# ASSESSING THE UTILISATION OF THE LOCAL CRIMINAL RECORD CENTRE IN RAPE CRIME SCENES

by

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#### **ABSTRACT**

The main purpose of this research is to assess the utilisation of the Local Criminal Record Centre (LCRC) in rape crime scenes. First responders need to attend to the crime scene and secure it as soon as possible. Other role-players such as the Family Violence, Child Protection and Sexual Offences (FCS) investigator and LCRC fieldworkers should be activated by the first responder to the rape crime scene. Ideally, role-players should be activated as soon as the case is reported to the first responder. Members of the LCRC are responsible for recording the crime scene by taking photographs, making video recordings and drawing sketch plans of the scene. The LCRC is also responsible for processing the rape scene for physical evidence such as fingerprints, blood, hair, semen and saliva. The crime scene is a major source of information as far as physical evidence is concerned. The body of the victim is also a major source of physical evidence.

It is therefore essential to have the rape victim examined by a medical examiner and the crime scene to be processed by the LCRC fieldworker timeously, in order to secure physical evidence that could be used to individualise a suspect. The discovery of physical evidence could place the suspect on the scene of crime and link such suspect to the crime committed. The physical evidence could also assist in corroborating the version of events from the victim. The physical evidence could also be used to exclude suspects as well.

This dissertation seeks to highlight the importance of having the LCRC processing rape crime scenes for physical evidence and to emphasise the responsibility of the first responders to activate LCRC fieldworkers to process the scene of incident timeously, in order to maximise physical evidence recovery.

# **KEY CONCEPTS**

- Criminal Investigation
- Forensic Science
- Individualisation
- Identification
- Crime Scene
- Physical Evidence
- Rape

#### **ACKNOWLEDGMENTS**

This dissertation is dedicated to my mother, Zoliswa and my late father, Vuyisile who have been supportive throughout my studies and career. The support from my family kept me going through the many challenges that have surfaced during this study.

I would like to thank the Lord for His grace and guidance throughout my life. I wish to express my sincere gratitude towards both my supervisor, Mr R.J. Mokwena and cosupervisor, Dr N.J.C. Olivier for their patience, wisdom, guidance and assistance throughout my studies.

I would also like to thank the SAPS management and members of the George Cluster police stations who participated in this study.

## **DECLARATION**

I declare that ASSESSING THE UTILISATION OF THE LOCAL CRIMINAL RECORD CENTRE IN RAPE CRIME SCENES is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references. I further declare that I submitted the dissertation to originality checking software.

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.

#### **LUVUYO MANELI**

28 February 2018

# **LIST OF ABBREVIATIONS**

LCRC Local Criminal Record Centre

CSC : Community Service Centre

CAS : Case Administration System

FCS : Family Violence, Child Protection and Sexual Offences

SAPS : South African Police Service

FSL : Forensic Science Laboratory

TNT : Trinitrotoluene

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22 January 2018

To whom it may concern,

This is to certify that I have edited Luvuyo Maneli's dissertation titled

# ASSESSING THE UTILISATION OF THE LOCAL CRIMINAL RECORD CENTRE IN RAPE CRIME SCENES

checking the spelling, grammar, punctuation, spacing and for repetition.

Yours sincerely,

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#### **CHAPTER ONE**

#### **GENERAL ORIENTATION**

#### 1.1 INTRODUCTION

The researcher intended to do a study in rape cases reported in the George cluster police stations. The researcher wanted to investigate the problems that first responders to rape cases experienced in activating the Local Criminal Record Centre (LCRC) fieldworkers. The primary responsibilities of LCRC fieldworkers on crime scenes are to search, locate, collect and safe keeping of physical evidence for analysis and possible presentation of such evidence during a subsequent trial. It is the responsibility of the first responders to activate all relevant role players, including the LCRC fieldworkers, to the scene of crime. The first responders in these cases are the Community Service Centre (CSC) patrol police members. The researcher asked at least 40 CSC patrol members to participate in the study. These participants were interviewed by the researcher at their places of work. The researcher seeks to address the challenges that are experienced by first responders to rape crime scenes in order to have all crimes scenes attended by LCRC fieldworkers for processing.

#### 1.2 PROBLEM STATEMENT

Welman, Kruger and Mitchell (2005:14) explain that a problem statement is a complication experienced by the researcher in either a theoretical or practical situation and to which he or she wants to solve such difficulty. The first requirement in the research process is to see the problem with unwavering clarity and to state it in precise and unmistakable terms says Leedy and Ormrod (2015:50).

According to the rape cases registered on Case Administration System (CAS) in the George cluster, out of the 59 cases reported at the police stations in George during the period of 1 January 2014 until 1 April 2014, only 10 (16%) cases had possible physical evidence collected by LCRC fieldworkers from the crime scenes; of the 59 rape cases reported, LCRC fieldworkers were activated to only 38 (64%) of these cases according to the LCRC case register. The LCRC offices are equipped with forensic light sources and chemicals that assist in the detection of

physical evidence, such as blood, semen, saliva, vaginal secretion and fingerprints on crime scenes. The LCRC fieldworkers are primarily responsible for recording the scene, search and collect possible physical evidence. Ideally, the LCRC should be activated immediately, to all sexual assault cases, once the rape case is reported to the police and the LCRC fieldworkers should respond within 45 minutes from receiving the case, according to National Instruction 5/2003 (SAPS, 2003).

Fieldworkers from the LCRC are at times activated a day or more after the rape had been reported and crime scene management is not always applied by the first responders (CSC members responding to complaints) to rape cases unlike in cases such as house robberies where the scene would be cordoned off and protected whilst all relevant units are activated until the scene is handed over to the units concerned. Unprotected rape crime scenes lead to possible contamination and loss of possible physical evidence on the crime scene, resulting in a low detection rate of such evidence. The researcher wants to find out why LCRC fieldworkers are not activated to process all rape cases.

It is important to do the research to ensure that the first responders to rape complaints are made aware of the use of LCRC fieldworkers in processing rape crime scenes for physical evidence in order to individualise a suspect. The researcher has focused on how LCRC fieldworkers could assist in searching and locating blood, semen, saliva and hair that could be found on a rape crime scene as physical evidence and how such evidence can be used to individualise a suspect of rape.

## 1.3 AIM OF RESEARCH

According to Denscombe (2012:49), the aims of the research indicate the direction in which the research will go and point to the target that the research hopes to hit. The aim of this study is to determine why LCRC fieldworkers are not activated to all rape scenes by the first responders in the George Cluster.

#### 1.4 PURPOSE OF THE RESEARCH

Creswell (2014:123) refers to Locke, Spirduso and Silverman (2013) by stating that the purpose statement indicates why you want to do the study and what you intend to accomplish. The purpose of the research has to do with the focal point of the research and it gives the researcher a benchmark to evaluate the outcomes of the study says Denscombe (2010:08). Denscombe (2010:10) states further that there are about six possible purposes for doing research. The researcher focused on evaluation, exploration and to develop good practice as purposes of this research.

The researcher evaluated the responses from the interviews to determine the weaknesses and strengths of first responders regarding the use of LCRC fieldworkers to process rape scenes for possible physical evidence in order to individualise a suspect.

Explored recent and relevant literature (peer review journals, dissertations and academic books) from local and national libraries about the use for physical evidence (such as blood, semen, hair and saliva) to individualise a suspect in rape cases, to find new information in order to improve the weaknesses of first responders into strengths. Interviewing experts in the field to find best practices that should be applied when processing sexual assault crime scenes for physical evidence.

The researcher has developed good practices by make certain findings and recommendations that could add value to the investigation of rape cases, especially when the investigator seeks to individualise a suspect to a specific rape case using physical evidence.

As the research is completed, the researcher intends to utilise the outcomes of the research to inform the heads of Crime Prevention, CSC, LCRC and the FCS sections, to highlight the need to use LCRC resources to detect physical evidence in cases of sexual assault. The researcher is certain that the utilisation of the LCRC fieldworkers and their resources during a sexual assault investigation is useful and should be regarded as a necessity within all police units that respond to rape complaints.

#### 1.5 RESEARCH QUESTIONS UNDER INVESTIGATION

According to Denscombe (2010:31), research questions gives the point of departure for any study in which specific aspects are to be perceived, quantified and interrogated in order to provide clarity on the topic.

The research question under discussion is:

1. Why is the LCRC not called to process rape crime scenes in the George Cluster?

# 1.6 KEY THEORATICAL CONCEPTS

Leedy and Ormrod (2010:58) state that in defining a term, the researcher makes the term mean whatever he or she wishes it to mean, within the context of the problem and its sub problems. Key theoretical concepts are those concepts that capture the essence of what the report is about, according to Denscombe (2007:282). The following key concepts are defined so that the reader of this document understands the specific concepts discussed.

# 1.6.1 Criminal investigation

According to Pepper (2005:93), criminal investigation is an official effort to uncover crime.

#### 1.6.2 Forensic science

Forensic science is the methods and techniques of science applied to matters involving the public says Siegel (2009:2). The author states further that today, forensic science has come to mean the application of the methods and techniques of science to matters involving justice and the courts.

## 1.7 VALUE OF THE RESEARCH

Denscombe (2007:43) states that a good research demonstrates its relevance in terms of existing knowledge that contributes something to existing theories, the way it addresses practical problems and the timeliness thereof. This research will benefit the academic community being available to students and researchers. The research will add value regarding the importance of activating LCRC fieldworkers to process rape cases. The research could be used as a source for students, researchers, first responders and would be especially useful to investigators of rape cases.

The South African society would benefit when offenders of rape are successfully prosecuted. The participants who participated in the research have gained valuable knowledge of how the LCRC can add value to the processing of rape crime scenes.

#### 1.8 RESEARCH METHODOLOGY

Research methodology is a systematic solution to a research problem according to Kothari (2004:8). The author explains that, it should be understood as a scientific study on how research is conducted. It focuses the various steps that are taken by a researcher in the studying of the research problem and the rationality behind them. Kothari (2004:8) concludes that when one speaks of research methodology, one doesn't only talk of the research methods but also think about the reasoning behind the methods in the context of the research study and explain the reason why a particular method or technique is used and why not using other methods so that study results could be assessed by the researcher or by others. According to Welman et al. (2005:2), research methodology considers and explains the logic behind research methods and techniques. The author states further that research methodology has much wider scope than research methods (such as opinion polls) which, in turn, have a wider scope than research techniques (such as attitude scales).

## 1.8.1 Research design

Terre Blanche, Durrheim and Painter (2006:34) describe a research design as a strategic framework for action that serves as a bridge between research questions and the execution or implementation of the research. According to Mouton and Marais (1990:32), a research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. The ways in which a researcher might combine qualitative and qualitative methods are almost limitless, restricted only by the researcher's imagination and creativity, as well as by the nature of the research problem (Leedy and Ormrod, 2015:331). Welman et al. (2005:52) simplify the description of a research design by stating "a research design is the plan according which we obtain research participants and collect information from

them". According to Denscombe (2010:99, 100), a research design of high quality has at least three characteristics, namely: (1) providing the description of the various elements of the study; (2) provides the reasoning for the selection of research strategy in relation to the research questions; (3) it details how the key parts of a research project link together.

The researcher chose the empirical design to do this study. According to Maxfield and Babbie (2005:6), empirical research is when knowledge based on experience or observation is produced.

# 1.8.2 Approach

The researcher collected data by using an interview schedule with a qualitative approach. Mouton (2001:107) states that in a qualitative research, researchers tend to keep field notes as they participate in the fieldwork, often in the natural field settings. The statement by the author is supported by Leedy and Ormrod (2015:269) where it is stated that qualitative research typically focusses on phenomena that are occurring or have previously occurred in natural settings, in the "real world". It was the intention of the researcher to record notes when participating and making observations during the fieldwork. The researcher considers the qualitative approach best for this study because this approach allows a comprehensive recording of the participants' responses, word for word on paper. It also allowed the researcher to do a comprehensive literature study. The source of information for this study was gathered from literature study and interviews. The researcher chose the empirical design to do this study because it involved going out into the field and gathered the personal experience and knowledge of participants, according to Mouton (2001:149). Mouton (2001:149) states further that this design has an advantage to the researcher as it allows the researcher to investigate the responses from the participants. Leedy and Ormrod (2015:273) agree by saying that the advantage here is that the researcher might gain insights about the group and its behaviours that could not be obtained in any other way. This design has enabled the researcher to have insight into the personal experiences of the participants during of rape investigation.

# 1.9 TARGET POPULATION AND SAMPLING

The population consists of individuals, groups, organisation, human products and events or the conditions to which they are exposed, according to Welman et al. (2005:52). The authors state further that a research problem therefore relates to a specific population and the population encompasses the total collection of all units of analysis about which the researcher wishes to make specific conclusions. The ideal population for this study would be all the CSC patrol police members attending to complaints in South Africa. However, Welman and Kruger (2001:47) state that the research population is usually so large, that it is impractical to conduct research on all. The primary goal is to get a representative sample or a small collection of units or cases from a much larger population, such that the researcher can study the smaller group and produce accurate generalisations about the larger group (Neuman, 2007:14). Therefore, the researcher had to obtain data from a sample of the population. Welman et al. (2005:52) explain that a target population is the entire group that the researcher is interested in; the group the researcher wishes to draw conclusions. The target population is the CSC patrol members in the George cluster for the study. The researcher wants to determine why they are not notifying the LCRC to process all rape crime scenes.

The George cluster has 122 CSC patrol police members, covering all 4 police stations (Thembalethu SAPS, George central SAPS, Pacalsdorp SAPS and Conville SAPS). At least 40 participants were asked to participate in this research. The researcher used simple random sampling to select the 40 participants. According to Welman et al. (2005:59), random sampling is most popular type of probability sampling, where each unit of the population has an equal chance of being included in the sample and each sample of a certain size has the same probability of being selected. Welman et al. (2005:60) state further that being representative, serves as an advantage in a simple random sample as it doesn't favour one unit of analysis over another. Leedy and Ormrod (2010:205) agree by stating that every unit of the population has an equal chance of being chosen in a simple random sample.

The researcher selected 4 samples from the police stations in George, namely: Sample "A", sample "B", sample "C" and sample "D". Sample "A" consist of

members from Thembalethu Police Station. There are 32 members and the researcher selected 10 participants by using the simple random sampling technique. The researcher wrote all 32 names of the station, each on a small piece of paper, put the paper in a hat, stir the papers and drew 10 names from the hat. Sample "B" consist of members from George Central Police Station. There are 36 members and the researcher selected 10 participants by using the simple random sampling technique. The researcher wrote all 36 names of the station, each on a small piece of paper, put the paper in a hat, stir the papers and drew 10 names from the hat. Sample "C" consist of members from Pacalsdorp Police Station. There are 24 members and the researcher selected 10 participants by using the simple random sampling technique. The researcher wrote all 24 names of the station, each on a small piece of paper, put the paper in a hat, stir the papers and drew 10 names from the hat. Sample "D" consist of members from Conville Police Station. There are 30 members and the researcher selected 10 participants by using the simple random sampling technique. The researcher wrote all 30 names of the station, each on a small piece of paper, put the paper in a hat, stir the papers and drew 10 names from the hat.

A total of 40 participants took part in this research: A sample of 10 from each station. The sample size is in line with Welman et al. (2005:71) where it is said as a general rule, researchers should not use any sample with less than 15 units of analysis, but preferably one more than 25 units of analysis. The researcher applied for permission from the SAPS Head Office to conduct interviews for the George Cluster CSC patrol members. The permission was granted and is filed as Annexure 1.

## 1.10 DATA COLLECTION

Leedy and Ormrod (2005:143) state that multiple forms of data gathering techniques in one study are often used by qualitative researchers. These include interviews, case study, observations and anything else could assist in answering their research questions. According to Denscombe (2010:45,46), it is very important to have access to documents and people for the purpose of research otherwise researchers will speculate. Mouton (2001:99) says that data sources can be categorized into self-reporting, observation, physical sources and archival

sources. Qualitative data come in the form of photos, written words, phrases or symbols describing or representing people and events in social life (Neuman, 2007:328). The researcher collected data by doing face-to-face interviews (self-reporting). He also gathered archival/documentary sources and to do a literature study.

According to Creswell (2014:201), it is necessary for the researcher to use more than one data collection technique as it allows him to use the triangulation strategy by using different data sources of information by examining evidence from the sources and using it to build a coherent justification for themes. Creswell (2014:201) states further that, the use of more than one approach to investigate a theme allows the researcher to be more confident on the accuracy of the findings and to convince the readers of that accuracy. The use of more than one approach to investigate a theme also ensures validity. De Vos, Strydom, Fouche and Delport (2014:442) say that the triangulation design is the most well-known and popular of the four mixed methods designs, which enables the researcher to produce more complete and well-validated conclusions. For Mouton and Marais (1990:75), the distinctive nature of the research domain of the social sciences poses the greatest challenges to the methodological ingenuity of the researcher. Welman et al. (2005:134) highlight that each data-collecting method and measuring instrument has its advantages and drawbacks. The researcher obtained information from studying appropriate and relevant literature. The researcher has compared and evaluated the information from the various sources against each other about specific discussions related to the research.

#### 1.10.1 Literature

The researcher noted the details of the literature that he used and subsequently listed the literature in the reference list. The literature topic, headings and subheadings assisted the researcher to identify the literature that is desired. The researcher referred to the content page of each literature to see the headings and sub-headings of relevant discussions. With the interview schedule in mind, the researcher used concepts, such as: criminal investigation; physical evidence; rape; sexual assault; blood; semen; hair; saliva; individualisation of suspects;

forensic investigators, sexual offences and forensic science investigation to find relevant literature.

According to Descombe (2010:33), the purpose of literature review is to inform the researcher about what is already known about the subject, so that this knowledge is used as a background for an investigation which will progress and guide the study to new learning. Several literature studies, as well as previous collected literature on physical evidence in rape cases were obtained from the libraries in the George area and from Unisa libraries. The researcher used the research aims and research questions as a guide to search for literature. Dissertations, internet documents and study guides were consulted by the researcher. Literature was divided into concepts and then studied. The information that was collected was used as a bibliographical tool to assist the researcher in the identification of the literature that is needed. The content page of the literature gave the indication on what topics are discussed in the said literature, directing the researcher to specific chapters or pages. The researcher collected the sections of the literature that was relevant to the respective discussions. The researcher weighed the relevant literature against each other to see similarities and differences. Recent literature was given priority as it was current compared to literature that could be old and out-dated.

# 1.10.2 Archival/documentary sources

Examples of archival/documentary sources include historical documents, diaries, letters, literary texts, narratives, official memoranda, business plans annual reports and etcetera (Neuman, 2007:141). Creswell (2014:190) agrees with Neuman (2007:141) by stating that the researcher may collect qualitative documents, such as public documents (e.g. newspapers, minutes of meetings, official reports) or private documents (e.g. personal journals and diaries, letters, e-mails). The researcher searched for documentary sources that would give reasons why first responders are not using LCRC fieldworkers to search for physical evidence on all rape crime scenes. Welman et al. (2005:151) say that the greatest advantage of archival sources is the ease and low costs involved in obtaining them.

The researcher perused the forensic fact file at George LCRC to look for documents that discuss the use of LCRC on crime scenes to find physical evidence. Information Books (IB), memos and National Instructions which are archived at the four police stations and the Garden Route FCS offences office, has been perused to find documents that are relevant to the study. Only documents that discuss the reasons for first responders not to activate LCRC members to rape scenes have been studied in detail. The researcher focused the search on key categories, such as physical evidence, crime scene investigation, LCRC forensic fieldworkers, rape, sexual assault, individualisation, blood, hair, semen and saliva to identify relevant documentary sources. Documents with these key words have been studied and noted for useful information that could add value to the study.

To gather data from the documents, the researcher compiled a structured observation schedule (Robson, 2007:97) with questions he like to get answers from. These questions were:

- Who are the role-players in rape scenes?
- Who is responsible to collect physical evidence on the rape scene?
- What are the functions of the LCRC fieldworkers on rape scenes?
- Who are the first responders to rape crime scenes?
- Who is responsible to activate role-players, such as the LCRC, in a rape case?

#### 1.10.3 Interviews

According to Denscombe (2007:175), there are at least three different types of interviews. These interviews are structured interviews, semi-structured interviews and unstructured interviews. Because the interviewer wanted to test specific questions, he opted to use structured interviews. Welman et al. (2005:165) state that in a structured interview, the interviewer puts a collection of questions from a previously compiled questionnaire, known as an interview schedule. Welman et al. (2005:165) explain that the interviewer becomes limited to the questions, their wording, and their order as they are on the schedule, with very little freedom to deviate from it. The same tone of voice was used to read the questions to avoid indicating bias. These questions were compared with the research problem to test consistency between the two and to determine whether these questions are

thorough and correct enough to elicit the required information. Only one schedule was compiled and used during the interview of the four samples. A copy of the interview schedule is filed under Attachment "A".

Leedy and Ormrod (2010:149-152) suggest at least ten guidelines for conducting interviews in qualitative research, namely:

## 1. Identify questions in advance.

The researcher identified questions in advance prior to conducting the interviews. These questions have been developed from the research questions. The researcher firstly analysed the research problem. Secondly, understood what information must be obtained from an interviewee. According to Welman et al. (2005:148), it is useful to "test out" a new measurement instrument before administering it to the actual sample. Welman et al. (2005:18) explain a pilot study is done during a "testing out", which involves administering the instrument to a small number of subjects from the same population as that for which the eventual study is intended. The purpose of a pilot study is to detect possible problems in the measurement procedures, to point out confusion or ambiguously formulated items and an opportunity for researchers to notice non-verbal behaviour, says Welman et al. (2005:148). A draft interview schedule has been pretested as a pilot study to determine the amount of time needed for questions and to make amendments with regard to improving the final draft of the interview schedule. The pilot study has presented the understanding of the interviewee regarding the research problem and interview questions. At least 40 George cluster CSC patrol members out of 122 were asked to participate in the pilot study, they were not part of the original group of participants. The pilot study has been done at their places of work in the privacy of their offices after confirming an appointment and consent from each of the pilot study participants. A pilot study with a draft interview schedule has led to a final interview schedule. The same interview schedule was used for all participants participating in the research.

# 2. Make sure the interviewees are representative of the group.

The researcher used simple random sampling to select the 40 CSC patrol members as a sample. According to Welman et al. (2005:59), in simple random sampling, each member of the population has the same chance of being included

in the sample and each sample of a particular size has the same probability of being chosen. By using simple random sampling, the researcher has ensured that the sample is representative of the population as each member of the population will have the same chance of being included in the sample.

## 3. Find a location that is suitable.

Interviews were held at the participants' place of work, at the rear offices of the CSC.

# 4. Apply for written permission.

An application for permission from the Head Office of the SAPS to be granted access to interview the participants was granted. Consent from the participants to conduct interviews with them was also given. A copy of the permission letter from the SAPS could be seen under Annexure "A" and a copy of the consent from the participants is under Annexure "B".

# 5. Establish and maintain rapport.

Rapport was established and maintained by engaging the participants individually by reading the recorded responses back to the participants after each interview.

6. Focus on the actual rather than on the abstract or the hypothetical.

The researcher has focused on the research questions.

#### 7. Avoid putting words in the mouths of the participants.

The researcher made sure that he sticks to what the participants have told him without putting any words in the participants' mouths.

#### 8. Record responses verbatim.

The researcher has recorded the responses as it comes and did not edit anything. The researcher has recorded responses word for word in writing on a standardized schedule.

9. Keep your reactions to yourself.

The researcher has avoided reacting in front of the participants. He kept his reactions to himself.

10. Remember that you are not necessarily getting the facts.

The researcher kept in mind that not all the information from participants are necessarily the facts, he has treated the responses as the participant's opinions. The researcher has also compared the information received from a participant to that of other participants.

#### 1.11 DATA ANALYSIS

To organise and analyse the data from qualitative studies, Leedy and Ormrod (2005:150-151) state that the data analysis spiral is equally applicable to wide a variety of qualitative studies. Creswell (2014:99) warns researchers not only to disclose positive results but to include negative results too. He highlights that the privacy of participants must be respected when the data is analysed. The researcher has followed the following steps described by Leedy and Ormrod (2005:150) to analyse the data:

Step 1: The researcher read through all interview schedules, archival/documentary sources and literature to get a clear picture of the data. The researcher has made use of index cards to group the literature and interviews into smaller themes.

Step 2: The researcher studied the information and grouped the data gathered from the interviews and literature to themes relevant to research questions.

Step 3: Thereafter the researcher read each interview schedule one by one, comparing the participants' answers with each other and with the topic under discussion. The answers have been categorised and compared with different authors in the field to recognize general subjects of discussions and to expose problematic areas.

Step 4: Lastly, the researcher consolidated and condensed the information by forming recommendations that describe the connection among categories. The researcher examined the different themes through various perspectives on each issue.

The researcher also discussed the findings of the case study and the literature with colleagues, to obtain a better understanding of the research findings. This approach has helped the researcher to identify the areas in which training should be focused on to improve investigation of rape paying attention to physical evidence that could be collected from rape cases.

#### 1.12 METHODS TO ENSURE VALIDITY

According to Rosnow and Rosenthal (1996:145), assessing the validity of a test or questionnaire means to find out the degree to which it measures what it is supposed to measure. Dyson and Brown (2006:112) state that validity is how close what is being measured in practice is to what is intended to measure in the theory. Denscombe (2010:143) explains that validity concerns the accuracy of the questions ask, the data collected, and the explanations offered. Denscombe (2010:143) states further that generally, validity relates to the data and the analysis used in the research.

The researcher used the aims of the research and the research questions to develop the questions that were used during the interviews. The interview schedule was submitted to Unisa supervisor for approval and suggestions to make improvements on it. Once the researcher complied with the suggestions that were made, the interview schedule was ready to be given to the identified participants. The interview schedule as a measuring tool is valid as it was modified during the pilot study. The researcher was satisfied that the questions are relevant and valid as they are developed from the research questions and aims of the research. These questions have also been amended according to the pilot when the draft interview schedule was used.

During the interviews, the interviews were conducted separately and in privacy, this is to ensure that the participants could not influence each other when answering questions. During the literature search, the researcher has broken up the topic into manageable concepts and search for relevant material which was the most up-to-date and current. These concepts were drawn from the research questions and aims of the research. The information gathered has been treated in confidence and nothing has been changed or manipulated during the research. The researcher has remained objective throughout the research.

Creswell (2013:250-252) focuses on eight strategies that are frequently used by qualitative researchers. These validity strategies are: prolonged engagement and persistent observation, to triangulate different data; to use peer or debriefing; negative case analysis; clarify researcher bias; use member checking; use rich, thick description; and to use an external auditor to review the entire project.

## 1.12.1 Triangulation

During triangulation, the researcher makes use of multiple and different sources, such as interviews, literature and information from the data analysis, to provide corroborative evidence to shed light on a specific theme.

### 1.12.2 Member checking

The researcher used member checking strategy by getting the views of the participants on the researchers' conclusions by having follow-up interviews. Participants had the opportunity to judge the accuracy and credibility of the accounts. The researcher has provided the participants with the draft of the researchers' work in order to evaluate and constructively criticise where necessary. The researcher revisited the stations where the participants are stationed to make copies of the draft study available to them so that they could comment on the study.

#### 1.12.3 Rich, thick description

The use of rich, thick description used by writing detailed in-depth descriptions of themes and settings under study. This has allowed the readers to make decisions regarding themes and the setting. The researcher went into in-depth details in describing the themes in the study, he also went into depth to detail what he has done during the study.

## 1.12.4 Clarifying researcher bias

The researcher clarified bias by commenting on past experiences and prejudices that had an effect on the interpretation to the study. The researcher also presented negative or discrepant information by refining the hypothesis as the inquiry advances in light of negative information.

# 1.12.5 Prolonged engagements and persistent observation

Whilst spending prolonged periods of time on the field, the researcher worked on building trust with the participants and learned the culture. The researcher also checked for misinformation and make decisions on what is relevant to the study.

The researcher used peer debriefing by involving a peer who provided an external check in the study process and helps to keep the researcher honest by asking critical questions. The researcher made use of a colleague who is an experienced police official and who is also a PhD candidate with the University of Fort Hare.

#### 1.12.6 Peer review

The researcher made use of a peer reviewer to assist the researcher to stay honest by asking hard questions about methods, meanings and interpretations. Lieutenant Colonel Zweni, who is an experienced colleague and who is a MTech candidate assisted the researcher, throughout the study, by listening to the researcher and giving suggestions when necessary. This provided the researcher with the opportunity for catharsis by sympathetically listening to the researcher's feelings.

## 1.12.7 Negative case analysis

The researcher continued to refine the hypothesis as the study advanced in light of negative or disconfirming evidence. The negative case analysis was reported in order to provide a realistic assessment of the phenomenon under study.

#### 1.12.8 External audits

The researcher also used an external auditor by allowing an external consultant to examine the accuracy of the process and product of the study by establishing if the findings, interpretations and conclusions are supported by data. Warrant Officer Potelwa, who is an experienced colleague and who is a PhD candidate assisted the researcher as an external auditor, availing himself to be consulted to examine the product of the study at the completion of the study.

#### 1.13 METHODS TO ENSURE RELIABILITY

According to Welman et al. (2005:145), reliability relates to the findings of the study and the credibility of such findings. Denscome (2010:144) recommends that the researcher must produce detailed data that is accurate, ask relevant questions and ensure the collected information is truthful. The researcher asked questions that relevant to the problem statement, research question and research aim. The researcher made efforts to corroborate the interview data with other sources of information on the topic. The interview content has been checked against other interviews to see if there is some level of consistency.

Creswell (2014:203) suggests several qualitative reliability procedures namely: checking transcripts for mistakes; making sure there is not a drift in the definition of codes; coordinate communication from other coders and cross-checking codes developed by different researchers.

# 1.13.1 Checking transcripts

The researcher checked transcripts to make sure they do not contain obvious mistakes made during transcription.

#### 1.13.2 Definition of codes

The researcher also ensured that there is not a drift in the definition of codes, a shift in the meaning of the codes during the process of coding.

### 1.13.3 Coordinate communication from other coders

The researcher compared data with the codes and by writing memos about the codes and their definitions.

# 1.13.4 Cross checking of codes

The researcher cross-checked codes developed by different researchers by comparing results that are independently derived. The researcher checked the plausibility of the data to assess the credibility of information contained in each interview. The researcher looked for themes emerging from a number of interviews instead of themes from one interview. A recurrent theme in the interviews indicates that the idea/issue is something which is shared among a wider group according to Denscombe (2007:202). The literature used during the research is fairly new and updated and thus be relied upon. All the relevant documentation, case studies, dockets and reports were available for control purposes and permission was applied for to peruse them for the research purposes. The references were correctly noted, and the authors acknowledged for their contribution. No data was manipulated and the personal experiences by the researcher can be verified by means of case numbers or witnesses and colleagues to ensure that the information is reliable.

## 1.13.5 Bracketing

Leedy and Ormrod (2013:146) say when the researcher suspends any preconceived notions or personal experiences that may unduly influence what the researcher "hears" the participants saying, such suspension is called bracketing. Throughout the data collection process, the researcher suspended his personal

experiences that could unduly influence him, he relied only on the data he collected.

The researcher is confident that reliable measures were used throughout the research and that it was done to the best of his abilities. The researcher is of the opinion that if the same method of research is used by another researcher, the results would be the same. This is in line with Welman et al. (2007:145), where it is stated that if a research finding can be reaped, it is reliable.

# 1.14 ETHICAL CONSIDERATIONS

Leedy and Ormrod (2013:104) advice that researchers must pay attention to the ethical implications of what they wish to do whenever human beings are the focus of the investigation as people have the ability to think, experience psychological or physical distress and have feelings. When one considers ethical conduct during a study, one should refer to ethical principles when attending to a particular matter. Leedy and Ormrod (2015:120) explain that ethical considerations can be grouped into the following categories: right to privacy, protection from harm, informed consent and honesty to professional colleagues.

## 1.14.1 Protection from harm

No disturbing material or photographs were shown to the participants that could expose them to physical harm. They were interviewed in the comfort of their work places. They were not exposed to any danger from the study. The participants were interviewed on what they are already exposed to on a daily basis at their places of work. The participants names were not made know to other members at the station to avoid victimisation.

#### 1.14.2 Informed consent

Permission to have access to registers and participants was applied for to the Head office of the SAPS and permission was subsequently granted. The participants were briefed about the study and what was expected of them. The individual participants were asked for their consent after being satisfied with what took place. The consent was therefore being informed. The consent form was made part of the interview schedule, Attachment "A".

# 1.14.3 The right to privacy

The researcher informed the participants that their names will not be written of the interview schedule, this is to respect their right to privacy. The interviews were done separately in private in their offices or work stations. The researcher assured the participants that when the research is released and published, their names will not be released, and their names will be kept confidential by the researcher. The researcher allocated numbers to the participants. It was only the researcher who knew which number belongs to which participant. The participants' number and names were kept confidential by the researcher. In the study, the participants were referred to by their number and not by name.

## 1.14.4 Honesty to professional colleagues

The researcher acknowledged all sources by stating the authors' names of the literature used. The researcher also compiled a list of references whereby all authors are acknowledged. The researcher refrained from committing plagiarism by acknowledging all authors he made reference to in the study. The researcher did not present another person work as his own. The researcher also complied with the ethics principles for research involving human participants as outlined in the Unisa's Policy on Research Ethics, according to Unisa (2007:9,10).

# 1.15 RESEARCH STRUCTURE (chapters and layout)

The research is presented in three chapters with the following content:

#### Chapter 1: General orientation

This chapter deals with the problem statement as identified by the researcher. The researcher developed a research aim and asked research questions that seek to address the aim of the research. The researcher identified key theoretical concepts which are relevant to the topic. The researcher discussed the research design he intended to follow and reasons for selecting the design. Data collection, data analysis, research structure, target population and sampling were explained. He discussed methods used to ensure validity and reliability. The researcher explained how participants were treated in terms of ethical considerations.

# Chapter 2: Reasons why the LCRC is not called to crime scenes

In this chapter, the researcher discussed why the LCRC fieldworkers are not activated to all rape crime scenes in the George Cluster. He looked into the

problems experienced by first responders in notifying and calling the LCRC fieldworkers.

# Chapter 3: Findings and recommendation

In this chapter, the researcher has made conclusions. He has made findings and recommendations to address the problems identified.

#### **CHAPTER 2**

# REASONS WHY THE LCRC IS NOT CALLED TO CRIME SCENES

#### 2.1 INTRODUCTION

In this chapter, the researcher discusses why the LCRC is not called to crime scenes in the George Cluster. SAPS (2005:14) gives the directive that a Crime Scene Technician must be provided by the LCRC in whose jurisdiction the incident occurred. Criminal investigation is discussed and explained. The researcher explores forensic science based on physical evidence that could be found at the rape crime scene, the victim and the suspect. The researcher looks at definitions that describe or define the terms 'criminal investigation', and 'forensic science' and the roles both these terms add value to the investigation of rape. The researcher also discusses identification and individualisation in rape cases. He looks into what is the description and definition of both identification and individualisation. The purpose of identification is to determine the physical or chemical identity of a substance with the most certainty that existing analytical techniques will permit (Gilbert, 2007:104). The researcher discusses identification broadly and lists the different types of identification based on his personal experience.

The importance of the crime scene and the likelihood of physical evidence that could be recovered on the scene are explored. Dutelle (2011:13) gives a working definition of a crime scene, both primary and secondary; as any place where evidence may be collected that will assist in explaining the events that occurred. The researcher looks into the functions of the LCRC fieldworkers on the scene of rape and the importance thereof. The Locard's Principle is discussed and explained. The basic premise of Locard's Principle is that whenever a person comes into contact with an object, place or another person, exchange of materials takes place (Lyle, 2012:20). The responsibilities of the first responders to rape cases are studied as well.

The researcher collected literature that was relevant to the chapter and the research as a whole. The researcher evaluated the responses from the participants against the literature that he gathered regarding crime scenes of rape

and the importance of LCRC fieldworkers to process such scenes for physical evidence.

## 2.2 CRIMINAL INVESTIGATION

Criminal investigation as a systematic, organised, thinking, reasoning, examination and analysis process designed to search for the truth, during which an inquiry and thorough analysis are conducted of all types of crimes or unlawful acts (Zinn & Dintwe, 2015:19). According to Pepper (2005:93), criminal investigation is an official effort to uncover crime. Once a crime has been reported to the authorities, officials normally have two primary concerns, namely: (1) who committed the crime? (2) What was the motive? At times, motive is used to catch the suspect. Houck and Siegel (2010:581) explain that the criminal investigation process involves the discovering of who committed the offence or if there is a suspect arrested for the crime, searching for evidence that could assist in the conviction or exonerating that suspect. The primary role of the criminal investigator in processing the scene is the collection, preservation, identification and reporting of evidence found at the scene of crime, says Birzer and Roberson (2012:25).

Zinn and Dintwe (2015:186) state that everything discovered at the crime scene should be sequentially recorded as it happens and the location of objects at the scene should be meticulously recorded. Criminal investigation includes interviewing witnesses, interrogation of suspects, taking statements from victims, tracing suspects. Participants were asked, according to their knowledge, what is criminal investigation?

## Sample A

- Seven participants said that criminal investigation is a way to discover who
  committed a certain crime and if possible, arrest the suspect and recover any
  items taken by the suspect.
- Three participants said that criminal investigation involves the police following leads from the witnesses in order to find out what occurred during the said crime

## Sample B

 Ten participants said criminal investigation is when an investigating officer tries to get information about a crime that occurred in order to arrest the suspect involved.

#### Sample C

- Six participants said criminal investigation is when the police members try to find out what occurred during a crime.
- Two participants said criminal investigation is when a crime is investigated.
- Two participants said criminal investigation is a process to discover the truth about a crime.

#### Sample D

- Seven participants said that criminal investigation is the process to solve a crime that has occurred.
- Three participants said that criminal investigation involves finding out what happened during the offence.

The researcher notes that the participants have a good idea what criminal investigation entails. This question was answered generally well. The responses from the participants is supported by Houck and Siegel (2010:581), where it is explained that the criminal investigation is a process that involves the discovering of who committed the offence or, if there is a suspect arrested for the crime, searching for evidence that could assist in the conviction or exonerating that suspect.

#### 2.3 FORENSIC SCIENCE

According to Siegel (2009:2), forensic science is the methods and techniques of science applied to matters involving the public. The author states further that today, forensic science has come to mean the application of the methods and techniques of science to matters involving justice and the courts. Forensic science describes the science of associating people, places and things involved in criminal activities; these scientific disciplines help in the investigation and adjudication of criminal and civil cases (Houck and Siegel, 2010:4). There are a number of types of forensic science investigations, and most people know the type that revolves

around violent crimes such as murder, rape, house robbery and etc. Forensic methods and techniques are used in investigations to uncover scientific evidence that might provide enough evidence to convict or exclude a suspect. Similarly, Ricciuti (2007:1) describes forensics as not one body of sciences, but rather a host of sciences used to analyse criminal evidence and present results in a court of law. Ricciuti (2007:1) states further that in jurisprudence, forensic science investigation is defined as the use of science and other disciplines, such as photography or accounting, to investigate and establish evidence in criminal or civil courts of law. Fish, Miller and Braswell (2011:2) say that forensic science starts with the effective identification, collection, documentation and preservation of physical evidence.

Forensic scientists have three major duties, to investigate crime scenes to locate and collect possible evidence; the analysis of evidence; and to give evidence in courts of law (Siegel, 2009:2). In rape crime scenes, forensic light sources are used to find bodily fluids.

Participants were asked the following: Based on your understanding, explain what forensic science is?

#### Sample A

- Six participants said that forensic science is a technique used to link suspects to a crime.
- Two participants said that forensic science is the process that is used by forensic analysts in the labs to uncover evidence.
- Two participants said forensic science is the scientific means to find DNA, fingerprints and other evidence.

#### Sample B

- Seven participants said forensic science is when DNA is analysed from a crime scene and is matched to the DNA of a suspect.
- Three participants said that forensic science is used to find evidence such as blood and fingerprints on scenes of crime.

## Sample C

- Six participants said forensic science is the science used to aid criminal investigators to find evidence and link such evidence to a suspect.
- Two participants said forensic science involves fingerprint investigation, DNA analysis, and ballistic investigation in order to find evidence.
- Two participants said forensic science is a scientific way to find evidence of a crime.

#### Sample D

- Four participants said forensic science as a means of science to assist criminal investigators to solve crimes.
- Three participants said forensic science is the methodology that uses science to find evidence and to link such evidence to a suspect or exclude a suspect.
- Three participants said when DNA analysis and fingerprint investigation is done, forensic science is used during these processes.

The response from the participants showed that they are generally aware what forensic science is and what role it plays in the investigation of crime. The researcher finds that Ricciuti (2007:1), Wright (2007:23) and Innes (2000:11-13) agree to what forensic science, the elements are similar, and the descriptions are congruent to each other. In principle, crime cannot be solved without evidence (Wright, 2007:10). At times confessions and circumstantial evidence may be untrue but physical evidence can provide for a strong case against the suspect.

#### 2.4 IDENTIFICATION

Identification is the examination of the chemical and physical properties of an object and using them to categorise the object as a member of a group, according to Houck and Siegel (2010:57). Gilbert (2007:104) states that the purpose of identification is to determine the physical or chemical identity of a substance with the most certainty that existing analytical techniques will permit. Girard (2011:38) agrees with Gilbert (2007:19) and makes an example stating that an analyst at the crime laboratory might use chemical tests to determine if a white powder found at a crime scene is an illicit drug, such as cocaine or heroin, or the residue from bomb-making, such as trinitrotoluene (TNT). The researcher makes an example

where the crime lab might use biological tests to determine the identity of the sample which is of biological material, such as blood, semen and saliva. Saferstein (2011:86) says the purpose of identification is the determination of the physical or chemical identity of a substance with certainty. An example of this would be when the researcher collects and sends presumed blood to the Forensic Science Lab where the researcher would request if the sent item was indeed blood and if so if it is human blood. Fisher, Tilston and Woytowicz (2009:12) state that identification evidence is sufficiently close to unique to provide compelling evidence of identity.

Participants were asked to explain the term identification.

#### Sample A

- Six participants said it is when somebody is pointed out.
- Two participants said it is when somebody is identified physically.
- Two participants said it is to identify a person or evidence.

#### Sample B

- Five participants said it is when somebody is identified by fingerprints.
- Three participants said it is when a suspect is pointed out during an identification parade.
- Two participants said that they do not know.

#### Sample C

Six participants said it is when somebody is identified by fingerprints or DNA.

- Three participants said it's when someone or something is pointed out.
- One participant said identification could be explained as each person has one set of fingerprints and no two people have the same DNA.

#### Sample D

- Four participants said it is when a suspect is linked to a crime.
- Three participants said it is when fingerprints or DNA is used to find a suspect.
- Two participants said it is when a person is recognised.
- One said it is when DNA and fingerprints are used to find a suspect

The responses from the participants are mixed and show that they do not exactly know what the term identification means. Houck and Siegel (2010:57) describe the term identification as the examination of the chemical and physical properties of an

object and using such examination to categorise the object as a member of a group.

#### 2.5 INDIVIDUALISATION

According to Girard (2011:15), individualisation is the process of proving that a particular unknown sample is unique, even among members of the same class, or proving that a known sample and a questioned sample share a unique common origin. The author states further that complete individualisation is currently possible for only a few types of evidence, including fingerprints, DNA and physical matches. Houck and Siegel (2010:59) say if an object can be classified into a group with only one member (itself), it is said to have been "individualised". Individualisation as a process of linking physical evidence to a common source (Zinn and Dintwe, 2015:64). According to Ogle (2012:9), the individuality of a specific object, based on the objects class and individual characteristics, when unique to only one member of a class, allows the identification of the individual source of the evidence item, this process is called "individualisation". The question item is individualised when the examiner is able to match the set of class and individual characteristics found in the question item to the same set of characteristics in the known sample or it's exemplary, says Ogle (2012:9). The researcher notes that all the authors agree that individualisation involves the proving of a known sample and an unknown sample share a unique common origin, however, Girard (2011:15) and Ogle (2012:9) refer to the unknown samples' class, that the unknown sample should be individualised including the members of its class. Houck and Siegel (2010:59) explain that the concept of individualisation rests on two assumptions, namely:

- All things are unique in space and time;
- The properties by which a thing is classified are constant over time.

Serological and biological evidence present the investigation with both class and individual characteristics for comparison, according to Gardner (2012:30). Gardner (2012:30) explains that biological can exist in the form of blood and other bodily fluids, such as spittle, semen, vaginal secretions, or any other DNA source. Bertino and Bertino (2012:23) agree with Gardner (2012:30) by stating that evidence can be divided into class evidence and individual evidence. Bertino and

Bertino (2012:23) explain that individual evidence narrows the identity to a single person or thing, it typically has such a unique combination of characteristics that it could only belong to one person or thing.

According to Saferstein (2011:87) and Gilbert (2007:104), a comparison analysis subjects a suspect specimen and a standard/reference specimen to the same tests and examination in order to determine whether they have a common origin. The author makes an example and refers to a forensic scientist that may place a suspect at a particular location by noting the similarities of a hair found at the crime scene to hairs removed from a suspect's head.

## 2.5.1 The use of semen to individualise a suspect in a rape case

Semen is an exclusively male fluid that comes from ejaculation (Lyle, 2008:197). Houck and Siegel (2010:239) agree with Lyle (2008:197) by stating that semen is a complex gelatinous mixture of cells, amino acids, sugars, salts, ions and other materials produced by post-pubescent males and is ejaculated following sexual stimulation. By the collection of semen as physical evidence from any crime scene, the above can be positively proven to use as an evidential value in court. In this manner, innocent victims of arrest can be eliminated, and the real offender can be identified and litigated. High profile cases in the USA have demonstrated that semen evidence is also a powerful tool for eliminating a suspect who has been falsely accused of sexual assault crime or rape homicide says Ogle (2012:316,317).

James and Nordby (2009:292) explain that after semen is identified, depending on circumstances, it may not be necessary to examine samples from more than one orifice even though penetration of more than one orifice took place unless the case involves multiple perpetrators. The semen identification and individualisation can help the investigating officer link the suspect to the crime scene and the victim which can all be used as expert testimonies in court by scientific evidence. Ogle (2012:314) encourages the investigator to find physical evidence that supports non-consensual sexual assault such as bloodstains at the site of the assault; displaced furniture at the crime scene that indicates a struggle; torn clothing from the victim; and injuries to the victim, which are consistent with non-consensual sexual activity. James and Nordby (2009:288) say sheets, duvets, mattresses,

carpeting, and floored areas are ideal for pre-screening for semen using alternative light sources. Zinn and Dintwe (2015:109) advise that investigators of sexual assault cases must not only focus on ensuring that physical evidence is collected from the victim but must also consider that physical evidence from the victim may be left on the suspect.

## 2.5.2 The use of blood to individualise a suspect of rape

Houck and Siegel (2010:233) define blood as a tissue that is composed of several types of cells in a matrix called plasma. Girard (2011:331) describes blood as a complex fluid that is found in a human's cardiovascular system; it's a mixture of cells, proteins, enzymes and inorganic salt. Girard (2011:331) explains the liquid portion of blood is called plasma and plasma accounts for 55% of the total blood volume; the other 45% consists of cellular material, such as blood cells and platelets. Injuries to the assailant may have transferred blood to the victim's clothing or body surfaces (Ogle, 2012:320). Ogle (2012:320) states further that blood standards from the victim, and any suspects need to be collected for comparison with any blood stain evidence obtained from the victim. Ricciuti (2007:26) stresses that blood, along with the stains, pools, spatters, and other patterns that it forms has long been a key source of evidence, but never more so than today. Savino and Turvey (2011:320) agree that blood is a key source of evidence by stating that DNA testing may be used to confirm the ownership of cells collected from swabs taken during the sexual assault examination, the presence of suspect DNA indicates only that contact or penetration has occurred. The researcher states when the DNA of the suspect is found in the victims' vagina, this proves penetration and such DNA could be compared to the suspect's DNA, therefore individualising the suspect. The researchers' view is confirmed by Birzer and Roberson (2012:88) where it is stated that the chemical blueprint of life itself, DNA is found in structures contained in cells, including nuclei and mitochondria. Because bodily fluids, tissues and organs are comprised of cells, these body materials can be used for DNA typing as it means personal identification.

## 2.5.3 The use of hair to individualise a suspect of rape

Hair is composed primarily of keratin, a very strong protein that is resistant to chemical decomposition and can retain its structural features for a long time

(Girard, 2011:91). The shaft of the hair consists of three layers: the cuticle (the outer layer), the cortex (the middle layer) and the medulla (the innermost layer). Gilbert (2007:320) agrees with Girard (2011:91) and adds that the length of a hair extends from its root, or bulb, which is embedded in the follicle, continues into the shaft and terminates at the tip. Hair makes good forensic evidence both for its biological nature and the possibility to find it at the crime scene, says Yacine and Fellag (2012:14). Bertino and Bertino (2012:59) state that neutron activation analysis allows unique signatures of elements contained in hair to be identified and the hair follicle can provide DNA for sequencing. The researcher adds that once the hair is identified, and the DNA is sequenced, it can now be compared to a control sample from the suspect. If a match is confirmed, such suspect would be individualised based on physical evidence called hair. Hair is encountered as physical evidence in a wide variety of crimes. Much success has been achieved by isolating and characterising the DNA present in hair, according to Gilbert (2007:320). According to Ogle (2012:320), the violent nature of sexual assault will often create a transfer of trace evidence such as hair and fibres from the assailant to the victim and from victim to assailant, or from either to the crime scene.

## 2.5.4 The use of fingerprint investigation to individualise a rape suspect

According to Nath (2010:11), personal identification through fingerprints has long been recognised and is regarded to be the greatest contribution to law enforcement. The author states further that through the fingerprint characteristics, the science of fingerprints provides unique service in the administration of justice and also in other areas where positive identification is of paramount importance. Fingerprints are friction ridge skin or papillary ridges that are found on the palm surface, and sole of feet (Fish et al., 2011:86). According to Dutelle (2011:173), the whole point of recognising and collecting fingerprints is to identify them in order to find a suspect or identify a person. Fish et al. (2011:93) agree with Dutelle (2011:173) by saying that fingerprints are an infallible means of establishing identity.

According to O'Hara and O'Hara (2003:747), there are at least three types of fingerprints namely visible prints, plastic prints and latent prints. James and Nordby (2009:164), Bertino and Bertino (2012:138) and agree with O'Hara and O'Hara (2003:747) about the different types of fingerprints. However, according to

Champod, Lennard, Margot and Stoilvic (2004:105-106), there are two general categories to describe fingerprint evidence that may be found on a crime scene or on an item related to a criminal matter, namely latent finger-marks and visible finger-marks. The researcher notes that Champod et al. (2004:105-106) differ from the other authors about the different types of fingerprints.

According to Gardner (2012:28), fingerprints are one of the most common forms of evidence sought at the crime scene. Nath (2010:1) agrees with Gardner (2012:28) and states that among the most valuable clues at the scene of a crime are fingerprints and palm prints. Gardner (2012:28) states further that the use of fingerprints, as a means of identification, dates back to the seventeenth century. Saferstein (2011:534) disagrees with the author by stating that the Chinese used fingerprints to sign legal documents as far back as three thousand years ago.

According to Nath (2010:13), the science of fingerprints and its applicability in the field of personal identification is based on three principles, namely:

- A fingerprint is an individual characteristic. No two fingers have yet been observed to possess identical ridge characteristics.
- A fingerprint will remain unchanged during an individual's lifetime.
- Fingerprints have general ridge patterns that permit them to be systematically classified.

Saferestein (2011:537-540); Fisher et al. (2009:57) and Girard (2011:137) agree with the author about the fingerprint principles.

## 2.5.5 The techniques used to locate fingerprints

The search for latent prints is done in a systematic and intelligent manner, and investigators develop techniques to locate traces of fingerprints at a crime scene, according to Dutelle (2011:1713). Ogle (2012:131) agrees with the author and adds that the physical and chemical methods for latent development should always be preceded by the non-destructive methods for latent detection: (1) a thorough visual search using adequate lighting for the presence of patent impressions and (2) a search with the laser light or an alternate light source and a long-wave ultraviolet light.

Fisher et al. (2009:62) advise that processing the crime scene or evidence items for fingerprints starts with a search for visible prints, then search for latent prints using powders or chemicals. The author advises further that the examiner should select an appropriate method based on properties of the surface being examined, such as whether it is hard or soft, porous or nonporous, absorbent or non-absorbent. James and Nordby (2009:365) agree by stating that most methods for the development of latent prints are developed based on the knowledge of the latent print and the object the print is on. Girard (2011:141) supports the views of Fisher et al. (2009:62) and James and Nordby (2009:365) by stating several methods for enhancing a latent print are available; the one of choice depends on the surface that is to be examined.

The most well-known method to detect and develop fingerprints is powder dusting, a mainstay of latent fingerprint detection for a century or more says James and Nordby (2009:365). According to Dutelle (2011:80-178), latent prints could be developed with fingerprint powders, fingerprint chemical or fingerprint reagents.

Participants were asked to explain the concept of individualisation:

#### Sample A

- Eight participants said that they do not know.
- Two participants said it is to separate yourself from others.

#### Sample B

Ten participants said that they do not know.

#### Sample C

- Seven participants said that they do not know.
- Three participants said it means one person.

#### Sample D

- Seven participants said they don't know.
- Two participants said it is to point someone out.
- One participant said it is differentiation.

The participants were not in agreement in their responses to the question. Twenty-two participants said they did not know the answer. Three participants said it means one person; two participants said it is to point some out, and one participant said individualisation is differentiation. The researcher notes that the participants do not know what individualisation is.

Girard (2011:15) describes individualisation as a process of proving that a particular unknown sample is unique, even among members of the same class, or proving that a known sample and a questioned sample share a unique common origin.

#### 2.6 LOCARD'S PRINCIPLE

Wright (2007:70) refers to Dr Edmond Locard's dramatic description of how trace evidence entraps a criminal:

"Wherever he steps, whatever he touches, even unconsciously, will serve as a silent witness against him. Not only his fingerprints or footprints but his hairs, the fibers from his clothes, the glass he breaks, the tool marks he leaves, the paint he scratches, the blood or semen he deposits or collects. All these, and more, bear mute witness against him. This evidence does not forget. It is not confused by excitement of movement. It is not absent because human witnesses are. It is factual evidence. Physical evidence cannot be wrong, it cannot perjure itself, it cannot be wholly absent. Only human failure to find it, study and understand it can diminish its value".

According to Houck and Siegel (2010:55, 56), the Locard Principle states that information is transferred when two things come into contact. Wright (2007:8, 9) refers to the Locard's Principle as the key to modern forensic science. He further states that in practice, this means physical evidence will be exchanged during any physical contact between a suspect and his victim or the crime scene. Ricciuti (2007:15) also refers to the Locard's Principle and explains it as "a criminal leaves something at a crime scene and, in turn, takes something away from it". Lyle (2012:20) agrees with Wright (2007:8, 9) by saying the Locard's Principle is the heart and soul of forensic science and understanding this principle is important to

grasping the true workings of forensic investigation. Lyle (2012:20) explains that the basic premise of Locard's Principle is that whenever a person comes into contact with an object, place or another person, an exchange of materials takes place. The author states that at any scene of crime, bodily fluids, hair, fibres, fingerprint and shoe prints are left or collected and carried away by anybody present.

Participants were asked to explain the Locard's Principle:

 Only 12 participants said the Locard's Principle is based on the bases that when two objects touch, a transfer of trace materials is exchanged. The rest of the participants did not answer this question.

All the other participants could not answer the question of the Locard's Principle. The participants are members of the CSC who are first responders; it is quite clear they are not familiar with the term. These members have not undergone a detective course and the Locard Principle was not part of their training. The researcher notices that Lyle (2012:20), Ricciuti (2007:15) and Wright (2007:8,9) explanation of the Locard's Principle is similar to the original Dr Edmond Locard's dramatic description on how trace evidence entraps a criminal. All different types of evidence could add value to the investigation of rape.

#### 2.7 CRIME SCENES

Any area where a crime took place is a crime scene, according to Savino and Turvey (2011:140). Dutelle (2011:13) gives a working definition of a crime scene, both primary and secondary, as any place where evidence may be collected that will assist in explaining the events that occurred. Genge (2004:3) goes further and states that a crime scene is not only the location of the crime but also includes the paths of flight to and from the primary scene, the paths between the primary and secondary scenes and the planning and staging areas. A primary crime scene is where a crime takes place, like a murder, while a secondary crime scene is a site related to the crime, such as a burial site. O'Hara and O'Hara (2003:167) support Genges' explanation of primary and secondary scenes by saying that the first criminal activity is the primary scene and any subsequent crime scenes as secondary.

A crime scene can be anywhere, e.g. inside a truck, beneath a house or river. Ricciuti (2007:19) makes an example of the September 11 attacks on the World Trade Centre in New York, USA where the entire building and sounding area was a crime scene.

Whatever the size of the crime scene, the effort to uncover what happened and who is responsible should begin as soon as it's safe to do so. Before evidence can be analysed, it should be recorded and gathered in a proper manner (Ricciuti, 2007:19). O'Hara and O'Hara (2003:168) say that the objectives of any crimes scene investigation are to recognise, to preserve, to collect, to interpret and to reconstruct all the relevant physical evidence to the crime scene.

Participants were asked what is a crime scene. Sample A, Sample B, Sample C and Sample D replied as follows:

• All participants generally said a crime scene is where the crime took place.

Participants were able to explain what a crime scene is, that is the place or venue where a crime took place, and Lyle (2012:28) agrees by stating that a crime scene is where the crime actually took place.

#### 2.8 THE CRIME OF RAPE

Gilbert (2010:292) defines rape as an act of sexual intercourse against another by force or against one's will. Savino and Turvey (2011:29) concur with Gilbert (2010:292) by defining rape "as non-consensual sexual penetration". According to South Africa (2007:10), rape occurs when a person ('A') who unlawfully and intentionally sexually penetrates a complainant ('B'), without the consent of "B", is guilty of the offence of rape.

Burchell (2013:595) states that the elements of the crime are (a) sexual penetration (b) between a person and a complainant (c) without the consent of the complainant; (d) unlawfulness and (e) intention. In order to understand the elements of the crime of rape, the researcher looks deeper to the explanation of each element.

a) The accused commits an act of sexual penetration with a certain complainant.

Sexual penetration, however slight, is sufficient to complete the offence. It must be shown beyond a reasonable doubt sexual penetration of the victims' body took place. Penetration could be established in the absence of the victims' testimony by circumstantial evidence as an expert by a medico-legal opinion.

b) The act was done without the victim's consent

The act required is simply that used to affect the act of sexual penetration. If the victim is in a normal condition, the act must be committed with the utmost reluctance and resistance which she is capable of making at the time. Burchell (2013:603) says the use of force and fraud could serve to vitiate consent. The researcher notes that in many rape victims he has seen, the victims generally have bruises, cuts and often swollen face indicating some form of physical attack.

c) The act must be unlawful

According to South Africa (2007:10), the absence of consent by the victim is a definitional element of the crime.

#### d) Intention

Rape can only be committed intentionally

The researcher makes an example of: X must know that Y had not consented to intercourse. According to Burchell (2013:609), the accused must have had the intention to sexually penetrate the complainant unlawfully, knowing or at least foreseeing that the complainant has not consented to the act of penetration,

Participants were asked to define the crime of rape:

#### Sample A

 Ten participants said that rape is the unlawful sexual penetration of a victim without consent.

#### Sample B

• Ten participants said that rape is the unlawful sexual penetration of a victim without the consent of such victim.

#### Sample C

 Ten participants said rape is the sexual penetration of the victim which is unlawful and without consent.

#### Sample D

• Ten participants said rape is the unlawful sexual penetration of the victim by another without consent.

The participants managed to show that they understood the definition of rape. Their description is similar to that of the literature discussed. The researcher notes that the current definition of rape in South Africa does not restrict a victim of rape to females only nor does it make males the only perpetrators of rape. The current definition states that one is guilty of rape if he/she unlawfully penetrates a victim sexually without consent.

According to Savino and Turvey (2011:29), a review of many laws, publications and studies associated with rape and sexual assault reveals definitions especially unique to each other. This is because rape means different things to different groups of people, each with their own goals, biases and assumptions. Burchell (2013:601) states in South Africa, the redefinition of rape in section 3 of the Criminal Law (Sexual Offences and Related Matters) Amendment now includes gender-neutral terminology that regards males as possible victims of rape, renders both genders liable for rape and adopts a wider definition of "sexual penetration" enough for a conviction of rape.

## 2.9 ROLE-PLAYERS IN THE SCENE OF RAPE

Zinn and Dintwe (2015:167) say the prospects of having success in investigating and solving an incident is severely hampered when available experts and aids are not utilised at the scene of the incident. The use of relevant aids and experts is therefore fundamental to a team or a multidisciplinary approach to investigation. Savino and Turvey (2011:146) explain that crime scene processing entails the function of recognising, documenting, collecting, preserving and the transportation of physical evidence. Zinn and Dintwe (2015:168-172) make use of a table to name and explain experts and aids that could be used in a multidisciplinary approach to scene processing of an incident investigation below:

 Table 1: Experts/aids that could be used in a rape crime scene.

Expert/aid	Purpose
District surgeon	Can provide assistance with a medical
	examination. The collection of physical
	evidence from the body of the rape victim
	using a rape crime collection kit.
Draughtsman	Can compile a proper sketch of the crime
	scene.
Experts attached to the different	Biology unit: Trichological (hair) analysis,
components of the Forensic Science	DNA analysis, biochemical and
Laboratory	microscopic tests.
	Chemistry unit: Analysis of prohibited
	substances, e.g. drugs
Fingerprint expert	Can collect, identify, and process latent
	and patent prints (finger, hand, palm, foot
	and shoeprints)
Forensic odontologist/forensic dentist	Can assist with the examination of dental
	evidence including age estimation, bite
	marks left on the victim, perpetrator or
	objects found at the crime scene or the
	identification of an unknown individual to
	whom the teeth belong.
Investigative psychologist	Can provide guidance in the investigation
	of psychologically motivated crimes such
	as serial murders and serial rapes based
	on the offenders' behaviour at the crime
	scene. Can also help by compiling a
	linkage analysis between crimes that
	display a similar modus operandi
Photographer	Can photograph the crime scene that has
	evidential value and injuries on the
	victim/perpetrator

Police sketch artist/Facial Identikit	Can compile a sketch that resembles the
	face of the suspect, victim, missing or
	deceased person for the purpose of
	identification.
Video operator	Can make a video recording of the
	overall appearance of the crime scene,
	exhibits and bystanders.
Dog handlers	As an aid, dog handlers with fluid dogs
	can assist the location of bodily fluid such
	as semen on a crime scene of rape.

Source: Zinn and Dintwe (2015:168-172)

For SAPS (2005:20), the different role-players on a crime scene will be identified by the approved colour-coded crime scene jackets that they wear. The following approved colour codes must be worn at all times at a crime scene to distinguish the different role-players:

Table 2: Role-player and colour coded crime scene jacket

ROLE PLAYER	COLOUR CODED CRIME SCENE
	JACKET
Crime Scene Manager	Red
Crime Scene Technician	Green
Explosives Unit	Yellow
Investigating Official	Blue
Media Liaison	White
Hostage Negotiator	Orange

Source: SAPS (2005:20)

Participants were asked who the role-players in a rape crime scene are: Sample A

• Eight participants named the FCS unit investigator; CSC member/first responder; LCRC fieldworkers.

• Two participants named the FCS unit investigator; CSC member; LCRC fieldworker and medical staff.

#### Sample B

- Six participants named the FCS unit investigator; CSC member; LCRC fieldworker and fluid dog with handler.
- Four participants named the FCS unit investigator; CSC member; LCRC fieldworker.

#### Sample C

- Five participants named the FCS unit investigator; CSC member; LCRC fieldworker and FSL analysts.
- Five participants named the FCS unit investigator; CSC member and LCRC fieldworker.

#### Sample D

- Seven participants named the FCS unit investigator; CSC member; LCRC fieldworker.
- Three participants named the FCS unit investigator; LCRC fieldworker.

The researcher notes that the most common role players mentioned by participants include the FCS unit investigator, the LCRC fieldworker and the first responder/CSC member. The medical staff, fluid dog and FSL analysts were the least mentioned. Some role players that could add value to the investigation of rape such as the investigative psychologists and identikit sketch artists were not mentioned at all. Zinn and Dintwe (2015:168-172) agree with the participants by saying experts and aids could be used in a multidisciplinary approach to scene processing of an incident investigation. The authors mention experts such as fingerprint experts, draughtsman, a forensic odontologist, district surgeon, investigative psychologist, photographer, facial identikit, video operator, dog handler and experts attached to the different components of the FSL.

## 2.10 FUNCTIONS OF THE LCRC FIELDWORKERS ON THE SCENE OF RAPE

Birzer and Roberson (2012:251) say that in sexual assault cases, the crime scene investigator is responsible for evidence contained at the physical location where the crime took place and the evidence present on the bodies and the clothing of

the victim and offender. All officers, not just the crime scene technicians, should be able to identify, collect, and process basic crime scene evidence properly, says Birzer and Roberson (2012:251). Fish et al. (2011:1) state that the crime scene investigator plays an important role on the collaborative team that includes the lead detective, the medical examiner, the prosecutor's office and the forensic scientists at the crime laboratory. SAPS (2005:15) says the crime scene technician must ensure that the crime scene is recorded to provide a visual representation of the scene, co-ordinate the processing of the scene for physical evidence and coordinate the gathering of information for the purpose of event reconstruction. James and Nordby (2009:171-182) agree with SAPS (2005:15) by stating that a successful crime scene investigator (CSI) must master skills including photography, sketching and documentation, processing items of evidence for fingerprints or other impression evidence, utilisation advanced software and technology-based equipment, and possessing the ability to communicate well with prosecutors and other members of the investigation team. Houck and Siegel (2010:35-39) and Fish et al. (2011:05) agree with James and Nordby (2009:171-182) by stating that the crime scene investigator should perform a preliminary survey of the scene; make a video and take photographs of the scene; compile a sketch of the scene of incident; crime scene search and collecting evidence; document and keep record of evidence in order to secure chain of custody; and perform a final survey to ensure all matters with evidential value is documented and collected for possible analysis.

## Participants were asked what are the functions of the LCRC on a rape scene? Sample A

- Seven participants said the LCRC takes photographs, search for fingerprints, and collect evidence.
- Three participants said the LCRC does a sketch of the scene; make a video recording and photos; collect evidence.

#### Sample B

 Ten participants said LCRC members take photographs, video recording on crime scenes, perform fingerprints investigation, collect evidence and make sketches of scenes.

#### Sample C

- Nine participants said the LCRC takes photographs, collect evidence and performs fingerprint investigations.
- One participant said that the LCRC performs fingerprints, photos, sketch drawing and facial identikit sketches of suspects.

#### Sample D

- Eight participants said the LCRC takes photos, make video recording, fingerprint investigation, and collect evidence.
- Two participants said the LCRC performs fingerprint investigation, photos and exhibit collection.

The responses from the participants showed that they have different viewpoints as to the functions of the LCRC on a rape crime scene. However, most said that the LCRC was responsible for taking photographs, video recordings, fingerprint examination and collecting physical evidence. Some participants included the drawing of the sketch plans and identikit facial drawings. James and Nordby (2009:171-182) support the responses by saying that a successful CSI must master skills including photography, sketching and documentation, processing items of evidence for fingerprints or other impression evidence, utilisation advanced software and technology-based equipment, and possessing the ability to communicate well with prosecutors and other members of the investigation team.

Participants were asked who is responsible in collecting the physical evidence on the rape scene?

#### Sample A

- Nine participants said it is the LCRC that is responsible to collect physical evidence on rape scenes.
- One participant said it is the FCS investigator.

#### Sample B

- Seven participants said it is the LCRC that has the responsibility to collect physical evidence.
- Three participants said it is the FCS investigator who has the responsibility to collect physical evidence.

#### Sample C

Ten participants said it is the LCRC fieldworker.

#### Sample D

- Seven participants said it is the LCRC that has the responsibility to collect physical evidence.
- Three participants said it is the investigating officer of the case that has the responsibility to collect physical evidence.

Most responses from the participants said that the LCRC is responsible for collecting physical evidence on a rape scene. Some responses said that it's the FCS investigator who has the responsibility to collect physical evidence on rape scenes. The researcher notes that the participants are not in agreement.

## 2.11 FIRST RESPONDER RESPONSIBILITY ON A RAPE SCENE

First responders to the scene of the incident should have an operational understanding of what will happen when they hand over the crime scene to the investigation team (Zinn and Dintwe, 2015:165). The authors add that the initial decisions and actions by the first responder have a fundamental bearing on how the investigation process will unfold. SAPS (2005:8) says the first member must approach the crime scene with due consideration to his or her own safety, the safety of others and the preservation of the crime scene. The primary task of the first responder at a crime is to secure the scene and prevent damage or alteration of the critical, and at times fragile context of a crime scene, says Houck and Siegel (2010:32). Savino and Turvey (2011:124) and Houck and Siegel (2010:32) state that the duties of the first responders are simple but complex in execution, duties such as:

- Detain any potential suspect
- Render medical assistance to those who need it.
- Do not destroy, alter or add any evidence at the scene.
- Prevent others, including superiors, from disturbing the scene.

According to Dutelle (2011:63), the first responder has two primary duties, the preservation of life and the securing and preserving the crime scene with the

associated evidence. SAPS (2005:11) says that the first member, typically the CSC police official, on the scene must call all the role players, such as the detective, LCRC and FSL to the scene, by making use of the despatcher. SAPS (2005:11) adds that the first responder must remain at the scene and assist the crime scene investigating team to manage the scene until the scene is handed over to the relevant authorities by the Crime, Scene Manager. The basic goals of incident management that the first responder is responsible for can be achieved and expressed in five specific objectives at the scene of the crime (Gardner, 2012:61). Gardner (2012:61) explains that in order to safely and effectively gain control of the crime scene, the first responder must:

## Document the provided information

The first responder must be clear about and make written notes about what he or she was told about the situation and specifically who told him or her.

Not become a casualty

The first responders' consideration for personal safety at the scene must begin long before he or she arrives. The first responder must consider potential threats before he arrives on the scene.

Provide for emergency care

After ensuring that there is no immediate threat from the suspects or natural hazards, the first responder must pay attention to the injured parties. In principle, lifesaving always takes priority over evidence preservation.

Secure and control the scene and all those within it

Once the scene is safe and lifesaving activities are underway or completed, the first responder must seek to secure and control both the scene itself, and anyone found there.

• Hand over the scene to the appropriate authorities (the investigating officer or the crime scene technician)

Eventually, the crime scene technician or investigating officer will arrive to take responsibility for the scene.

Participants were asked who are the first responders to rape crime scenes? Sample A

 All ten participants said it is the CSC patrol members and other Visible Policing members.

#### Sample B

All participants said it is the CSC members.

#### Sample C

- Nine participants said the CSC members.
- One participant said it is any police official who arrives on the scene first.

#### Sample D

• Ten participants said it is the CSC members.

All participants agree that the CSC members are first responders to rape cases. The view of the participants is supported by SAPS (2005:11) where it is said that the first member, typically the CSC police official, on the scene must call all the role players, such as the detective, LCRC and FSL to the scene, by making use of the despatcher.

Participants were asked who is responsible to activate role-players, such as the LCRC to the rape crime scene and how?

#### Sample A

- Eight participants said it is the investigating officer in the case who calls the LCRC fieldworkers on the standby phone or at the LCRC office.
- Two participants said it is the radio control that is responsible for calling the LCRC.

#### Sample B

- Six participants said it is the investigating officers' call to make if LCRC is needed in a case or not. LCRC is called on standby phones.
- Four participants said radio control as despatcher, is responsible for calling the LCRC to the scene on their standby phones.

#### Sample C

- Nine participants said the first responder must request the radio control to call the LCRC.
- One participant said it is the detective decision to call the LCRC.

#### Sample D

- Seven participants said it is radio control by phoning the LCRC standby numbers or the office.
- Three participants said it is the investigating officer.

There was a difference noted in the replies from the participants when the question was asked as to who has the responsibility to activate the LCRC. Some said it is the investigating officer's responsibility, some said it is the radio control's responsibility, and some said it is the first responder's responsibility using radio control.

Participants were asked if they experience difficulty in activating members from the LCRC.

Sample A, Sample B, Sample C and Sample D

All participants said no.

All participants had the same answer; they answered "no". There were no differences noted. The researcher notes that the first responders are not aware that the activating of the LCRC is also their responsibility, hence they do not have difficulty activating the LCRC, they are of the opinion it's the responsibility of the investigating officer and radio control. They do not initiate the process of activating the LCRC fieldworkers.

Participants were asked if they make use of the LCRC to process rape crime scenes at their station:

#### Sample A

- Eight participants said "yes."
- Two participants said "no."

#### Sample B

• Ten participants said "yes."

#### Sample C

- Six participants said "yes "
- Four participants said "no "

#### Sample D

- Seven participants said "yes."
- Three participants said "no."

If the answer to the question is NO, why according to your experience is the LCRC not called out to rape scenes?

#### Sample A

 Two participants said it is the FCS investigator who takes control of the rape case and he/she would take the victim for medical examination first and later arrange with the LCRC fieldworker to take photos or collect evidence.

#### Sample C

 Four participants said it is the FCS investigator who takes control of the rape case and would take the victim for medical examination first and later arrange with the LCRC fieldworker to take photos or collect evidence

#### Sample D

 Three participants also said that it is the FCS investigator who will decide which role-players should be activated and what examination he/she wants on the scene.

Participants were asked why is the LCRC not called to process rape crime scenes in the George Cluster.

#### Sample A

- Eight participants said it is the FCS investigator who decides when the LCRC is needed.
- Two participants said some complainants come to the Police station to report the rape and later gets taken by the FCS investigator for medical treatment and thereafter, the LCRC is arranged by the FCS investigator.

#### Sample B

- Five participants said it is the investigating officer who takes charge of the case when they arrive on the scene and makes arrangements with the LCRC for photographs and other investigation to be done.
- Five participants said the FCS investigator decides if the LCRC member is needed or not depending on the case.

## Sample C

- Seven participants said the docket is given to the FCS investigator for investigation and the LCRC will be called by the investigator when needed.
- Three participants said it is the detective from FCS decision to call the LCRC after the victim has been to the hospital.

#### Sample D

- Six participants said the FCS investigator makes the decision on what should take place on the scene including which other help is needed or not.
- Three participants said it is the investigating officer's choice.
- One participant said radio control calls all the relevant role-players if they are needed.

Most participants said that they use LCRC fieldworkers on rape crime scenes, some participants, however, said that they do not. The reasons the LCRC fieldworkers are not always used in crime scenes is because the FCS investigator takes control of the scene and makes the arrangements with the LCRC to process the crime scene. The researcher notes that the first responders rely too much as to what the FCS investigator decides on when it comes to rape crime scenes. It would appear that the first responders are not fully aware that it is their responsibility to activate all role-players, including the LCRC, to attend to the rape crime scene. SAPS (2005:11) gives the directive that the first member on the scene must call all the role players, such as the detective, LCRC and FSL to the scene, by making use of the despatcher.

Historically, investigating sexual assault cases has provided law enforcement with challenges that are unique to sexual crimes (Birzer and Roberson, 2012:253). The authors state that these crimes are often not immediately reported following their occurrence, which results in delays in evidence location and collection, initial and tertiary crime scene identification, witness location and offender location. Savino and Turvey (2011:115) say the sex crimes unit is assigned to investigate any serious complaint or report involving a sex crime and the units' role is to identify and arrest criminal suspects, as well as to identify serial sex offence patterns within its jurisdiction.

#### 2.12 DATA FROM DOCUMENTS

The researcher gathered data from documents by compiling a structured observation schedule. The questions and answers were:

• Who are the role-players in rape scenes?

National Instruction 5/2003 (SAPS, 2003) says role-players in rape cases include the FCS investigator, the first responder, the Crime Scene Manager, the LCRC fieldworker, district surgeon, facial identikit, video operator, dog handler and FSL analysts.

- Who is responsible to collect physical evidence on the rape scene?
   The crime scene investigator is responsible for physical evidence collection at the scene of crime according to National Instruction 5/2003 (SAPS, 2003).
- What are the functions of the LCRC fieldworkers on rape scenes?
  The researcher found that SAPS (2005:15) says that a crime scene investigator must have skills in photography, sketching and documentation, processing items of evidence for fingerprints or other impression evidence, utilisation advanced software and technology-based equipment, and possessing the ability to communicate well with prosecutors and other members of the investigation team.
- Who are the first responders to rape crime scenes?
   SAPS (2005:11) says that the first responder is typically the CSC police official.
- Who is responsible to activate role-players, such as the LCRC, in a rape case? The CSC police official, on the scene must call all the role players, such as the detective, LCRC and FSL to the scene, by making use of the despatcher, according to SAPS (2005:11).

#### 2.13 SUMMARY

The researcher notes that there are many role-players in a scene of rape that could add value to the investigation of the incident. One of the role-players is the first responder who arrives and must secure the scene from contamination. The first responder also has the responsibility to ensure that victims get medical attention and that the scene is generally safe. Where suspects are still on the scene, the first responder has a duty to arrest such suspects. The first responder must make sure the scene is cordoned off. There are a number of LCRC functions on the crime scene which includes photography of the scene, evidence and

victims; video operation; fingerprint examination; plan drawing; collection of physical evidence and many other items. The victim of rape is very important to the investigation of rape; the victims' body can be a scene too. The researcher concludes that there are a number of methods to make identification and there are different reasons for making such identification. Far too often identifications are made for criminal purposes where a crime was committed, and the offender needs to be arrested and brought before a court. At times when a corpse is unknown, identifying who the corpse is might not be crime related. An example is when a natural disaster takes place, and many people die, the identifying of the bodies is not criminally related.

The researcher also concludes that when there is insufficient evidence to identify a suspect, an identification parade might be the only way to identify the culprit. After physical evidence is identified, the process of individualisation is initiated. Individualisation involves the suspect sample compared to a sample from a known source, normally a suspect. Identification, however, is the process to make sure that suspected blood, semen or hair is indeed blood, semen or hair. Both individualisation and identification play a pivotal role in the criminal investigation of rape.

It is noted by the researcher that the first responders are not fully aware of what their responsibilities are. The responses by the participants suggest that the first responders are of the view that it is the responsibility of the investigating officer and radio control to activate the LCRC fieldworkers to rape crime scenes and not themselves. This matter could be a major contribution to rape crime scenes not visited by the LCRC or the late attendance of rape scenes by LCRC fieldworkers. The researcher notes that the directives of the National Instruction is not complied with as explained by SAPS (2005:11), where it is said that the first member on the scene must call all the role players, such as the detective, LCRC and FSL to the scene, by making use of the despatcher

#### **CHAPTER 3**

## FINDINGS AND RECOMMENDATIONS

#### 3.1 INTRODUCTION

The aim of the study was to determine why LCRC fieldworkers were not activated to all rape scenes by the first responders in the George Cluster. To address the research problem, the following research question was asked:

 Why is the LCRC not called to process rape crime scenes in the George Cluster?

#### 3.2 PRIMARY FINDINGS

The findings are based on the information from local and international sources in the field as well the responses from the participants who took part in the study. The findings indicate that there are some shortcomings from the participants' knowledge about the responsibilities of the first responder especially with the activation of the LCRC fieldworkers to rape crime scenes in the George Cluster.

The crime scene is crucial when physical evidence must be located, collected and processed for analysis. The scene of incident needs to be protected to avoid physical evidence loss, damage or contamination. Equally so, the body of the rape victim should be treated as a crime scene as well because there could be physical evidence that could be collected from it too. Based on Locard's Principle, when two bodies touch each other, physical traces are exchanged between the said bodies. Failure to properly protect the crime scene and the speedy activation of role-players such as the LCRC fieldworks could negatively affect the investigation.

The following are primary findings relating to the research question:

## 3.2.1 Research question

Why is the LCRC not called to process rape crime scenes in the George Cluster? Finding 1

The responses from the participants showed that there is some misunderstanding as to who is responsible for activating the LCRC to rape crime scenes. Some are of the view that it is the responsibility of the FCS investigator; some were of the view that the radio control as the despatcher is responsible, whilst some believed

it's the duty of the first responder. The mixed responses indicate that there is no clear understanding from the participants. The misunderstanding of the responsibilities could lead to a delayed activation or the LCRC not activated at all. The LCRC is not called out because the first responders rely on the investigator to activate the LCRC themselves, whereas it's the responsibility of the first responders to activate the LCRC.

#### 3.3 SECONDARY FINDINGS

The researcher made some secondary findings with regards to the facts of the study.

#### 3.3.1 Identification

Finding 1

Participants gave mixed responses. The mixed responses indicate that they do not exactly know what the term identification means. The first responders are CSC members and have not been trained on identification.

Finding 2

For Houck and Siegel (2010:57), identification is the examination of the chemical and physical properties of an object and using them to categorise the object as a member of a group.

#### 3.3.2 Individualisation

Finding 1

The participants were not in agreement in their responses when they were asked to explain the concept of individualisation. Thirty-two participants said they did not know the answer. Three participants said it means one person; two participants said it is to point some out, and one participant said individualisation is differentiation. The researcher notes that there is lack of knowledge on what individualisation is.

#### 3.3.3 Crime Scene

Finding 1

The responses from the participants indicate that they know what a crime scene is. They said a crime scene is the location where the crime took place.

#### Finding 2

Dutelle (2011:13) gives a working definition of a crime scene, both primary and secondary, as any place where evidence may be collected that will assist in explaining the events that occurred. Genge (2004:3) goes further and states that a crime scene isn't only the location of the crime but also includes the paths of flight to and from the primary scene, the paths between the primary and secondary scenes and the planning and staging areas.

## 3.3.4 The crime of rape

#### Finding 1

According to South Africa (2007:10), rape occurs when a person ('A') who unlawfully and intentionally sexually penetration a complainant ('B'), without the consent of B, is guilty of the offence of rape. The researcher finds that the current definition of rape in South Africa does not restrict a victim of rape to females only nor does it make males the only perpetrators of rape. The current definition states that one is guilty of rape if he/she unlawfully penetrates a victim sexually without consent.

## Finding 2

The participants managed to show that they understood the definition of rape by describing rape as the unlawful sexual penetration of the victim without consent. Their description is similar to that of the literature discussed where it is said that rape takes place when a person who unlawfully and intentionally sexually penetrates a complainant without the consent of the complainant.

## 3.3.5 The role-players in rape scenes

#### Finding 1

The researcher finds that the FCS unit investigator, the LCRC fieldworker and the first responder/CSC member are the most common role players mentioned by participants, whilst medical staff, fluid dog and FSL analysts were the least mentioned.

#### Finding 2

Zinn and Dintwe (2015:168-172) say role-players such as fingerprint experts, draughtsman, a forensic odontologist, district surgeon, investigative psychologist,

photographer, facial identikit, video operator, dog handler and experts attached to the different components of the FSL are often used in serious cases such as rape.

#### 3.3.6 Collection of physical evidence

#### Finding 1

The researcher notes that the participants are not in agreement about who is responsible for collecting physical evidence on the rape crime scene. Most responses from the participants said that the LCRC is responsible for collecting physical evidence on a rape scene whist some participants said that it's the FCS investigator who has the responsibility to collect physical evidence on rape scenes.

#### Finding 2

James and Nordby (2009:171-182) mention that the crime scene investigator should compile a sketch of the scene of incident; search the crime scene and collect evidence; document and keep record of evidence in order to secure chain of custody; and perform a final survey to ensure all matters with evidential value is documented and collected for possible analysis.

## 3.3.7 Functions of LCRC fieldworkers on rape scenes

#### Finding 1

The responses from the participants showed that they have different viewpoints as to the functions of the LCRC on a rape crime scene. Most participants said that the LCRC was responsible for taking photographs, video recordings, fingerprint examination and collecting physical evidence. Some participants included the drawing of the sketch plans and identikit facial drawings amongst other functions.

#### Finding 2

SAPS (2005:15) says the crime scene technician must ensure that the crime scene is recorded to provide a visual representation of the scene, co-ordinate the processing of the scene for physical evidence and co-ordinate the gathering of information for the purpose of event reconstruction. James and Nordby (2009:171-182) explain that a successful CSI must master skills including photography, sketching and documentation, processing items of evidence for fingerprints or other impression evidence, utilisation advanced software and technology-based

equipment, and possessing the ability to communicate well with prosecutors and other members of the investigation team.

## 3.3.8 First responders to rape crime scenes

#### Finding 1

The researcher finds that all participants agree that the CSC members are first responders to rape cases.

#### Finding 2

SAPS (2005:11) says the first member is typically the CSC police official.

## 3.3.9 Activation of role-players in rape cases

#### Finding 1

Participants had different viewpoints when the question was asked as to who has the responsibility to activate the LCRC to the scene of rape. Some participants indicated that it is the responsibility of the investigating officer; some said it is radio control's responsibility; whilst some said it's the first responder's responsibility using radio control.

## Finding 2

For SAPS (2005:11) it is the first member, typically the CSC police official, on the scene who has the responsibility to call all the role-players such as the detective; LCRC and FSL to the scene by making use of the despatcher.

#### 3.3.10 Criminal investigation

#### Finding 1

Participants generally said that criminal investigation is the process to solve a crime that has occurred. The researcher finds that the participants have a good idea what criminal investigation entails.

#### 3.3.11 Forensic science

#### Finding 1

Participants view forensic science as a scientific means that is used to aid criminal investigators to find evidence and link such evidence to a suspect. Responses from participants indicates that they are generally aware what forensic science is and what role it plays in the investigation of crime.

## 3.3.12 The Locard's Principle

## Finding 1

Most participants could not explain what the Locard's Principle entails, only 12 out of 40 participants attempted to explain the principle. The participants are members of the CSC who are first responders; it was quite clear they are not familiar with the term. There is lack of knowledge for the Locard's Principle. The 12 participants said the Locard's Principle is based on the bases that when two objects touch, a transfer of trace materials is exchanged.

## 3.3.13 Difficulty in activating members of the LCRC

## Finding 1

All participants said that they do not experience any difficulty in activating the LCRC.

## 3.3.14 Making use of the LCRC to process rape crime scenes

## Finding 1

Thirty-one participants said that they use LCRC fieldworkers on rape crime scenes and only nine participants said that they do not. The researcher notes that it's a minority that do not make use of the LCRC to process crime scenes. Ideally, all participants should make use of the LCRC on all rape scenes.

## 3.3.15 LCRC not called to process rape crime scenes

## Finding 1

The researcher finds that the reasons the LCRC fieldworkers are not always used on rape crime scenes is because the FCS investigator takes control of the scene and makes the arrangements with the LCRC to process the crime scene. The researcher notes that the first responders rely too much as to what the FCS investigator decides on when it comes to rape crime scenes. Not all the first responders who participated in the study are fully aware that activating the LCRC is primarily their responsibility.

#### 3.4 RECOMMENDATIONS

The recommendations that follow are made on the basis of the findings of the study: The matter of the first responders to rape crime scene not taking the full responsibility to activate relevant role-players, such as the LCRC fieldworkers immediately to rape crime scenes is matter of concern as this could mean the LCRC might be activated late or not activated at all to the scene. The matter should be addressed by the SAPS as soon as possible. The prompt activation of the LCRC would add value to the investigation by processing of the rape crime scene as it is and maximise physical evidence collection and minimising loss of physical evidence or contamination of the crime scene.

The researcher recommends that first responder members in the George Cluster are workshopped on crime management directives with special emphasis on the following:

- The role and responsibilities of the first responder to rape scenes.
- The role and responsibilities of the FCS investigator.
- The responsibilities and functions of the LCRC fieldworker on a rape case.
- The use of the LCRC on rape cases.
- The Locard's Principle and the value thereof to the investigation.
- The concepts of identification and individualisation.

#### 3.5 CONCLUSION

In order to improve the utilisation of the LCRC on rape crime scenes, the SAPS need to make sure that first responders to rape crime scenes are fully aware what their responsibilities and duties are. It would seem that the first responders do not quite understand that it is their primary function to activate the relevant role-players, especially the LCRC, to process the rape crime scene. Responses indicate that many first responders think that it is the responsibility of the FCS investigator to activate the LCRC at some stage that is suitable for the investigator. Delaying activating the LCRC could lead to negative implications for the criminal case, as contamination of the scene and possible loss of physical evidence could occur. The researcher believes that when proper crime scene management is adhered to, and role-players are activated timeously, the overall

investigation of the crime would benefit from physical evidence that could be recovered on the scene. Such recovered physical evidence could be used to link a suspect to the scene, the victim and to the crime committed.

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#### **Attachment A**

INTERVIEW SCHEDULE: PARTICIPANT NUMBER



SAMPLE

A; B; C or D

**TOPIC:** ASSESING THE UTILISATION OF THE LOCAL CRIMINAL RECORDS CENTER IN RAPE CRIME SCENES

**AIM:** To determine why LCRC fieldworkers are not activated to all rape scenes by the first responders in the George Cluster.

#### **RESEARCH QUESTIONS:**

 Why is the LCRC not called to process rape crime scenes in the George Cluster?

You are kindly requested to answer the following questions in this interview schedule, for the researcher. The questions, responses and the results will be revealed.

Privacy will be maintained throughout the study. The researcher will ensure that participants are treated equally regardless of their socio-economic status. The information given will be treated with confidentiality and no other person will have access to interview data. The researcher will ensure that participants are treated equally regardless of their socio-economic status whether illiterate or learned and privacy will be maintained throughout the study. The participants to the research will remain unanimous. The information you provide will be used only in a research project for a Magister Technologiae degree in Forensic Investigation registered with Department of Police: College of law at the University of South Africa. The analysed and processed data will be published in a research report.

Your answers will be noted by the interviewer himself, on paper. Should any question be unclear, please ask the researcher for clarification. Only one answer

per question is required. When answering the questions, it is very important to give your own opinion.

Written permission has been obtained from the South African Police Service in advance, for the interview to be conducted.

#### **PARTICIPANT**

I hereby give permission to be interviewed and that information supplied by me can be used in this research.

YES /NO

SECTION A: SECTION A: BACKGROUND INFORMATION	SECTION A:	SECTION A: BACKGRO	OUND INFORMATION
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•	Where are you working?

How long have you been in a place of employment?

1 – 5 yrs	5yrs – 10 yrs	10yrs and above	

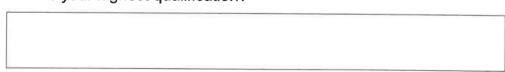
Do you currently attend to rape crime scenes?

YES	NO

For how many years have you been involved in rape related cases?



• What is your highest qualification?



• Did you undergo any training on sexual offences such as rape?

YES	NO	
	1	

## **SECTION B:** WHY IS THE LCRC NOT CALLED TO PROCESS RAPE CRIME SCENES IN THE GEORGE CLUSTER?

- 1. According to your knowledge, what is criminal investigation?
- 2. Based on your understanding, explain what forensic science is?
- 3. Explain the term Identification?
- 4. Explain the term Individualisation?
- 5. Explain the meaning of the Locard's Principle.
- 6. What is a crime scene?
- 7. Define rape.
- 8. Who are the role-players in a rape case?
- 9. What are the functions of the LCRC /LCRC fieldworkers?
- 10. Who is responsible in collecting physical evidence on a rape scene?
- 11. Who are the first responders to rape crime scenes?
- 12. Who is responsible to activate role-players such as the LCRC to the rape crime scene?
- 13. Do you experience difficulty in activating members of the LCRC?
- 14. Do you make use of the LCRC to process rape crime scenes at your station?
- 15. If the answer is NO, why according to your experience is the LCRC not called out to rape scenes?
- 16. Why is the LCRC not called to process rape crime scenes in the George Cluster?

#### **Annexure A**

SOUTH AFRICAN POLICE SERVICE



SOUTH AFRICAN POLICE SERVICE

25/7/2/1(201600148)

#### INFORMATION NOTE

To: The Provincial Commissioner: Western Cape

PERMISSION TO CONDUCT RESEARCH IN SOUTH AFRICAN POLICE SERVICE: THE USE OF LOCAL CRIMINAL RECORD CENTRE (LCRC) AS AN AID TO PROCESS PHYSICAL EVIDENCE ON THE SCENE OF CRIME: MAGISTER TECH IN FORENSIC INVESTIGATION: UNISA: RESEARCHER: L MANELI

- The researcher, Mr Maneli, has submitted an application to conduct research within SAPS. The applicant's proposal has been perused, evaluated and recommended by the office of the Divisional Commissioner: Research.
- The aim of the research is to determine why LCRC fieldworkers are not activated immediately to all rape scenes by the first responders.
- The target population is the Community Service Centre (CSC) patrol members in the George Cluster. The researcher is requesting permission to conduct interviews with CSC patrol members and LCRC experts.
- This office has perused the application and recommends; subject to the following conditions:
  - the researcher will at his or her exclusive cost, provide all equipment of whatsoever nature used to conduct the research;
  - will conduct the research without any disruption to duties of members of the service:
  - the interviews are confined to the conducting of said interviews with members at the identified police stations;
  - prior arrangements must be made timeously with the Station Commander of such members to be interviewed to ensure that service delivery is not hampered;

PERMISSION TO CONDUCT RESEARCH IN SOUTH AFRICAN POLICE SERVICE: THE USE OF LOCAL CRIMINAL RECORD CENTRE (LCRC) AS AN AID TO PROCESS PHYSICAL EVIDENCE ON THE SCENE OF CRIME: MAGISTER TECH IN FORENSIC INVESTIGATION: UNISA; RESEARCHER: L MANELI

- the researcher will respect the privacy of the members and will not divulge information received from a member of the Service or any person with whom the researcher conducted an interview, and that such information will at all times be treated as strictly confidential;
- If information pertains to the investigation of crime or a criminal case, the
  researcher must acknowledge that he or she, by publication thereof, may also be
  guilty of defeating or obstructing the course of justice or contempt of court;
- will pay fees or comply with further procedures in the Service, such as fees or procedures applicable to obtain access to a record of the Service;
- will allow the Service fourteen days to peruse the report in order to determine
  whether it complies with all conditions for the approval of the research before it is
  published in any manner and, if it is found not to comply with the conditions, that
  he or she will not publish it;
- will complete an indemnity form and agree to the undertaking and conditions
  prior to the commencement of his/her research, in terms of which the South
  African Police Service is indemnified against any injury, personal damage or any
  loss suffered during the research;
- the researcher may not take photographs of any office or state building as that may compromise the security of the police station, and is prohibited by law and

· Will donate an annotated copy of the research work to the Service.

PROVINCIAL HEAD OD & STRABERGAVINER

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AND STRATEGIC MANAGEMENT WESTERN CAPE

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PERMISSION TO CONDUCT RESEARCH IN SOUTH AFRICAN POLICE SERVICE: THE USE OF LOCAL CRIMINAL RECORD CENTRE (LCRC) AS AN AID TO PROCESS PHYSICAL EVIDENCE ON THE SCENE OF CRIME: MAGISTER TECH IN FORENSIC INVESTIGATION: UNISA: RESEARCHER: L MANELI

KCLOMMENDED / NOT RECOMMENDED
the Conditions set in paragraph 4.
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PROVINCIAL HEAD: LEGAL SERVICES
WESTERN CAPE FM MBEKI
Date: 2016-12-01
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TE PATEKILE
Date: 2016-12-03
Date
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#### **Annexure B**

## **INFORMED CONSENT FORM**

# ASSESSING THE UTILIZATION OF THE LOCAL CRIMINAL RECORD CENTRE IN RAPE CRIME SCENES

Thank you for agreeing to participate in this study.

The aim of this study is:

 The aim of this study is to determine why LCRC fieldworkers are not activated immediately to all rape scenes by the first responders.

The purpose of this study is to:

- To evaluate the responses from the interviews to determine the weaknesses and strengths of first responders regarding the use of LCRC fieldworkers to process rape scenes for possible physical evidence in order to individualise a suspect.
- To explore recent and relevant literature (peer review journals, dissertations and academic books) from local and national libraries about the use for physical evidence (such as blood, semen, hair and saliva) to individualise a suspect in rape cases, to find new information in order to improve the weaknesses of first responders into strengths. Interviewing experts in the field to find best practices that should be applied when processing rape crime scenes for physical evidence.
- To develop good practice by make certain findings and recommendations that could add value to the investigators' capabilities when trying to individualise a suspect to a specific rape case using physical evidence.

The research will have the following benefits:

 This research will benefit the academic community being available to students and researchers. The research will add value regarding the importance of using LCRC fieldworkers to detect physical evidence such as semen, blood, saliva and hair in order to individualise suspects in rape cases. The research could be used as a source for students, researchers and would be especially useful to investigators of rape cases.

- The South African society would benefit when offenders of rape are successfully prosecuted. The participants who will participate in the research will also gain valuable knowledge of how physical evidence could add value to the investigation. The researcher intends to teach the participants about the value of physical evidence in sexual offences cases. The physical evidence could add weight to the states' case or exonerate the accused during the subsequent trial. The conviction of the accused would mean that the offender is removed from society and such convict would receive rehabilitation through the department of Correctional Services.
- This research would benefit any other law enforcement agencies that are interested in individualising suspects by using physical evidence. The principle of using physical evidence to individualise a suspect remains the same regardless of the type of offence.
- Once this research is found to be noteworthy by Unisa, this research would be uploaded on myUnisa website. This would benefit the students and researchers of Unisa.

#### Selection of participants:

The researcher will work first responders (Community Service Centre members) from four police stations as they are all in the same cluster. From all four police stations the researcher will select 40 first responder members out of a total number 120 in the George cluster, for the sampling target for this study. At least 10 members per police station will be asked to participate in the study. The targeted participants for an interview will be first responders who are involved in attending to rape cases. The population targeted for this study is the first responding members of George cluster. The George cluster has for police stations namely: George SAPS, Pacaltsdorp SAPS, Conville SAPS and Tembalethu SAPS.

The data collection methods that will be used in this study are:

#### Literature

#### Interviews

You have a right to refuse to participate in this research and to change your decision or to withdraw your consent if you wish. You are not forced to participate in this interview but your participation is highly appreciated. To ensure your privacy during the interview, the venue will be changed to a private and safer place. You don't have to give your personal identity in this interview you can remain anonymous if you wish and your confidentiality and anonymity will be safeguarded. The interview will be recorded in writing, if you are uncomfortable with the recording, you are free to say so and your request will be respected, also once the recording commences you are also free to stop the recording if you are uncomfortable with it. The information that you will provide during this interview will be used in this study and your identity will still be safeguarded and protected at all times. The findings of this study will be made available to the concern parties and it will be published for future use and for educational purposes. This research is expected to be finalized during February 2018.

As a researcher of this study I am guided by the UNISA Research Ethics Policy which compels me to comply with the rules set out in the Research Ethics Policy and should I breach any of the rules promised to you, I shall be facing the punishment set out in the UNISA Research Ethics Policy.

Should you wish to contact the researchers of this study feel free to contact Captain L. Maneli on 044-8034559 or luvuyo9615@gmail.com

By signing this consent form I certify t	hat I
agree to	(Participant: print full name here)
participate in this study.	•
(Signature)	(Date)