According to Osterburg and Ward (2010:148), *modus operandi* is divided into three stages. These stages are actions taken before, during and after the crime. (It will not be discussed). Girard (2011:37) is of the opinion that during these stages criminals develops opinions, identifiable characteristics and methods of operations and techniques that are as identifiable as fingerprints. It can thus safely be argued that *modus operandi* can be used to identify a criminal. *Modus operandi* as an identification technique is discussed in the next section.

3.4 Modus operandi as an identification technique

In the investigation of crime, it is important for the investigator to use all possible lawful resources, methods and techniques to investigate the crime and establish the truth. Marais (1992:1) and Van Graan and Budhram (2015:54) submit that the determination of the identity of the perpetrator or suspect of a criminal act is of significant importance, because the detection and, by implication, the classification of incident situations are hardly possible without it. These authors are of the opinion that the collection of information and facts to determine the identity of the offender and his or her part in the incident remains the crux of any investigation.

Hess and Orthman (2010:324) and Marais and Van Rooyen (1990:66) stress that modus operandi as an identification technique is an excellent investigation method that can be used when much time has elapsed and no suspect has been arrested. Horgan (1979:9) and O'Hara and O'Hara (2003:15) listed four methods that can be used to identify a criminal, namely:

- the identification by eyewitnesses;
- circumstantial and objective evidence;
- possession of stolen property; and
- modus operandi.

Marais (1992:04) and Van Graan and Budhram (2015:55) state that during investigation the identification can be made directly or indirectly. The direct method of identification refers especially to perpetrator identification techniques such as personal description, sketches, identification parades, incidental identification, photographic identification, voice identification, and the perpetrator's modus operandi. Criminals have a particular modus operandi, which consists of their characteristics, and way of committing a crime. Van der Watt, Van Graan and Labuschagne (2014:61) point out that every crime and criminal has a modus operandi that can help the investigator to determine who is responsible for the crime committed. Buckles (2007:11) and Van Graan and Budhram (2015:62) see the specific modus operandi information which perpetrators leave behind at a crime scene as the central focus of the investigation. They encourage investigators to utilise modus operandi information to discover the facts about the crime.

The participants were asked if they regard modus operandi as an important identification technique. The majority of the participants answered 'yes,' but only one participant motivated his answer by saying: It gives significant information. From the biographical information which reflect the experience of the participants in the investigation of crime it, is of concern to the researcher that a lack of knowledge regarding modus operandi that was displayed. According to the researcher, this can be attributed to the lack of specialised training. The researcher noted from the answers of participants' that they do not really know how modus operandi can be used as an important identification technique in a rape cases.

3.4.1 Modus operandi information found on rape crime scenes

According to Bennet and Hess (2007:552), Hess and Orthmann (2010:324), Savino and Turvey (2011:408-409) and Van der Watt et al. (2014:61), a rape crime scene usually contains a significant amount of behavioural information. This is according to them seen as the offenders' crime scene behaviour. According to Brandl (2014:164) and Savino and Turvey (2011:408), crime scene behaviour consists of the actions and behavioural actions taken by the perpetrator to commit and execute a crime successfully. In their discussion of the behaviour information left on a rape crime scene, they include and acknowledge the role of offender's state of mind during the commission of the crime. They make it clear that these actions can influence the perpetrator's behaviour actions during the commission of the crime. They argue that studies have revealed that these behaviour actions can include actions such as offenders' selection, actions to protect their identity and actions taken to ensure successful completion of the crime.

Hess and Orthman (2010:324), Modus Operandi (2008), Osterburg and Ward (2010:148), Savino and Turvey (2011:40) and Van der Watt et al. (2014:64), refer to general types of modus operandi behaviour actions and information that according to them should be documented. They include, but are not limited to:

- location of offence;
- age of the victim;
- number of offenders;
- date and time of crime;

- type of targets;
- amount of planning before a crime;
- techniques and instruments to be used;
- methods of committing the crime;
- use of weapon during the crime;
- words spoken;
- language used;
- direction of escape or rout taken from offence location;
- nature and extent of precautionary acts;
- type of transportation used to and from the crime scene;
- items taken from the victim or crime scene(s); and
- motive and extent of injuries to the victim.

Van der Watt et al. (2014:64), are of the opinion that rape offenders' modus operandi includes the procedure or techniques that can be characteristic or reflective of a particular discipline, trade, skill profession, or area of knowledge particular to the victim, suggesting contact or a prior relationship, and knowledge particular to a crime scene of varying levels of familiarity. Van der Westhuizen (1996:32) cautions the investigator by informing him that offenders modus operandi information not only involves operational method and techniques, but it also includes the impersonate techniques, secret language, writing and communication signs of criminals.

3.4.2 Difference between modus operandi and the signature of a perpetrator

According to James et al. (2014:539), and Turvey (2012:334) there is confusion amongst researchers regarding the modus operandi and signature of a criminal. Some researchers (according to them) see these two concepts as the same. Brandl (2014:230), Labuschagne (2015:279) and Pethrick (2009:299) give an explanation to differentiate between these two concepts. They reason that all criminals do have a modus operandi but argue that they do not automatically leave a signature on a crime scene. They are also of the viewpoint that modus operandi is the method that is used to commit the crime and a signature refers to the distinctive behaviour that helps to serve the criminals psychological and emotional needs. In the context of

this research, and after analysis of the above authors' literature, the researcher established a few examples of criminal signatures, being:

- level of injuries to the victim, minimal to excessive;
- specific location or sequences to the criminal act;
- ejaculation, unintentional and/or intentional defecation at the crime scene;
- specific type of weapon used;
- personal items taken from victim; and
- specific type of victim targeted.

From a rape investigation perspective Turvey (2008:428), is of the opinion that investigators should first establish what the perpetrator is doing when committing the offense. This involves investigating how victims were selected, the level of force and control used, proffered sexual activity, and overall planning skills involved. Turvey (2008:428) argues that these offence behaviours are a function of the offender's modus operandi and signature. Several seminal authors such as Labuschagne (2015:278) remind investigators that there are factors that influence the modus operandi of a rape offender. These factors are highlighted in the next paragraph.

3.5 Factors that can influence the modus operandi perpetrators of rape

According to Labuschagne (2015:278) modus operandi is dynamic and can change through time. Labuschagne (2015:278) from his experience as a serial rape and homicide investigator, emphasize that modus operandi is an important identification technique and cautions investigators to consider this information when they investigate rape crimes. In the next paragraph those factors influence a perpetrator to change their modus operandi is highlighted.

- **Experience and success**

Modus Operandi (2008) and Turvey (2008:413) are of the opinion that a criminal's modus operandi behaviours are learned and they are subject to change. They are of the opinion that modus operandi is affected by time, and can change as the criminal discovers that some of the things done during a crime are more effective than others. They are of the opinion that criminals can subsequently recognize these effective actions, repeat them in future offences, and becoming more skilful, refine their overall modus operandi. According to Beauregard, Lussier and Poroux (2005) and Van der Watt et al. (2014:64), studies have shown that criminals can learn how to commit crimes more skilfully as they gain more experience, building confidence through success and/or having more contact with the criminal justice system.

- **Mental state**

Labuschagne (2015:281) and Van der Watt et al. (2014:64), from a rape investigation viewpoint, and Turvey (2012:336-339) from a crime scene reconstruction viewpoint, argue that perpetrators' behaviour may also be affected by a (perpetrator's) deteriorating mental state, the influence of controlled substances, and/or increased confidence that the law enforcement agency will not successfully apprehend them. For them these things may cause a criminal's modus operandi to become less skilful, less competent and more careless.

- **The media**

Further assertions are that there are other factors that can influence modus operandi. According to Labuschagne (2015:281), Lochner (2016:66), Modus Operandi (2008) and Turvey (2012:414), the information reported in the media may have an influence on the modus operandi of criminals. Criminals learn from what is reported in the media and what to do to prevent them from being arrested. They are of the opinion that criminals can also seek out knowledge, spending time with other, and more experienced, criminals.

The participants were requested to list the factors that, according to them, can influence the modus operandi of rape suspects. What is alarming that none of the participants could provide any answers! From the participants answers the researcher could determine their lack of knowledge on how to list the factors that

could influence the modus operandi of a rape suspect. This lack of knowledge is addressed by the researcher in the last chapter under findings and recommendations. The reason for those participants is that investigators should get training in the area in order to know how modus operandi information could be influenced.

3.6 The value of recorded modus operandi information

Hess and Orthman (2013:324) and Van der Watt et al. (2014:64), state modus operandi records contain valuable information relevant to the method of operation of known offenders, and the method used in past crimes by unidentified criminals. Marais and Van Rooyen (1990:34) and Van der Westhuizen (1996:33) caution that the offender's modus operandi is useless if it has not been described, studied, classified and recorded in a scientific way, for potential comparison, reference and identification. Casey (2011:256), Hess and Orthman (2013:17), Potgieter and DeWet (2010:2), Turvey (2012:407) and Van der Watt et al. (2014:64), are adamant that modus operandi should be collected, stored, and examined, whether on arrest cards or in computer databases. The advantages of recording modus operandi are listed by the above-mentioned authors as:

- linking of unsolved crimes;
- developing of investigative leads;
- prioritizing perpetrator identification or elimination of perpetrators;
- clearing of unsolved cases, and
- use in crime prevention.

Van der Watt et al. (2015:64), state that the linking of serial and stranger rape cases using documented behavioural modus operandi information should not be underestimated. They reason that documented behavioural modus operandi information can be of practical use in the total absence of physical evidence and witness statements.

To the question: 'How the participants suggested modus operandi information can be recorded?' Minority of the participants provide the following:

They were of the opinion that it should be properly documented and reported to the criminal record office. Two of the participants suggested that it should be recorded by the investigating officer. From the researchers' practical experience in the EPS, he knows that the offender's modus operandi information is captured and recorded in a computerized manner. From the participants answers the researcher could determine their lack of knowledge on how modus operandi is recorded by the EPS. This lack of knowledge is addressed by the researcher in the last chapter under findings and recommendations. The investigators should get training in the area in order to know how modus operandi information should be recorded.

3.7 Summary

In this chapter it was highlighted that individualisation is only possible if a process of identification was followed. To identify an object is to recognise that the object or person belongs to a specific category, without linking the object or person. Individualisation is to identify an object or somebody which has a known origin and then to link it to a specific object or person. To answer one of the research questions the concept of modus operandi was examined. Modus operandi refers to the manner in which a crime has been committed by a perpetrator. Modus operandi behaviour information can be used to identify a specific individual if the information is properly documented and analysed. Modus operandi as an identification technique does have investigation value. There are various factors that can influence the modus operandi of perpetrators, and investigators should take cognisance of these factors. From the literature study it was determined that the person who committed rape will leave behaviour evidence behind on a rape crime scene. The behaviour evidence should be documented and can be used to identify a rape suspect.

An understanding of the difference between the concepts of modus operandi and signature of a perpetrator may help investigators establish a pattern or link of an offender to a crime. A recorded keeping of the offender's modus operandi can inform investigators about the type of perpetrator who is likely to commit the crime of rape in the future. The purpose of the use of modus operandi information is to identify the perpetrator and to link cases to a perpetrator. The next chapter presents the findings and recommendations of this study.

4. CHAPTER 4: FINDINGS AND RECOMMENDATIONS

4.1 Introduction

The investigation of crime does have clear objectives, which, if correctly applied, will lead to positive results. One of these objectives is to identify the perpetrator; and modus operandi is one of the techniques that can be used to identify a perpetrator. The use of modus operandi information as a perpetrator identification technique plays an important role in the investigation of rape and other crime cases as it will enable the investigator to identify the perpetrator. This research is the result of the need, identified by the researcher, to improve the use of modus operandi in the investigation of rape cases in the Gulele policing area.

In an attempt to address the research questions and aim, the researcher gathered information from literature by authors of national and international origin, and involved the experience of investigators who investigate rape cases, to obtain knowledge from practice.

4.2 Findings

The researcher attained primary and secondary findings, based on the formulated research questions to address the aims of this research. Recommendations are made, based on the primary and secondary findings. The most prominent finding of this research is the lack of knowledge and insight the participants display regarding modus operandi information and how modus operandi can be used as an identification technique in the investigation of rape in the Gulele policing area. The lack of training, particularly specialised training in the use of modus operandi is the main reason for this phenomenon.

4.2.1 Primary findings

Primary findings are detailed below. In this research, based on the literature and empirical study the researcher established that:

- The bodies of a rape victim and that of the perpetrator of the crime rape are crime scenes; and important objective evidence can be found on these two crime scenes.

- Objective evidence is superior to other evidence and is the most reliable kind of evidence. If it is properly managed, it can help to establish the modus operandi of a perpetrator.
- Modus operandi is the method used by perpetrators to commit their crimes. From the literature study, it was determined that modus operandi information will be found on a rape crime scene.
- From the literature sources it was determined that the modus operandi information of rape perpetrators include their behaviour actions.

4.2.2 Secondary findings.

From the literature, study in this research it was established that:

- Criminal investigation is the systematic search for the truth and is used to reconstruct past events by using objective and subjective evidence.
- From the empirical evidence, the researcher concluded that the participants see crime investigation as a police function and do not have an in depth understanding of what the concept crime investigation entails. A comprehensive analysis of the literature study reveals that the principle objective of criminal investigation is to identify the perpetrator. Additional objectives are to determine whether a crime has been committed, the collection of objective and subjective evidence and to present the best evidence to the prosecutor.
- The investigation of crime requires a person with important intellectual, physiological, and physical characteristics, skills and abilities. The ability to know and understand what modus operandi is must be one of these. The empirical evidence indicates that the participants see non-corruption as an important ability. They fail to list any other important abilities.
- From the literature sources, it was established that the chain of evidence and the prevention of contamination of evidence serve an important role in the investigation of crime. The sole purpose is for evidence to be admissible in a trial. It was found that contamination of evidence occurs when the integrity of evidence is compromised. Empirical evidence obtained from the participants did not support the evidence from the literature sources.
- The literature study reveals that body materials such as semen, hairs, fibres, DNA, clothes, blood, saliva, sperm and urine are likely to be found on the body

of a victim. This is supported by the empirical evidence. The participants did not refer to the trace evidence that can be found on the body of the victim.

- From the empirical evidence gathered, it was clear that the participants do regard the perpetrators' body as a crime scene, but they did not explain their answers.
- It was found that individualisation is preceded by a process of identification. It involves the analysis and comparison of the disputed objects found at the scene with an object of known origin.
- From the literature study, it was discovered that there are factors that influence the modus operandi of perpetrators. These factors are the experience and successes gained through committing a crime. The mental state and the information reported in the media may influence the modus operandi of criminals.

4.3 Recommendations

One of the purposes of this research was to develop good practice and to empower those involved in the use of modus operandi information in the investigation of rape cases. This is only achievable if the investigators have sufficient knowledge and a proper understanding of, and training in the investigation of crime. Based on the reason for the lack of knowledge and insight regarding modus operandi and how it can be used in rape investigations, the following recommendations are made.

A robust policy is implemented for the recruiting of investigators who possess the necessary skills, characteristics and knowledge in the investigation of rape cases and the use of modus operandi information. Investigators who are selected and tasked with investigation of rape cases should be properly trained and, on a regular basis, sent on courses. The researcher recommends that the following topics be incorporated in the training programme of rape detectives:

- criminal investigation and its objectives;
- the role of the investigator in the investigation of rape cases;
- the Locard principle and how the chain of evidence in rape cases can be maintained to prevent contamination;

- crime scene investigation with special emphasis on how to prevent evidence from being contaminated;
- training in the correct evidence collection procedure with the focus on the collection of evidence from rape victims and perpetrators;
- modus operandi and how it can be used as a perpetrator identification technique;
- factors that influence the modus operandi of perpetrators of crime rape suspects.

It is recommended that there should be practical and theoretical in-service training for investigators who investigate rape cases and that this should be done on a continuous basis.

Investigators who investigate rape cases should be encouraged to equip themselves with knowledge by studying and attending courses to empower them to successfully investigate rape cases.

4.4 Conclusion

The researcher was able to address the research questions by utilizing the design and methodology of this research. The literature used in this study revealed that the investigation of crime does have clear objectives. These objectives can be reached if a systematic process is followed. The principle objective is to identify the perpetrator and in the process of identifying the perpetrators, evidence is used.

This research established that the bodies of the rape victim and perpetrator are crime scenes. Modus operandi is found on crime scenes. Modus operandi is a reference to the method used by criminals and which is used as a perpetrator identification technique.

The research results showed that a need for training exists among investigators of rape cases at the Gulele policing area. Based on the findings of the research, a number of recommendations have been made, aimed at improving the investigation of rape cases.

5. LIST OF REFERENCES

- Atsede, Wordofa. Deputy Commander at Addis Ababa Police Commission Family Violence, Child Protection and Sexual Offences Unit. Statement to author, 10 July 2012. Addis Ababa.
- Babbie, E. & Mouton, J. 2011. *The Practice of Social Research*. Cape Town: Oxford.
- Bachman, R. & Schutt, R.K. 2011. *The Practice of Research in Criminology and Criminal Justice*. 4th edition. Thousand Oaks.
- Baxter, E. 2015. *Complete Crime Scene Investigation*. Handbook. London: CRS Press.
- Beauregard, E., Lussier, P. & Poroux, J. 2005. The role of sexual interests and situational factors on rapists' modus operandi: Implications for offender profiling. *Legal and Criminological psychology*, 10:265-278.
- Becker, R.F. 2009. *Criminal Investigation*. 3rd edition. Canada: Jones and Bartlett.
- Bennett, W.W. & Hess, K.M. 2007. *Criminal Investigation*. 8th edition. Belmont: Wadsworth/Thomson Learning.
- Benson, B.C., Jones, G. & Horne, J.S. 2015. Forensic investigation of crime, irregularities and transgressions. In Zinn, R.J. & Dintwe, S.I. (eds.) 2015. *Forensic Investigation: Legislative Principles and Investigative Practice*. Cape Town: Juta.
- Bertino, A.J. 2012. *Forensic Science: Fundamentals and Investigations*. Mason: South-Western Cengage Learning.
- Birzer, M.L. & Roberson, C. 2011. *Introduction to Criminal Investigation*. Boca Raton: CRC Press.
- Boeije, H. 2010. *Analysis in Qualitative Research for Education: An introduction to Theory and Methods*. London: Sage.
- Brandl, S.G. 2014. *Criminal Investigation*. London: Sage.
- Buckles, T. 2007. *Crime Scene Investigation: Criminalistics and the Law*. New York: Thomson Delmar Learning.
- Byrd, M. 2004. *Duty description for the crime scene investigator*. Miami, FL Miami-Dade Police Department.
- Casey, E. 2011. *Digital Evidence and Computer Crime: Forensic Science, Computers, and the Internet*. 3rd edition. New York: Academic Press.
- Carney, P. 2004. *Practical Investigation of Sex Crimes*. Florida: CRC.

- Chisum, W.J. & Turvey, B.E. 2011. *Crime Reconstruction*. 2nd edition. Elsevier: London.
- Coetzee, T. 2008. *The Evidential Value of Crime Scene Investigation in Child Rape Cases*. MA dissertation, University of South Africa, Pretoria.
- Creswell, J.W. 2009. *Qualitative Inquiry & Research Design: Choosing Among Five Traditions*. 8th edition. Thousand Oaks: Sage.
- Crime Scene Forensics. 2017. Available from: <https://medium.com>. (Accessed: 14 June 2017).
- Crime scene. 2016. Available from: https://en.wikipedia.org/wiki/Crime_scene. (Accessed: 16 June 2016).
- De Vos, A.S., Strydom, H., Fouche, C.B. & Delport, C.S.L. 2011. *Research at grass roots: For social science and human service professions*. 4th edition. Pretoria: Van Schaik.
- Denscombe, M. 2002. *Ground Rules for Social Research: Guidelines for Good Practice*. 2nd edition. New York: Open University Press.
- Denscombe, M. 2010. *Ground Rules for Social Research: Guidelines for Good Practice*. 2nd edition. New York: Open University Press.
- Dowling, J.L. 1979. *Criminal investigation*. California: Harcourt College.
- Du Plooy-Cilliers, F., Davis, C. & Bezuidenhout, R. 2014. *Research Matters*. Cape Town: Juta.
- Dutelle, A.W. 2011. *An Introduction to Crime Scene Investigation*. 7th edition. Washington: CRC Press.
- Ethiopia, Criminal Code of the Federal Democratic Republic of Ethiopia, 2004, Proclamation No. 414/2004, Addis Ababa.
- Ethiopia, Constitution of the Federal Democratic Republic of Ethiopia. 1995. Proclamation No. 1/1995: Addis Ababa.
- Ethiopia, Criminal Procedure Code of Ethiopia, 1961. Proclamation No. 185. Ministry of Pen: Addis Ababa.
- Ethiopia, Family Violence, Child Protection and Sexual Offence see the Ababa City Administration Police Commission, 2009. Unpublished: Addis Ababa.
- Fisher, A.J. & Fisher, D.R. 2012. *Techniques of crime scene investigation*. CRC Press: Boca Raton.
- Fisher, B.A.J. 2004. *Techniques of Crime Scene Investigation*. 7th edition. Washington, DC: CRC Press.

- Fisher, J.T., Miller, L.S., Braswell, M.C. & Wallace, E.W. 2014. *Crime Scene Investigation*. 3rd edition. Waltham: AP Anderson.
- Flick, U. 2011. *Introducing Research Methodology. A Beginner's Guide to Doing a Research Project*. London: Sage.
- Gardner, R. 2013. Bloodstain Pattern Analyst. Expert in the field from Bevel & Gardner Associates. Atlanta, United States of America. Statement to author, 2013-06-24 & 2014-08-22: Pretoria.
- Gardner, R.M. 2005. *Practical Crime Scene Processing and Investigation*. 2nd edition. Boca Raton: CRC Press.
- Gilbert, J.N. 2004. *Criminal Investigation*. 6th edition. New Jersey: Prentice Hall.
- Gilbert, J.N. 2010. *Criminal Investigation*. 8th edition. New Jersey: Pearson.
- Girard, J.E. 2011. *Criminalistics: Forensic Science and Crime*. Burlington: Jones and Bartlett.
- Gray, D.E. 2014. *Doing research in the real-world*. London: Sage.
- Greene, J.R. 2007. *The Encyclopaedia of Police Science*. 3rd edition. New York: Routledge.
- Hazelwood, R.R. & Burgess, A.W. 2001. *Practical Aspects of Rape Investigation - A Multidisciplinary Approach*. Boston: CRC Press.
- Hess, K.M. & Orthmann, C.H. 2010. *Criminal Investigation*. 9th edition. Mason, OH: Cengage Learning.
- Hess, K.M. & Orthmann, C.H. 2013. *Criminal Investigation*. 10th edition. Mason, OH: Cengage Learning.
- Hofstee, E. 2006. *Constructing a Good Dissertation*. Johannesburg: EPE.
- Horgan, J.J. 1979. *Criminal Investigation*. 2nd edition. New York: McGraw-Hill.
- Horswell, J. 2004. *The Practice of Crime Scene Investigation*. Florida: CRC Press.
- Ingram, J.L. 2009. *Criminal Evidence*. 10th edition. Dayton: LexisNexis.
- James, S.H. & Nordby, J.J. 2012. *Forensic science. An introduction to Scientific and Investigative Techniques*. 3rd edition. Boca Raton: CRC Press.
- James, S.H., Nordby, J.J. & Bell, S. 2014. *Forensic science. An Introduction to Scientific and Investigative Techniques*. 4th edition. London: CRC Press.
- Labuschagne, G. 2015. Criminal Investigative Analysis: An Applied Perspective. In Zinn, R.J. & Dintwe, S.I. (eds) 2015. *Forensic Investigation: Legislative Principles and Investigative Practice*. Cape Town: Juta.

- Lee, H.C., Palmbach, T. & Miller, M.T. 2003. *Crime Scene Handbook*. London: Academic.
- Leedy, P.D. & Ormrod, J.E. 2005. *Practical Research: Planning and Design*. 8th edition. Ohio: Merrill Prentice Hall.
- Leedy, P.D. & Ormrod, J.E. 2010. *Practical Research: Planning and Design*. 9th edition. New Jersey: Pearson: Education International.
- Leedy, P.D. & Ormrod, J.E. 2013. *Practical Research: Planning and Design*. 10th edition. Boston: Pearson.
- Lochner, H.T. 2014. *Taking Effective Witness Statements*. Cape Town: Juta.
- Lochner, H.T. 2016. The use of modus operandi information from incarcerated cash-in-transit robbers in the Investigation of cash-in-transit robberies. D.Lit(t) Et Phil. Thesis, University of South Africa, Pretoria.
- Lochner, H.T. & Zinn, R.J. 2015. *Crime Scene Investigation*. Cape Town: Juta.
- Lochner, H.T., Zinn, R.J. & Horne, J.S. (in press). *Basic Investigative Principles: Handy hints for Investigators, Lawyers and Magistrates*.
- Lushbaugh, C.A. & Weston, P.B. 2009. *Criminal Investigation: Basic Perspectives*. 9th edition. New Jersey: Pearson Education.
- Lyle, D.P. 2012. *Forensic Science*. 1st edition. Chicago: ABA Publications.
- Lyman, M.D. 2013. *Criminal Investigation. The Art and Sciences*. 5th edition. New Jersey: Prentice Hall.
- Marais, C.W. 1989. Die waarde van Modus Operandi: Inligting by die ondersoek van seker misdade. *Acta Criminologica*, 2(2):46.
- Marais, C.W. 1992. *Physical Evidence in Crime Investigation*. Pretoria: Henmar.
- Marais, C.W. & Van Rooyen, H.J.N. 1990. *Crime Investigation*. Pretoria: Henmar.
- Maree, K. 2007. *First Steps in Research*. Pretoria: Van Schaik.
- Marshall, C. & Rossman, G.B. 2011. *Designing Qualitative Research*. New Delhi: Sage.
- Maxfield, M.G. & Babbie, E. 2005. *Research Methods for Criminal Justice and Criminology*. 4th edition. Belmont: Wadsworth Thomas Learning.
- McNiff, J. & Whitehead, J. 2010. *You and your Action Research Project*. Routledge: Wadsworth Thomson Learning.
- Modus Operandi Law and Legal Definition. 2008. US Legal. From: <https://definitions.uslegal.com/m/modus-operandi/>. (Accessed: 13 May 2012).

- Monckton-Smith, J., Adams, T., Hart, A.G. & Web, J. 2013. *Introducing Forensic and Criminal Investigation*. London: Sage.
- O'Hara, C.E. & O'Hara, G.L. 2003. *Fundamentals of Criminal Investigation*. 7th edition. Illinois: Charles C Thomas.
- Ogle, R.R. 2002. *Crime Scene Investigation and Reconstruction*. Upper Saddle River: Pearson Education.
- Ogle, R.R. 2004. *Crime Scene Investigation and Reconstruction*. Upper Saddle River: Pearson Education.
- Ogle, R.R. 2012. *Crime Scene Investigation and Reconstruction*. New Jersey: Pearson Education.
- Orthmann, C.H. & Hess, K.M. 2013. *Criminal Investigation*. 10th edition. Delmar: Cengage Learning.
- Osterburg, J.W. & Ward, R.H. 2010. *Criminal Investigation. A Method for Reconstructing the Past*. 6th edition. Boston: Anderson.
- Palmiotto, M.J. .2013. *Criminal Investigation*. 4th edition. Boston: CRC Press.
- Pena, M.S. 2000. *Practical Criminal Investigations*. Belmont: Thomson Wadsworth.
- Petherick, W. 2009. *Serial Crime Theoretical and Practical Issues in Behavioural Profiling*. Elsevier: London.
- Petherick, W. 2012. *Serial Crime*. London: Elsevier.
- Potgieter, C. & De Wet, J. 2010. A descriptive study of the modus operandi of serial rapist in South Africa. *ActaCriminologica*, 23(3):12-13.
- Humble, I.S.D. 2015. Primary and Secondary Crime Scenes. [PowerPoint presentation]. From: <http://www.humbleisd.net/cms/lib2/TX01001414/Centricity/Domain/3959/Prim%20and%20Secondary%20CS%202015.ppt>. (Accessed: 12 October 2017).
- Savino, J.O. & Turvey, B.E. 2011. *Rape Investigation Handbook*. 2nd edition. London: Elsevier.
- Siegel, J.A., Saukko, P.J. & Houck, M.M. 2013. *Encyclopaedia of Forensic Science*. Oxford: Elsevier.
- Singleton, R.A. & Straits, B.C. 2010. *Approach to Social Research*. 3rd edition. New York: Oxford University Press.
- Stelfox, P. 2009. *Criminal Investigation: An Introduction to Principles and Practice*. New York: Willan.

- Turvey, B.E. 2008. *Criminal Profiling: An Introduction to Behavioural Evidence Analysis*. 3rd edition. London: Elsevier.
- Turvey, B.E. 2012. *Criminal Profiling*. Sitka: Elsevier.
- UNISA. 2004. Reference Method for Unisia (Florida). 7th edition. UNISA: Florida.
- Van der Merwe, E. 2010. The Value of the Victim's Statement in the Investigation of Rape. Unpublished MA Dissertation, University of South Africa, Pretoria.
- Van der Watt, M. 2014. Forensic Methods and Techniques 1: Study Guide 1 for FOR1501. Pretoria: Unisa.
- Van der Watt, M., Van Graan, J. & Labuschagne, G.N. 2014. Modus operandi, signature and fantasy as distinctive behaviour: Fundamental consideration in the case linkage of child rape cases. *Child Abuse Research: A South African Journal*, 15(1): 61-72.
- Van der Watt, M. 2015. The Preliminary Investigation Phase. In Zinn, R.J. & Dintwe, S.I. (eds). 2015. *Forensic Investigation: Legislative Principles and Investigative Practice*. Cape Town: Juta.
- Van der Westhuizen, J. 1996. *Forensic Criminalistics*. 2nd edition. Johannesburg: Heinemann.
- Van Graan, J. & Budhram, T. 2015. Principles of Evidence. In Zinn, R.J. & Dintwe, S.I. (eds). 2015. *Forensic Investigation: Legislative Principles and Investigative Practice*. Cape Town: Juta.
- Van Heerden, T.J. 1982. *Criminalistics*. Pretoria: UNISA.
- Van Heerden, T.J. 1984. *Criminalistics*. Pretoria: UNISA.
- Van Rooyen, H.J.N. 2004. *The A-Z Guide for Forensic, Private and Corporate Investigations*: Pretoria: Henmar.
- Van Rooyen, H.J.N. 2008. *The Practitioner's Guide to Forensic Investigation in South Africa*. Pretoria: Henmar.
- Wagner, C., Kawulich, B. & Garner, M. 2012. *Doing Social Research. A Global Context*. London: Sage.
- Woods, D.D. 2013. *Fundamentals of Criminal Investigations*. Illinois: Charles C Thomas.
- Zinn, R.J. & Dintwe, S.I. (eds). 2015. *Forensic investigation: Legislative Principles and Investigative Practice*. Cape Town: Juta.

6. APPENDIXES

6.1 Appendix A: Interview schedule

THE USE OF MODUS OPERANDI AS IDENTIFICATION TECHNIQUE IN THE INVESTIGATION OF RAPE CASES IN GULELE POLICE STATION

Instructions:

Please answer all of the questions as honestly as possible. The information collected for this study will be analysed in order to develop an accurate picture for this research project. The purpose of the research is to obtain my Master's Degree in Forensic Investigation at the University of South Africa. Your participation will assist the researcher to make findings and recommendations to determine how of modus operandi as identification technique can be used in the investigation of rape cases in Gulele police station. You do not need to identify yourself and, similarly, the researcher will uphold anonymity in that there will be no possibility of any participant being identified or linked in any way to the research findings in the final research report.

Declaration by the researcher

You as the participant will be treated as a human being. The interview will be in the language of your choice. No attempts will be made to mislead you or to supply you with false information. It is my intention to conduct this research honestly, fair and transparent and I acknowledge that I may have certain limitations, competence and believes regarding research. However, I will at all times adhere to integrity, transparency and accountability. There are no predetermined risks accompanying this study. You as the participant are merely providing the researcher with knowledge about the subject matter. It is not foreseen that by participating in this research that you as the participant will face any specific risks.

The questions formulated in the interview schedule are to provide information to answer the research questions. It is not of a personal nature and should not pose a risk of discomfort. During the interview you may become tired or feel uncomfortable at which point you may request a break or request that the interview be postponed to a later date or terminated if so desired.

I will ensure that the benefits from this research will out way any risk and precautions will be taken to minimize and mitigate risk if risks occur. I will adhere to the research ethics of Unisa and all other applicable policies on the protection of the identity of the participants and the information that was gathered during the interview. The interview schedule with your information and relevant documentations to the interview and the analyses of the information will be code protected and it will be stored in a code protected safe. I am the only person who has excess to the safe.

You as the participant do not have to disclose information you would prefer to remain private. I am the person who will analyse the data and will ensure that all data be treated confidentially and only for the purpose agreed herewith. Your information will be used as empirical data in the research report.

I appreciate your willingness to be interviewed for this research project. You may withdraw from the study at any time. In co-signing this agreement, Fikre Woldegebriel Badore (the researcher) under takes to:

- Maintain confidentiality, anonymity, and privacy regarding the identity of the participant and information rendered by the participant.
- The researcher will use code names to protect the anonymity, and privacy regarding the identity of the participant and all the information obtained during the interviews will be kept confidential at all times.

The research findings will be made available to you should you request them. The research report will after the research has been done be available at UNISA library. (Electronic and hard copy).

Participant's involvement in the study

Your involvement in this study is voluntary. You will in no way be penalised if you do not participate or withdraw during the interview. The reason for your involvement is to gain valuable, rich and new information regarding the problem that is researched. You will be asked open-ended questions which will appear on an interview schedule. I will record your answer verbatim on the interview schedule. The interview schedule will be completed anonymously to protect your

confidentiality. I will refrain from publishing any of the participants' personal information.

The open-ended questions will allow me as the researcher to ask clarifying and probing questions on answer you gave. The interview will be semi structured and will take approximately 60 minutes.

This research will follow a qualitative approach and empirical design. Interviews are an empirical method to gather information and this is one of the data collection techniques that I am going to use in this research. I have used a scientific sampling method to sample you as a participant for this research. You as a participant fall into the geographical area where the research will be conducted. You have the experience and the knowledge of the topic under investigation. You will be able to supply the richest and most valuable information that will help to investigate the topic under investigation.

Participant's benefits

There are no perceptible financial benefits or incentives available for you. However, it can be proposed that you as the participant will benefit in some way through the process of knowledge production. The result of this study could facilitate the enhancement of the investigation capabilities of the investigators. This study could benefit the academic community since its results could be used in academic material and the results could be accessed by local and international scholars as a source.

The researcher to complete the next section after the information was read to the participant.

		Yes/No
1.	I the participant have received sufficient information about the study for me to decide whether to take part.	
2.	I the participant understand that I am free to refuse to take part if I wish	
3.	I the participant understand that I may withdraw from the study at any time without having to provide a reason.	

		Yes/No
4.	I the participant know that I can ask for further information about the study from the research team.	
5.	I the participant understand that all information arising from the study will be treated as confidential.	
6.	I the participant know that it will not be possible to identify any individual participant in the study report, including myself.	
7.	I the participant agree to take part in the study.	
8.	I the participant understand that all information will be kept in a code protected safe and that the documents on which the information appears will also be code protected.	

Certificate by participant

I the participant also consent to:

- follow-up interview if necessary;
- the interviews be recorded in writing; and
- the use of data derived from these interviews by the interviewer in a research report as he deems appropriate;

I the participant also understand that:

- I am free to end my involvement or to cancel my consent of participate in the research at any time should I want to;
- Information rendered up to the point of my termination of participation could, however, still be used by the researcher;
- Anonymity is guaranteed by the researcher and data will under no circumstances be reported in such a way to reveal my identity;
- I am free to determine that specific information that I reveal should not be recorded in writing;
- No reimbursement will be made by the researcher for information rendered or for my participation in this project;
- I will in no way derive any personal benefit from taking part in this research project; (delete if not applicable and if applicable explain the benefit).

By signing this agreement, I the participant under take to:

Give honest and full answers to reasonable questions and not to deliberately mislead the researcher.

I the participant hereby acknowledge that the researcher/interviewer:

- Discussed the aims and objectives of this research project with me;
- Informed me about the contents of this agreement; and
- Explained the implications of my signing this agreement.

I confirm that quotations from the interview can be used in the final research report and other publications. I understand that these will be used anonymously and that no individual participant will be identified in such report.

I the participant did receive the original copy of this agreement on signing it.

I the participant understand the contents of this document and agree to voluntary participate in this research.

Signature:

Date:

Name in block letters, please

SECTION A: HISTORICAL INFORMATION

1. What is your age?
2. What is your gender?
3. State the name of unit that you are attached to?
4. How many years of investigation experience do you have?
5. Did you attend any Crime investigation Courses?
6. Did you receive/undergo any training regarding crime investigation?
7. Did you undergo specialized training with regards to the use of modus operandi in the investigation of rape cases?
8. How many rape cases have you investigated?

SECTION B: CRIME INVESTIGATION

9. In your own words explain your understanding of the concept crime investigation?
10. What do you regard as the objectives of criminal investigation?
11. What investigate aspects do you regard as important during the investigation of crime?
12. What investigative aspects do you regard as important during the investigation of rape?
13. What are the responsibilities of a crime investigator?
14. What role does the investigator fulfil in the investigation of rape cases?
15. In your viewpoint, what characteristics should an investigator of crime possess?
16. What characteristics should an investigator who investigates rape cases possess?
17. In your own words explain the concept contamination of evidence?
18. How can contamination of evidence in rape cases been prevented?
19. What is your understanding of the investigative principle “chain of evidence”?
20. What did you do to maintain the chain of evidence in rape cases?

SECTION C: CRIME SCENE

21. What is your definition of a crime scene?
22. Do you consider the body of a rape victim as a crime scene?
23. If the answer to the above question is yes explain your reasons.
24. Do you consider the body of the suspect as a crime scene?
25. If the answer to the above question is yes explain your reasons.
26. What do you consider as forensic investigation?

SECTION C: MODUS OPERANDI

27. In your own words can you explain what your understanding of the concept identification is?

28. In your own words explain your understanding of the concept individualisation is?
29. How would you define modus operandi?
30. Do you regard modus operandi as an important identification technique?
31. If your answer to the above question is positive, furnish reasons for your opinion?
32. Are there factors that can influence the modus operandi of rape suspects?
33. If the answer to the above is positive, name the factors that you consider to have an influence of the modus operandi of a rape suspects.
34. How would you suggest modus operandi information to be recorded?

Thank you for the opportunity to allow me to conduct this interview with you your cooperation.