A CRITICAL ANALYSIS OF THE PROCEDURES FOLLOWED IN CHILD RAPE CASES IN MPUMALANGA PROVINCE

by

VINESH BOODHOO

Submitted in accordance with the requirements for the degree of

MASTER TECHNOLOGIAE

in the subject Forensic Investigation at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: DR B. BENSON

FEBRUARY 2015
ABSTRACT

This study reflects a critical analysis of the procedures followed in child rape cases in Mpumalanga Province and in the process to enhance investigative capabilities with sound detective development.

Empirical research was conducted with a literature review, docket analysis and interviews as methods to obtain information where the following important aspects were addressed: an overview of the field of forensic investigation, the shortcomings with regard to child rape investigations and correct procedures for conducting child rape investigations formulated.

The study found that generally rape cases were not properly investigated, correct procedures were not followed (biological/physical evidence was not readily identified nor correctly handled) and applicable directives pertaining to child rape investigations not complied with. Investigators had a narrow understanding of the concept forensic investigation. In child rape investigations it would be of more evidential value and reliable to collect physical evidence such as blood, semen, vaginal fluids and saliva as the child’s testimony at court might not be reliable, particularly when subjected to cross examination. Rape is both a contact crime as well as a psychologically motivated crime and both aspects of the trauma needs attention during the investigation process.

Crimes against women and children are also a national concern, thus making child rape a priority crime for the South African Police Service. For any successful prosecution it is necessary that policy and correct procedures are not compromised but rather strictly adhered to.

The Locard Principle in relation to physical evidence such as body fluids at the crime scene needs to be focussed on during the investigation process. The research suggests that the current standing operating procedures be amended to include the critical aspects of child rape investigation such as processing of the crime scene, the search for biological evidence as well as the packaging and preservation of biological evidence.
ACKNOWLEDGEMENTS

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

• My supervisor, Dr B. Benson, and Marielize van Zyl for their devoted guidance and support. Their knowledge and insight guided and motivated me in pursuing the dissertation;

• My beloved wife, Sunitha, and children, Kavir and Kashmeeta, for their never-ending love, support, patience and for being there for me during the difficult times. Especially my wife for typing and effectively dealing with the e-mails and communication between my supervisor and me;

• The SAPS, for authorising my research and giving me written permission to conduct this research;

• All participants, who openly engaged with and participated in an important aspect of the process, namely the interviews:

• The Station Commanders of the five police stations, for facilitating the interviews and docket analysis; and

• The University of South Africa, for the facilities they put at my disposal.
DECLARATION

Student number: 36781959

I, Vinesh Boodhoo, declare that “A Critical Analysis of the Procedures followed in Child Rape Cases in Mpumalanga Province” 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.

____________________      ________________
Vinesh Boodhoo       Date
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS</td>
<td>Crime Administration System</td>
</tr>
<tr>
<td>DNA</td>
<td>Deoxyribonucleic Acid</td>
</tr>
<tr>
<td>FCS</td>
<td>Family Violence, Child Protection and Sexual Offences Unit</td>
</tr>
<tr>
<td>FSL</td>
<td>Forensic Science Laboratory</td>
</tr>
<tr>
<td>FSW</td>
<td>Forensic Social Worker</td>
</tr>
<tr>
<td>MO</td>
<td>Modus Operandi</td>
</tr>
<tr>
<td>NI</td>
<td>National Instruction</td>
</tr>
<tr>
<td>SAECK</td>
<td>Sexual Assault Evidence Collection Kit</td>
</tr>
<tr>
<td>SAPS</td>
<td>South African Police Service</td>
</tr>
<tr>
<td>SO</td>
<td>Standing Orders</td>
</tr>
<tr>
<td>SOP</td>
<td>Standing Operating Procedure</td>
</tr>
<tr>
<td>UNISA</td>
<td>University of South Africa</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS

DECLARATION iv
LIST OF ABBREVIATIONS AND ACRONYMS v
LIST OF TABLES ix

CHAPTER 1. GENERAL ORIENTATION 1
1.1 INTRODUCTION 1
1.2 PROBLEM STATEMENT 2
1.3 RESEARCH AIMS 6
1.4 RESEARCH PURPOSE 6
1.5 RESEARCH QUESTIONS 7
1.6 KEY CONCEPTS 7
1.6.1 Forensic Investigation 8
1.6.2 DNA 8
1.6.3 Rape 8
1.6.4 Sexual Penetration 8
1.6.5 Child 8
1.6.6 Child Rape 9
1.7 RESEARCH DESIGN AND APPROACH 9
1.8 TARGET POPULATION AND SAMPLING 10
1.8.1 Population and Target Population 10
1.8.2 Sampling 11
1.9 DATA COLLECTION 12
1.9.1 Literature Review 13
1.9.2 Interviews 13
1.9.3 Case Docket Analysis (Document Analysis) 14
1.10 DATA ANALYSIS 16
1.11 METHODS TAKEN TO ENSURE VALIDITY 17
1.12 METHODS TAKEN TO ENSURE RELIABILITY 18
1.13 ETHICAL CONSIDERATIONS 18
1.14 CHAPTER LAYOUT 19

CHAPTER 2. FORENSIC INVESTIGATION 21
2.1 INTRODUCTION 21
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2</td>
<td>UNDERSTANDING WHAT FORENSIC INVESTIGATION MEANS</td>
<td>22</td>
</tr>
<tr>
<td>2.3</td>
<td>THE FORENSIC INVESTIGATOR</td>
<td>24</td>
</tr>
<tr>
<td>2.4</td>
<td>THE MANDATE TO INVESTIGATE</td>
<td>26</td>
</tr>
<tr>
<td>2.5</td>
<td>PURPOSE OF FORENSIC INVESTIGATION</td>
<td>29</td>
</tr>
<tr>
<td>2.6</td>
<td>OBJECTIVES OF FORENSIC INVESTIGATION</td>
<td>30</td>
</tr>
<tr>
<td>2.7</td>
<td>A SYSTEMATIC AND PLANNED PROCESS</td>
<td>32</td>
</tr>
<tr>
<td>2.7.1</td>
<td>Identification of the Crime</td>
<td>34</td>
</tr>
<tr>
<td>2.7.2</td>
<td>Collection of Evidence</td>
<td>34</td>
</tr>
<tr>
<td>2.7.3</td>
<td>Individualisation of the Perpetrator and Arrest</td>
<td>36</td>
</tr>
<tr>
<td>2.7.4</td>
<td>Evaluation of Information</td>
<td>36</td>
</tr>
<tr>
<td>2.7.5</td>
<td>Important Aspects of Prosecution</td>
<td>37</td>
</tr>
<tr>
<td>2.7.6</td>
<td>Characteristics of an Effective Forensic Investigator</td>
<td>38</td>
</tr>
<tr>
<td>2.8</td>
<td>SUMMARY</td>
<td>39</td>
</tr>
<tr>
<td>3.1</td>
<td>INTRODUCTION</td>
<td>41</td>
</tr>
<tr>
<td>3.2</td>
<td>TYPES OF EVIDENCE</td>
<td>42</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Blood</td>
<td>43</td>
</tr>
<tr>
<td>3.2.2</td>
<td>Identification of Blood</td>
<td>44</td>
</tr>
<tr>
<td>3.2.3</td>
<td>Origin of Blood</td>
<td>47</td>
</tr>
<tr>
<td>3.2.4</td>
<td>semen</td>
<td>49</td>
</tr>
<tr>
<td>3.2.5</td>
<td>Origin of semen</td>
<td>54</td>
</tr>
<tr>
<td>3.2.6</td>
<td>Vaginal Fluids and Swabs</td>
<td>56</td>
</tr>
<tr>
<td>3.2.7</td>
<td>saliva</td>
<td>57</td>
</tr>
<tr>
<td>3.2.8</td>
<td>Identification of Saliva at the Crime Scene</td>
<td>58</td>
</tr>
<tr>
<td>3.3</td>
<td>THE RAPE CRIME SCENE</td>
<td>62</td>
</tr>
<tr>
<td>3.3.1</td>
<td>Rape Proximity</td>
<td>64</td>
</tr>
<tr>
<td>3.4</td>
<td>THE LOCARD PRINCIPLE</td>
<td>68</td>
</tr>
<tr>
<td>3.5</td>
<td>SUMMARY</td>
<td>70</td>
</tr>
<tr>
<td>4.1</td>
<td>INTRODUCTION</td>
<td>72</td>
</tr>
<tr>
<td>4.2</td>
<td>CRIME SCENE PROCESSING</td>
<td>73</td>
</tr>
<tr>
<td>4.3</td>
<td>EVIDENCE AT THE CRIME SCENE</td>
<td>75</td>
</tr>
<tr>
<td>4.3.1</td>
<td>Collection of Biological Evidence</td>
<td>75</td>
</tr>
</tbody>
</table>
4.3.2 Correct Procedures when collecting Biological Evidence 77
4.3.3 Packaging and Preservation of Biological Evidence 80

4.4 CRITICAL ASPECTS OF BIOLOGICAL EVIDENCE 83
4.4.1 Handling of Biological Evidence 83
4.4.2 Chain of Custody 85
4.4.3 Constitutionally and Legally Obtained Evidence 88

4.5 SUSPECT AND PROCEDURE 89
4.5.1 Linkage of the Suspect to the Scene 89
4.5.2 Corroboration of Eye Witness/Victim Testimony 92

4.6 SUMMARY 93

CHAPTER 5. FINDINGS AND RECOMMENDATION 95
5.1 INTRODUCTION 95
5.2 PRIMARY FINDINGS 95
5.2.1 Research Question 1: What is forensic investigation? 95
5.2.2 Research Question 2: Shortcomings identified with regard to child rape investigations 97
5.2.3 Research Question 3: What are the critical procedures that should be followed in child rape investigations? 100

5.3 SECONDARY FINDINGS 101
5.3.1 Research Question 1: What is forensic investigation? 101
5.3.2 Research Question 2: Shortcomings identified with regard to Child rape investigations 102
5.3.3 Research Question 3: What are the critical procedures that should be followed in Child Rape Investigations? 104

5.4 RECOMMENDATIONS 106
5.4.1 Research Question 1: What is forensic investigation? 106
5.4.2 Research Question 2: Challenges with regard to child rape investigations 106
5.4.3 Research Question 3: What are the critical procedures that should be followed in child rape investigations? 107

5.5 FUTURE RESEARCH 108
5.6 TRAINING AND DEVELOPMENT 108
5.7 SUMMARY 109

LIST OF REFERENCES 111

LIST OF CASES 116

ANNEXURE A - INTERVIEW SCHEDULE 118
ANNEXURE B - MATRIX: DOCKET ANALYSIS  126

ANNEXURE C - AUTHORITY FROM THE SAPS TO CONDUCT RESEARCH  127

ANNEXURE D - CERTIFICATE OF EDITING  128

LIST OF TABLES

Table 1: Statistics of Child Rape Cases for Mpumalanga April 2007 – March 2008  2

Table 2: Statistics of Child Rape Cases for Mpumalanga April 2012 – March 2013  3
CHAPTER 1. GENERAL ORIENTATION

1.1 INTRODUCTION
The Constitutional mandate of the Ministry of Police and the South African Police Service (SAPS) is reflected in section 205 of the Constitution of the Republic of South Africa, 1996 (Act 108 of 1996). The objectives of policing, in terms of section 205, are to:

- Prevent, combat and investigate crime
- Maintain public order
- Protect and secure the inhabitants of the Republic and their property
- Uphold and enforce the law

Therefore, the SAPS have been mandated in terms of the Constitution to address crime and to keep the nation informed of the annual crime status. Statistics released by the SAPS for the period 2007/2008 showed that 16 068 child rape cases were reported nationally (South African Police Service, 2008:127). In Mpumalanga Province, for the same period, statistics showed that 1 249 child rape cases were reported (South African Police Service, 2008:45). Yet very few cases ended up in court with an ultimate successful conviction (see Table 1 below). Of the 1 249 reported cases only 30 per cent were placed before the court roll and of these only 8 per cent secured a conviction of the suspect. The concept of child rape is to be understood, as the rape of a person who is under 18 years as defined in paragraph 1.6.6 below.

Annual national crime perspective in respect of child rape cases for the period 2012/2013 indicates that 20 702 child rape cases were reported. In Mpumalanga Province, 1 621 child rape cases were reported for the same period (South African Police Service, 2013:24). A comparative analysis between 2007/2008 and 2012/2013 of the statistics in respect of child rape cases nationally and in Mpumalanga Province indicates substantive increases. While the empirical research for this dissertation was conducted in 2007/2008, the problem persists to date: child rape cases remain a challenge.

According to the Annual Performance Plan 2012/2013 of the SAPS, the strategic objective of the Detective Service is to contribute to the successful prosecution of crime
by investigating, gathering and analysing evidence, thereby increasing the detection rate of priority crimes such as rape (Annual Performance Plan 2012/2013).

1.2 PROBLEM STATEMENT

According to Welman and Kruger (2001:11), “a problem statement or hypothesis is a tentative solution or explanation of a research problem and the task of research is to investigate it”. The authors point out that one of the first things that a researcher must do in scientific research is to formulate a clear problem statement that can be investigated. When conducting research within a criminal justice discipline, research problems are often manifested through crime statistics. The statistics in respect of child rape cases being successfully resolved in Mpumalanga Province reveal a low success rate.

Table 3: Statistics of Child Rape Cases for Mpumalanga April 2007 – March 2008

<table>
<thead>
<tr>
<th>Reported</th>
<th>Undetected</th>
<th>Cases to court</th>
<th>Conviction</th>
<th>Not guilty</th>
<th>Withdrawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 249</td>
<td>23%</td>
<td>30%</td>
<td>8%</td>
<td>8%</td>
<td>31%</td>
</tr>
</tbody>
</table>

(South African Police Service, 2008:45)

Table 1 shows the following in terms of child rape cases reported in Mpumalanga Province for the period 1 April 2007 to 31 March 2008:

- Reported: this refers to all of the child rape cases that were reported in Mpumalanga Province between 1 April 2007 and 31 March 2008.
- Undetected: this refers to child rape cases that were not solved.
- Cases to court: this refers to child rape cases that were referred to court as a result of detection where the alleged perpetrator was arrested.
- Conviction: this refers to where the accused in a child rape case was found guilty before a court of law.
- Not guilty: refers to when the accused in a child rape case was found not guilty by a presiding official in a court of law.
- Withdrawn: refers to the manner of disposal of a case on the request of the victim or complainant as well as cases that are withdrawn at court.
The above statistics indicate that of the 1,249 cases reported only 376 (30%) cases were taken to court. More alarming than this is the fact that in 8 per cent (of the 376 cases which were taken to court) a guilty verdict was obtained. This translates as only 31 of the 376 case that went to court receiving a guilty verdict. These figures indicate that the child rape offences in Mpumalanga Province are not being dealt with effectively.

Table 4: Statistics of Child Rape Cases for Mpumalanga April 2012 – March 2013

<table>
<thead>
<tr>
<th>Reported</th>
<th>Undetected</th>
<th>Cases to court</th>
<th>Conviction</th>
<th>Not guilty</th>
<th>Withdrawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,826</td>
<td>13%</td>
<td>53%</td>
<td>68%</td>
<td>31%</td>
<td>2%</td>
</tr>
</tbody>
</table>

(South African Police Service, 2013:24)

Table 2 presents statistics of child rape cases reported in Mpumalanga Province for the period 1 April 2012 to 31 March 2013. A comparison between Table 1 and Table 2 indicates that child rape cases had increased between the first reporting period and the second. Although in 31 per cent of the cases the accused were found not guilty, the positive factor was that cases to court and the conviction rate had increased. Comparatively, cases withdrawn at court had also decreased. An analysis of the statistics in Table 1 and Table 2 indicates that child rape cases remain a threat to the society.

The situation as described above has been highlighted through several reports in the media. Brandon (2007:4) reported that some police officers fail to record all rape cases, or report rapes as common assault instead, which has caused widespread outrage. The Times newspaper, in which Brandon’s report appeared, also reported that the police placed the victim and rapist in the same vehicle.

In the same year, Laganparsad (2007:5) reported that “the magistrate described the way in which rape was investigated by the police, as highly disturbing”. In this article, Laganparsad reported that the magistrate slammed the police for not collecting Deoxyribonucleic Acid (DNA) evidence and key statements, thus forcing the court to acquit the perpetrator. Hosken (2007:16) also added that “a senior police officer said the chance you had of having a child rapist convicted has been lost because the court has thrown out the case over lack of evidence”.

3
Cohen (2007:17) reported in the Pretoria News that “forty three children are raped per day”. This report stated that 16 600 DNA kits were waiting to be analysed in the Police Forensic Laboratories. This situation was criticised as it was stated by the reporter that DNA evidence was absolutely essential in linking perpetrators to crimes, especially in the case of violence against children. Based on the negative publicity on child rape investigations and poor successes, it was perhaps possible that investigative methods and techniques had become questionable.

Writing in the Pretoria News in 2013, Van Zuydam (2013:5) stated that “SA child murder rape doubles the world average.” The journalist made reference to the recent killings of five children, which were linked to sexual abuse. The prominent cases highlighted were those of Sheldean Human, seven years of age, and the siblings of Diepsloot, aged two and three respectively. In the latter case, although five suspects were arrested, only one suspect was charged based on his confession and on a positive DNA link. The remaining suspects did not have a DNA link and were therefore not prosecuted.

During this time (2007-2008), the researcher (as a member of the SAPS) was attached to the Provincial Inspectorate in Mpumalanga Province. The mandate of the Provincial Inspectorate was to conduct inspections of the operational and support components at police stations and to conduct performance and compliance inspection of case dockets as a standard police procedure in terms of quality control of the investigation of cases. Owing to the poor performance of detective units, a low conviction rate at court as well as negative publicity in the media, the researcher (in his capacity as a member of the Provincial Inspectorate) was tasked to conduct a thorough inspection of child rape investigations. The purpose of this inspection was to identify possible shortcomings, (deviations from the standing operating procedure) in relation to the comprehensive investigation of child rapes. To this end, 60 case dockets collectively of child rape cases for the period 1 June 2007 to 31 December 2007 were perused at the five police stations of Kwa Mhlanga, Tweefontein, Kwaggafontein, Vaalbank and Siyabuswa, in the Highveld Area, Mpumalanga Province (an equal number per station were selected). These police stations were chosen for inspection of case dockets owing to the prevalence of rape and high reported incidence of child rape cases.
After perusal of the dockets pertaining to child rape cases from an investigation perspective, the following shortcomings were identified:

- Victim statements were not comprehensive and descriptive of the exact events and in instances lacked elements of the crime.
- Police officers were judgmental (based on their entries in the case dockets) which was apparent especially in instances where the victims were sex workers. This was established due to negative entries in the investigation diaries to the effect that the victim cannot be trusted as she is a prostitute.
- The pre-counselling of forensic social workers was not utilised prior to statement taking. No reference was made to this effect and neither was an affidavit obtained from a social worker as to the victim’s state of mind.
- In some instances resources at investigative units such as the correct sexual offences kits were lacking. There were entries in the investigation diaries to this effect. Although this appears to be a logistical issue, it does affect the success of cases.
- Police officers failed to obtain the statement of the first person to whom the rape was reported by the victim and statements by the parent or guardian.
- Investigators failed to visit crime scenes timeously and collect evidence such as DNA. In some cases, crime scenes were visited hours later or a day later.
- Investigating officers failed to maintain consistent contact with the victim in the event of new or fresh information arising.
- Investigators were changed several times before cases went to trial. The case dockets were assigned to different investigating officers before trial proceedings.
- Unnecessary prolonged delays in trials occurred, thus exhausting the victim and witnesses. Cases were postponed several times on request by the police, due to incomplete investigations or on request by the defence attorney as a result of inadequate instructions by the perpetrator to his attorney.

These shortcomings with regard to child rape investigations convinced the researcher of the urgent need to conduct further research into this problem. This prompted the researcher to undertake a critical analysis of the procedures followed in child rape investigation in specifically selected areas in Mpumalanga Province. This was
undertaken in an attempt to determine whether procedural deviations occurred in child rape investigations that might contribute to the cases not reaching court or not being successful at court.

Case dockets were analysed using a matrix (see Section 1.9.2 below) that was informed by the deviations highlighted above. A procedural deviation that was also considered was the failure to visit crime scenes or to take victims for medical examination timeously. Such procedural deviations have a negative impact on the probable success rate of case dockets when the cases are referred to court for prosecution purposes. The researcher considered the investigation of this problem important because crimes against women and children have been identified as an operational priority by the SAPS, as stated in the Annual Performance Plan 2012/2013 (Annual Performance Plan 2013:33).

1.3 RESEARCH AIMS

According to Denscombe (2002:11), the principal aim of scientific research is to merge the power of rational thought and systematic investigation to produce new knowledge. The aim of this research was to critically evaluate the procedures followed in child rape cases at a selection of police stations in Mpumalanga Province to identify shortcomings that were possibly contributing to the poor performance of the cases at court. Based on the shortcomings that were identified by the researcher during this research, recommendations were made to improve the procedures with regard to child rape investigations at the affected police stations.

1.4 RESEARCH PURPOSE

According to Denscombe (2002:25), the purpose of a research study determines the focus and the direction that the research will take. The research purpose also serves as a criterion against which the outcomes or results can be evaluated. It is important that there should be a valid reason for conducting the research to prevent wasting time and money on a research project that is pointless.

The purpose of this study is two-fold: exploration and description. The purpose of much of the research being undertaken within the discipline of Criminal Justice is to explore problems, as is the case in this study (Babbie, 2014:94; Maxfield & Babbie, 2005:19).
In this study, the procedures followed in child rape investigations were explored and described to critically evaluate them. Thereafter recommendations were made to in an attempt to improve the procedures in child rape investigation and to enhance the performance of the investigators during such investigations. Exploratory studies focus particularly on developing a preliminary understanding about either a new or a universal problem (Babbie, 2014:94-95; Maxfield & Babbie, 2005:20).

Babbie (2014:95) explains that often qualitative research aims to describe what is being studied. The second purpose of this study is to describe the problem as it is encountered in the field. By first exploring and then describing the problems being experienced during the investigation of child rape cases, the study is likely to produce more informed and practical recommendations. The results of this research will also be made available to SAPS to be used to supplement the training and development of investigators.

1.5 RESEARCH QUESTIONS

Research questions are the door into the world that the researcher studies and it is often the guiding question that highlights the focus of the study from an overall (holistic) perspective (Flick, 2011:103). The research questions should communicate the fundamental nature of the enquiry that is addressed by the research (Denscombe, 2002:31). The research questions for this study are as follows:

- What is forensic investigation?
- What are the shortcomings with regard to child rape investigations at the selected police stations?
- What are the correct procedures that should be followed in child rape investigations?

1.6 KEY CONCEPTS

Researchers define terms in order to assist readers in understanding the exact meaning of the terminology referred in the study, and in particular if the reader is not someone who is familiar with the particular field of study (Creswell, 2003:143). The following concepts are therefore defined.
1.6.1 Forensic Investigation

Pollex (2001:93) states that “forensic investigation is an investigation aimed at instituting court proceedings, criminal as well as civil”.

1.6.2 DNA

“DNA contains the entire genetic blueprint of an individual. No two individuals share the same DNA sequence, except identical twins. DNA is an organic substance found in the chromosomes within the nucleus of a cell. Forensic scientists have devised a technique, often referred to as ‘genetic fingerprinting’, that allows them to pick out specific patterns in the arrangement of the DNA” (Gilbert, 2010:279).

1.6.3 Rape

According to section 2 (1) of the Sexual Offences and Related Matters Amendment Act, 2007 (Act 32 of 2007), “Any person who unlawfully and intentionally commits an act of sexual penetration with a complainant without the consent of that person is guilty of an offence of rape” (South Africa, 2007).

1.6.4 Sexual Penetration

Sexual penetration is defined in the Sexual Offences and Related Matters Amendment Act, 2007, as to include any act which causes penetration to any extent whatsoever by:

- “The genital organs of one person into the genital organs, anus, or mouth of another person;
- Any other body part of one person or, any object, including any part of the body of an animal, into the genital organs or anus of another person, or
- The genital organs of an animal, into the mouth of another person.” (South Africa, 2007)

1.6.5 Child

In terms of section 1(1) (a) of the Children’s Act, 2005 (Act 38 of 2005), a child is a person under the age of 18 (South Africa, 2005).
1.6.6 Child Rape

For the purpose of this research, the following operational definition is used: “child rape” refers to the rape of a person under the age of 18.

1.7 RESEARCH DESIGN AND APPROACH

According to Welman and Kruger (2001:46), a research design “is the plan according to which we obtain research participants (subjects) and collect information from them. In it we describe what we are going to do with the participants with a view to reaching conclusions about the research problem.” Babbie (2014:93) adds that the research design explains clearly what it is the researcher wants to find out and then adds to this explanation the best way in which to do this. The empirical research design for this study, as described by Mouton (2001:55), included the data-collection methods of a case docket analysis and face-to-face interviews with investigators who are responsible for the investigation of child rape cases.

The researcher utilised an empirical design in this research because it involved the researcher getting into the field and focusing on the personal experience of the participants in the study (Mouton, 2001:148). The investigators interviewed for this study had practical experience in the investigation of child rape cases and were able to relate to the topic and respond with first-hand information about the topic.

Within the empirical design, the researcher used a qualitative approach. Leedy and Ormrod (2013:98) explain that qualitative research may at times be so specific to a context that generalisation (to other contexts outside the study) may not be applicable. They also explain that a qualitative study is typically used to answer questions about the complex nature of a phenomenon from the study participants’ point of view. It can involve the collection of information from various empirical materials such as interviews, observation, case studies and personal experience. The qualitative research approach was used because the researcher aimed to obtain information from the personal experience of the investigators who are responsible for child rape investigations.
1.8 TARGET POPULATION AND SAMPLING

1.8.1 Population and Target Population

Bless and Higson-Smith (2000:84) defines population as “the entire set of objects or people which is the focus of the research and about which the research wants to determine some characteristics”. The ideal population for this study would be all detectives who are responsible for investigating child rape cases in the SAPS. However, for practical reasons this is not possible.

Owing to their negative publicity and poor performance with regard to child rape investigation in the Highveld area of Mpumalanga Province (as discussed in Section 1.2 supra), 17 police stations in the Highveld policing area were selected as the target population for this study. Mpumalanga Province is divided into three areas: the Lowveld, the Eastern Highveld and the Highveld. While these Areas became Clusters shortly after the empirical research was done, the researcher maintained the description of the Areas as reflecting where the research was done. At the time of this study, the rape cases reported at these police stations were being investigated by the general detectives of the police stations because the Family Violence, Child Protection and Sexual Offences (FCS) specialised units (which prior to 2000 had investigated child rape cases) had been phased out. Subsequent to the completing of this research, there was a strong move to reinstate these specialised FCS units.

The target population or study population is the population from which the sample for the study is drawn and to which the researcher would like to use to generalise the results (Babbie, 2014:207; Welman & Kruger, 2001:119). This verifies the limitations to the generalisation of data in qualitative research highlighted by Leedy and Ormrod (2013:98).

The following police stations were purposively selected as the target population because the short comings discussed earlier in this chapter manifested prolifically during inspections at these stations: Kwa Mhlanga (42), Tweefontein (16), Kwaggafontein (19), Vaalbank (15) and Siyabuswa (33). The figures in brackets refer to the number of detectives at each station. Purposive sampling mentioned above, was used since the researcher is able to relate to the field of investigation as well as the knowledge of the respective police stations (Welman & Kruger, 2001:63).
The sample from which the researcher ultimately collected data was thus drawn from these five police stations. There are 125 detectives at these police stations collectively, which make up the sampling units of the target population. The further sampling from the target population is discussed below. The researcher was able to determine from the CAS that there were 397 child rape dockets (filed and closed), between these 5 police stations. The sampling of these dockets is also discussed below.

1.8.2 Sampling

Welman and Kruger (2001:47) state that when the research population is so large that it is practically not possible to conduct research on the whole population, the researcher will obtain data from a sample of the population. Denscombe (2002:11) explains that a sample is a small portion of the whole.

Two primary sampling methods are available: probability and non-probability sampling. According to Welman and Kruger (2001:47), in probability sampling the probability that any element or member of the population will be included in the sample can be determined. Conversely, the authors state that in non–probability sampling some elements have no chance of being included in the sample. Various authors explain that probability sampling is more often used in large-scale quantitative research in which the population parameters are relatively known, while non-probability sampling is used in small-scale qualitative research, where the population parameters are relatively or totally unknown (Babbie, 2014:195-234; Flick, 2011:115-126; Strydom, 2011:222-235; Strydom & Delport, 2011:390-396).

Since the parameters of the study population were known, it was decided to make use of a probability sampling method, which would afford all 125 detectives an equal opportunity of being selected for this study. No definite guidelines could be found in research methodology literature to contradict this reasoning.

Simple random sampling is a probability sampling method. The simple random sampling method as described by Leedy and Ormrod (2005:201) was used to ensure that each element had an equal chance of being selected. Six detectives were selected from each of the police stations which made up the target population. This was achieved by writing the names of all the detectives of Kwa Mhlanga on separate pieces
of paper and placing them in a box; thereafter, six pieces of paper were drawn from the box, thus revealing the names of the sample for that station. This process was repeated for the four remaining police stations until 30 names were selected. This selection of 30 names is the study sample. This group made up Sample A.

Using the same method of simple random sampling, a total of 60 child rape case dockets out of the 397 (closed and filed) dockets in respect of the five police stations, for the period 1 January 2007 to 31 December 2007, were also selected. The CAS system indicated that there were 397 filed case dockets which had child victims. The case numbers for each of the police stations were written on separate pieces of paper and placed in separate boxes. Thereafter, 12 pieces of paper were randomly drawn out of each of the boxes. This process ensured that 60 pieces of paper were drawn, 12 from each station, evenly spread between the 5 stations. The selected 60 case numbers made up the study sample and was called Sample B. The simple random sampling method was used thus giving each docket the same chance of being included in the sample (Welman & Kruger, 2001:53).

1.9 DATA COLLECTION

Data are the basic material with which researchers work (Durrheim, 1999:45). Data sources are vital to the success of any research and therefore access to documents, people and places is a prerequisite for useful research (Denscombe, 2002:70). The research was based on qualitative data. Qualitative data enable the researcher to understand the underlying meaning of interactions, events, or other phenomena (Pope, Lovell & Brandl, 2001:11).

According to Mouton (2001:57), qualitative research involves the following data-collection techniques: surveys, experiments, case studies, programme evaluation and ethnographic studies. The researcher decided on the literature review, face-to-face interviews and case docket analysis for this research because he considered these the most appropriate methods for collecting the data needed to answer the research questions and address the research aims. The use of multiple sources of data (in this research literature review, docket analysis and interviews) is also known as “triangulation”; it enabled the researcher to explore the problem from different angles and also enhanced the credibility of the data collected (Leedy & Ormrod, 2005:99).
1.9.1 Literature Review

A literature study, as suggested by Clarke (1999:67), was conducted in order to understand all the issues surrounding the topic. National and International sources in the field of policing, criminology and law, such as books, articles, training material of the SAPS relating to the topic were consulted, to obtain relevant information on what has been published on the topic. The topic was divided into various concepts in order to find sources. The concepts were in relation to forensic investigation, DNA, rape and child rape.

1.9.2 Interviews

An interview is defined as a personal and intimate sharing of confidence among people (Morse & Field, 2002:72). The researcher conducted 30 face-to-face interviews using a semi-structured interview schedule, as described by Welman and Kruger (2001:160). A set of standard questions based on the research questions and aims of the research was put to each of the participants in accordance with guidance provided by Leedy and Ormrod (2005:184). Responses were clustered by themes and feedback to this effect is given in the respective chapters.

The participants that were interviewed had experience of the investigation of rape cases where both children and adults were victims and had also attended the relevant courses for rape investigators, which are the Family Violence, Child Protection and Sexual Offences Detective Learner Programme and the Sexual Offences Investigation Course. The average length of experience of the participants was between 10 and 15 years in the field of general investigation, which included rape investigations. The participants chose to remain anonymous and did not reveal their names and they were issued with numbers and are referred to as “participants” in this dissertation.

To regulate the standard of the interviews, the researcher used the guidelines for conducting productive interviews as set by Leedy and Ormrod (2001:147-148), which recommend:

- Identifying questions in advance (questions were formulated based on the research questions and topic well in advance of the interviews);
- Finding a suitable location (a quiet office was used for the interviews)
• Obtaining written permission (written permission was obtained from the relevant authority)
• Establishing and maintaining rapport (the participants were put at ease by means of general and open communication prior to the actual interview)
• Recording responses verbatim (the participants were requested to speak slowly and audibly, and discrepancies were immediately clarified prior to recording responses)
• Avoiding putting words in the participants’ mouths (the participants were allowed space and no leading questions were asked)
• The researcher keeping his reaction to himself (the researcher during the interview process was professional and did not comment on the participants’ responses)

Prior to the interviews, the researcher conducted a pilot study to test the interview schedule. The interview schedule was tested on detectives not included in the sample and the necessary corrections were made before the final interviews were conducted. During the interview with the participants, their responses were recorded by the researcher on the interview schedule.

The purpose of the interview was explained to the participants. The research was conducted on the procedures followed in child rape cases. The researcher did not interrupt the participants while they were expressing their thoughts, and did not influence or guide the participants as they gave information. The feedback of the participants was recorded in writing, as explained by Goddard and Melville (2002:49). The interview schedule is attached as Annexure A.

The researcher obtained permission from both the SAPS and the individual participants to conduct the research. Permission to do research is attached as Annexure C.

1.9.3 Case Docket Analysis (Document Analysis)

Police dockets are the case files that contain all the relevant information about a criminal case and contains all the evidence pertaining to the case, basic facts and demographic information about the incident, statements by victims and witnesses, details of the activities undertaken by the police officers dealing with the case, and the
The standards of case dockets are not decided individually by the provinces but uniformly by Head Office. Head Office, being the National Commissioners Office, is where instructions and directives are drawn up and validated. The instructions are thereafter disseminated to the Provincial Commissioners for implementation and compliance. In similar fashion, investigation processes are regulated centrally by one set of rules: national instruction (NI) and standing orders (SO). These rules are not discussed in detail in this study, but are referred to where necessary.

The matrix used to analyse the case dockets was formatted on the basis of the literature reviewed, relevant policies and the researchers’ experience in the field of investigation. The matrix consisted of the following questions:

- Was the crime scene visited?
- Where was the crime scene (location)?
- Was the crime scene searched for evidence?
- Did the crime scene technician visit the crime scene?
- Were any exhibits retrieved from the crime scene?
- Was search for semen done?
- Was search for blood done?
- Was search for saliva done?
- Were exhibits preserved correctly?
- Was the correct packaging process followed in handling exhibits?
• Was the crime kit (exhibit) referred to the Forensic Science Laboratory (FSL) without unreasonable delays?
• Were chain of custody statements filed in respect of handling exhibits?
• Were precautions taken to avoid contamination?
• Were the correct procedures followed in collection of biological evidence?
• Was the victim taken for medical examination?
• Was the suspect taken for medical examination?
• Was the J88 (medical examination form) filed in docket?
• Was the J88 form completed in all respects?
• Was a photo album of the crime scene filed in docket?
• Were corroborating statements taken from the witnesses?
• Were action steps taken to link the suspect to the crime scene?

Annexure B consists of the questionnaire (matrix) against which the dockets were analysed.

1.10 DATA ANALYSIS

According to Leedy and Ormrod (2001:160), there is no single right method of analysing data in a qualitative study. Data analysis is a process of bringing order, structure and meaning to the mass of collected data (De Vos, Strydom, Fouche & Delport, 2002:139). The data collected from the case docket analysis and the interviews were compared in order for the researcher to reach the findings reported in this study and in terms of which recommendations were made. The research data were analysed according to the spiral analysis method as explained by Creswell (1998:249) and Leedy and Ormrod (2005:150-151).

To this end, the following was done:

• The data obtained during the research were organised using cards and folders and large sections text were broken into smaller sections in the form of sentences and words;
• The data were perused more than once to get a picture of the whole and memos were used to refer to categories and interpretations; and
• General categories and themes were identified and pieces of data classified into themes and sub-themes.

1.11 METHODS TAKEN TO ENSURE VALIDITY

Validity concerns the accuracy of questions asked, the data collected and explanations offered; it relates to the data and analysis used in research (Denscombe, 2002:100). Leedy and Ormrod (2001:97) also explain that “validity” refers to the accuracy, meaningfulness and credibility of the research project as a whole.

To ensure validity of the interview schedule, it was pilot tested on detectives not included in the sample, and thereafter the necessary corrections were made to ensure that the relevant questions were asked (Mouton, 2001:103). The same principles of interviewing were followed with the pilot test participants and the representative sample participants. The interview rooms in the case of the pilot test participants and the representative sample participants were suitable for interviewing, offered privacy and were familiar to the participants.

To ensure validity, as described by Mouton (2001:100) and Robson (2000:98), the researcher used different sources of data; namely, literature review, interviews and docket analysis. The triangulation approach, as discussed by Leedy and Ormrod (2005:99), was used to strengthen the validity of the multiple sources of data to support the problem statement. A semi-structured interview schedule with previously developed questions based on the aims and research questions of the study was used in each interview. This ensured that the interviews measured what they were supposed to measure. The interview schedule further ensured that the same questions were asked of all participants during the interviews. Each participant provided answers according to their personal experience, which was recorded. According to Maxfield and Babbie (2005:83), one of the factors that threaten the validity of results is basing conclusions on a small number of cases. In this study, reasonable samples of case dockets and participants were drawn. This greatly assisted in determining the validity of conclusions as data collected from all these sources were collated, integrated and compared with each other. All interpretations, analyses and conclusions were made on the basis of data gathered from the interviews and case studies as explained by Mouton (2001:110).
1.12 METHODS TAKEN TO ENSURE RELIABILITY

Reliability generally relates to methods and techniques used to collect the data that are consistent and do not distort findings (Denscombe, 2002:100). According to Mouton and Marais (1990:79), “reliability” actually refers to a situation where the same methods of data collection used by different researchers at different times must produce the same results. To achieve reliability, interviews were conducted with a semi-structured interview schedule; it ensured that all the participants answered the same set of questions. The researcher ensured confidentiality by conducting the interviews in private, which gave the participants the opportunity to express themselves freely. The interviewer did not make use of leading questions or influence the answers of the participants in any way.

According to Leedy and Ormrod (2005:92), reliability of data is influenced by five variables: the researcher, the participant, the measuring instrument, the research context and the circumstances under which the research is conducted. The researcher, in this study, did everything possible to enhance the reliability of the measuring method, so that the same methods used by other researchers at different times would produce the same results. To achieve reliability, the researcher ensured that the methods were administered in a consistent manner, in that each method was standardised from one situation, document or person to the next. All the interviews were conducted in the same way, where the same questions were posed to the participants in the same sequence. The matrix was applied to each docket in the same format.

1.13 ETHICAL CONSIDERATIONS

According to Mouton (2001:238), research ethics in relationship to the practice of science are as follows:

- Objectivity and integrity in research
- The fabrication or falsification of data
- Recording of own data
- Ethical publishing practices
The idea of “ethics” is associated with the concept of morality and practically deals with what ought, and ought not to be done (Denscombe, 2002:174-175). The following ethical principles, as suggested by Leedy and Ormrod (2005:101-102), were adhered to:

- Protection from harm: the participants were not exposed to unnecessary stress, embarrassment or loss of self-esteem.
- Informed consent: the participants were given the background and purpose of the study and participation was at their free will.
- Right to privacy and confidentiality: the participants’ personal details were not referred to in any response/reply. The participants were issued with participant numbers and referred to by their numbers.
- Honesty with professional colleagues: the findings and recommendations were reported in a complete and honest fashion without fabrication of data in order to reach a particular conclusion.

The researcher adhered to the UNISA policy on research ethics (UNISA, 2007:1) and complied with the policy as follows:

- To contribute to an ethical and scientific intellectual culture of UNISA
- To protect the rights of participants where their identity were not revealed.

The names of victims in the samples of the case docket analysis were also not revealed.

1.14 CHAPTER LAYOUT

CHAPTER 2: FORENSIC INVESTIGATION

This chapter introduces forensic investigation, and discusses the forensic investigator, the mandate to investigate, meaning of forensic investigation, purpose of forensic investigation, goals of forensic investigation and characteristics of an effective investigator.
CHAPTER 3: CHALLENGES EXPERIENCED WITH CHILD RAPE INVESTIGATIONS.

This chapter provides first-hand information from the interviews and docket analysis on the shortcomings experienced with child rape investigations.

CHAPTER 4: THE CORRECT PROCEDURES OF CHILD RAPE INVESTIGATION

This chapter outlines proper procedures that should be followed in the investigation of child rape cases.

CHAPTER 5: FINDINGS AND RECOMMENDATIONS

This chapter concludes the dissertation with the findings and recommendations of the study, based on the problems that were identified. This chapter also includes recommendations for future research.
CHAPTER 2. FORENSIC INVESTIGATION

2.1 INTRODUCTION

Forensic investigation is the application of scientific methods to clarify the circumstantial evidence with the intention of resolving legal disputes (Jackson & Jackson, 2004:13). Forensic investigation is also defined as an investigation aimed at instituting court proceedings and where some or other scientific knowledge is applied to a legal problem (Pollex, 2001:93). In this study the researcher will describe the scientific knowledge applied to the legal problem during the forensic investigation (biological evidence analysed in laboratories) and how this evidence is subsequently used to address a legal problem (was the child raped or not). In society, both the private and corporate sectors also conduct investigations, and many companies and state departments have their own forensic investigation departments, which are responsible not only for criminal but also for civil investigations.

This chapter addresses Research Question 1: What is forensic investigation? The chapter deals with forensic investigation and presents an overview of forensic investigation in terms of the definition, as well as discussing what the purpose and objectives of forensic investigation may be. The chapter considers what a forensic investigator is, what the duties of a forensic investigator are and what may be the characteristics of an effective investigator. This chapter further discusses who has the mandate to undertake investigations, as well as the systematic and planned process of forensic investigation.

This chapter also presents an overview of secondary information in relation to forensic investigation in dealing with identification of crime, collection of evidence, evaluation of information, individualisation of the perpetrator and arrest, and prosecution. Various questions related to the issues discussed in the chapter were presented to the participants; their responses were analysed, thus giving insight into their scope of knowledge and skills pertaining to forensic investigation. Responses from the participants are clustered thematically and are thus not individually reflected, in order to provide an overview of the feedback received.
2.2 UNDERSTANDING WHAT FORENSIC INVESTIGATION MEANS

The term “forensic” relates to or denotes the application of scientific methods and techniques to the investigation of crime (Concise Oxford Dictionary, 2002:555). A broader definition is given by the Longmans Exams Dictionary (2006:595), which states that the term “forensic” is only used preceding a noun, and relates to the scientific methods used for finding out about crime. An exclusive definition pertaining to the term “forensic investigation” is not often found. An example of an exclusive definition is the definition by Van Rooyen (2004:7), who states that forensic investigation is more often than not associated with the investigation of computer-related crimes and crimes such as fraud and corruption. Van Rooyen (2004:7) does, however, agree that confusion exists within the investigation fraternity with regard to a universally accepted understanding of forensic investigation.

Forensic investigation is defined by Carrier and Spafford (2004:3) as a process that uses science and technology to develop and test theories that could be used in a court of law to answer questions about events that occurred. Karagiozis and Sgaglio (2005:7) state that forensic investigation was once the sole realm of pathologists, but with the scientific advancement of recent years, the spectrum of professionals involved in forensic investigation has broadened dramatically.

Marais (1992:1) postulated two decades ago that criminal investigation involves the lawful tracing of people and instruments, which may, directly or indirectly, contribute to the reconstruction of a crime situation and provide information about the people involved. More recently, Stelfox (2009:1) added to the discourse by stating that criminal investigation involved locating, gathering and using information to bring offenders to justice or to achieve the pre-set investigative objective.

Based on the views of various authors, the researcher is of the opinion that the terms “forensic investigation” and “criminal investigation” are synonymous and are interchangeably used (Carrier & Spafford, 2004:3; Marais 1992:1; Stelfox 2009:1; Van Rooyen, 2004:7; Karagiozis & Sgaglio 2005:7). It has been argued that forensic and criminal investigations are very similar. In this study and depending on which author is being cited when the term “investigation” is used, it is meant to include both forensic and criminal investigation and vice versa.
In this study, the participants were asked to define the concept “forensic investigation”. Their responses were as follows:

- It is a scientific process to analyse evidence in order to make a conclusive connection (seven participants).
- It involved the work of forensic experts at the laboratory (five participants).
- Forensic investigation involved scientific methods and techniques in the investigation process (five participants).
- Forensic investigation is to uncover scientific evidence on crimes committed (five participants).
- It is an analysis of evidence in order to prove a case before court (two participants).
- It is done scientifically to reveal evidence that cannot be seen with the naked eye (one participant).
- It is a form of investigation that needs forensic expert analysis from biology samples (one participant).
- It is to analyse the DNA samples from the victim and compare them with DNA samples of the perpetrator (two participants).
- It is a unit mainly to investigate or determine whether there is alcohol in a person’s body or semen which is different to that found on the victim (two participants).

Nineteen of the participants’ responses were that forensic investigation involved scientific methods and techniques with investigation procedures. This set of responses is consistent with what several of the authors discussed in the literature reviewed. However, 11 participants were of the opinion that forensic investigation is exclusively centred on laboratory work such as experiments. In the researcher’s experience, before the term “forensic investigation” became a buzzword for all types of investigations, the term was mainly used for the work conducted by experts who were attached to an FSL of the police. This may be the reason that the 11 participants are still of the view that the term “forensic investigation” is only used in relation to laboratory examinations and they do not apply forensic investigation techniques in their daily task of investigation.
It is possible that the high degree to which the 19 participants view forensic investigation as applicable to their investigative work will impact in a positive manner on their work environment since they are aware of the dual functionality (both in laboratory work and in investigation) played by the scientific elements within the investigative process. As for the remaining 11, who see forensic investigation as only involving laboratory work, it is likely that they will have a much more narrow approach to the crime scene and not see the link between the forensic elements at the scene and evidence in court.

2.3 THE FORENSIC INVESTIGATOR

The term “detective” is derived from the Greek word *detergere*, which can be translated as “expose” or “uncover” (Callanan, 1994:1). The investigator (in some literature referred to as “the detective”) can thus be regarded as the person responsible for exposing or uncovering the truth concerning a crime (Callanan, 1994:1).

A detective is defined by the Concise Oxford Dictionary as a person, especially a police officer, whose occupation is to investigate crime (Concise Oxford Dictionary, 2002:316). The Concise Oxford Dictionary further defines an investigator as a person who carries out a systematic or formal enquiry into an incident or allegation so as to establish the truth (Concise Oxford Dictionary, 2002:607). From the researcher’s perspective as a police official and based on the definition provided by the dictionary, the terms “detective” and “investigator” are synonymous and are used interchangeably in the SAPS domain. For the purpose of this research, the term “investigator” is used.

Swanson, Chamelin and Territo (2003:28) believe that a forensic investigator is someone who gathers documents and evaluates evidence and information; this is accomplished through the process of investigation. According to Dowling (1997:1), the forensic investigator carries out the investigation function. It is clear from this that the forensic investigator is the central figure in the investigation process and must have a wide and specialised knowledge to utilise the sources of information at their disposal to the full (Gardner, 2005:1; Horswell, 2004:57). From the above, it is clear that forensic investigation places exceptionally high demands on forensic investigators (Horswell, 2004:57).
Horswell (2004:69) summarises the main duties of a forensic investigator as follows:

- Assessment of the crime scene
- Control of the crime scene
- Examination of the crime scene
- Interpretation of the evidence
- Recording of the crime scene
- Evidence collection
- Case management

Participants were asked to define a forensic investigator. The participants responded as follows:

- It is to use scientific methods and techniques to investigate a case (15 participants).
- It relates to analysis conducted at a laboratory (five participants).
- It is a specialised investigator who has more skills than an ordinary investigator (seven participants).
- It is an investigator who deals with serious and complicated cases (three participants).

A collective summation of the feedback is given after the next question as both questions are linked. The participants were asked what they thought the duties of a forensic investigator were. Their responses were as follows:

- To assess a crime scene for clues (five participants)
- To be in charge of a crime scene (four participants)
- To thoroughly examine a crime scene (five participants)
- To search and identify clues (six participants)
- To assist with interpretation and reconstruction of a crime scene (four participants)
- To carefully gather evidence and preserve it for court (six participants)

In relation to the question “define a forensic investigator”, the first and second sets of participants (15 and 5 participants respectively) did not respond to the question in
relation to a forensic investigator but instead referred to the methods and techniques used by a forensic investigator. This is possibly due to a misinterpretation of the question relating to what forensic investigation involves and not who a forensic investigator is. The third and fourth sets of participants (seven and three participants respectively) gave a clearer explanation of their understanding of a forensic investigator. This division in responses may not be due to a lack of knowledge but rather attributable to a misinterpretation of the question. However, the researcher is of the opinion that based on the divided feedback from the question addressed under Section 2.2, the division is due to a narrow understanding of the concept rather than a misinterpretation of the question.

With reference to the question related to the duties of the forensic investigator, the responses of the various participants were clustered in terms of themes. From the list, two specific themes emerged: the first in relation to the forensic investigator being responsible for or involved with the crime scene and the second in relation to the identification of evidence for use in court.

In essence, the responses of some participants were consistent with the literature. In relation to the research aim namely, to critically evaluate the procedures followed in child rape cases, and the research questions, there is a gap in the knowledge of the participants concerning the duties of a forensic investigator and what a forensic investigator is.

The researcher concurs with the participants and the findings of the literature reviewed that the duties of a forensic investigator are essentially to assess, control, examine, interpret, record and collect evidence at a crime scene, using scientific methods and techniques.

2.4 THE MANDATE TO INVESTIGATE

Section 205(3) of the Constitution of the Republic of South Africa, 1996, states that the police have the mandate to investigate crime (South Africa, 1996). Section 5 of South African Police Service Act, 1995 (Act 68 of 1995), provides that the powers of the police include the investigation of any offence (South Africa, 1995). Joubert (2001:18) explains that the Criminal Procedure Act (CPA), 1977 (Act 51 of 1977) also provides police officials with powers and authority such as to obtain evidence, search, seize, and
arrest. In the case of Mentor v Union Government 1927 CPD 11, it was held that it is the function of the police to investigate crime (Mentor v Union Government 1927 CPD 11).

Burstein (1999:29) points out that it is not only detectives or government personnel that carry out investigations but that private-sector organisations or individual people can also conduct investigations in terms of their briefings. According to Sennewald and Tsukayama (2001:12), a private or corporate investigator has delegated authority to investigate from their senior company management or client. In 1995, a verdict was given in S v Botha and others (1) 1995 (2) SACR598 (W) against the SAPS, which claimed that the investigation of cases was its domain only.

The participants were asked to explain who has the mandate to conduct a forensic investigation. The responses of the participants were as follows:

- The powers and authority to investigate are those of the police (16 participants)
- Police experience and background are essential to investigate (five participants)
- Private investigators also have power to investigate (five participants)
- Investigators of the corporate domain who have the necessary qualification (four participants)

The responses received from the majority of the participants indicated that they are of the belief that the mandate to conduct investigations lies with the SAPS, while the remainder of the participants placed the mandate in the private/corporate domain.

From the discussions above, the researcher is of the opinion that the SAPS does not have the exclusive mandate to investigate. Swanepoel (2001:4) foresaw 13 years ago that the state would not have the capacity to investigate all crimes and, especially in cases of a commercial nature, the outsourcing of criminal investigations would continue to increase. Swanepoel (2001:3-7) further states that in terms of the Constitution of the Republic of South Africa, the police do not have the exclusive right to investigate and legislation confers powers of investigation on various institutions or officials. The extent of these powers varies from statute to statute.
Mindful of this, the most extensive investigative powers are conferred on the SAPS, not only by the South African Police Act of 1995 but also by the Criminal Procedure Act of 1977. It is important to understand that the private and corporate sectors are limited with regard to their jurisdiction of investigations. They have no powers to charge or subpoena suspects, but they are able to investigate any criminal activity that affects the company internally according to company policies (Joubert, 2003:49). The researcher is aware that many private companies in South Africa have their own forensic investigation departments, with investigators conducting investigations according to their respective company policies. This means that an investigation process lies in the domain of the SAPS and in private investigation companies.

Neither the Constitution nor any other legislation states that the right to investigate crime is a right reserved for the state only. The capacity of the state to conduct criminal investigation has declined, leading to an increase in the number of private and corporate investigators (Swanepoel, 2001:4). The High Court has expressed its acceptance that private and forensic investigations occur externally to the SAPS; e.g. in S v Botha and Others (1) 1995 (2) SACR 598 (W) and S v Dube 2000 (1) SACR 53 (N). In S v Botha and Others (1) 1995 (2) SACR 598 (W), the defence attorney argued that, according to section 215 (b) of the Constitution, only police officials could investigate crime and that no other possessed this authority. The judge ruled that it was not the purpose of section 215 (b) to prevent someone who is not a member of the SAPS from conducting an investigation, and admitted that there are many private and corporate sectors that conduct their own investigation before handing their results to the SAPS for the institution of a prosecution. This development has created more opportunities for private and corporate investigators.

According to Joubert (2003:49), while private investigators have no power to charge or subpoena suspects, they are able to investigate any criminal activity that affects the company (which mandates them) internally according to company policy. This is an indication that private investigators can also investigate child rape cases (although it is not the norm) but they may not charge or subpoena the suspect.
2.5 PURPOSE OF FORENSIC INVESTIGATION

The purpose of an investigation, first and foremost, is to search for the truth of what has happened and to establish who was involved, in a manner that is lawful and does not violate the rights or liberties of those being investigated (Gardner, 2005:3). According to Lambrechts (2002:83), investigation should not rely on presumptions, but needs to prove a crime by means of evidence. This is in line with the view of Ogle (2004:2), who argues that the ultimate purpose of investigation is to reconstruct the event of the crime to answer the questions: what happened, who was responsible for each action and what was the sequence of action?

Fisher (2004:48) also argues that the purpose of forensic investigation is to identify, collect and retrieve physical evidence from the crime scene. The purpose of forensic investigation has similarities to the objectives of investigation, which are discussed in Section 2.6. Based on his experience, the researcher believes that the purpose of a forensic investigation is to reconstruct an incident (basing this on evidence) for prosecution purposes.

The participants were asked what the purpose of forensic investigation is. Their responses were as follows:

- To investigate irregularity when reported (three participants)
- To gather information and evidence in order to create linkage (two participants)
- Scientific methods and techniques to investigate a case (seven participants)
- An elimination process in order to identify the perpetrator (five participants)
- A logical investigation process in order to prepare a case for court (eight participants)
- To reveal all the evidence using scientific equipment in order to prove a case (two participants)
- To analyse DNA samples and compare them to that of the perpetrator to make a connection (three participants)

From the responses of the participants, it is the opinion of the researcher that only 13 had a clear understanding of the purpose of forensic investigation, which can be summarised as to identify, collect and retrieve evidence. The responses of the remaining
The researcher agrees with the 13 participants’ viewpoints on the purpose of forensic investigation as they bear similarities to the assertions of the literature reviewed. The main purpose of forensic investigation can be summarised as to obtain information in an investigation aimed at instituting court or other proceedings, by determining the irregularity and gathering the necessary evidence to create the linkage in respect of a case presented at court.

The response of the 13 participants in relation to obtaining evidence aimed at court proceedings is a positive indication that these detectives are aware that they have to prove the crime in court and therefore whatever they do must be in terms of legislative parameters. It is very likely that their actions during the course of an investigation into a child rape will be carried out with this purpose in mind.

The remaining 17 participants’ responses were in relation to laboratory work. It is possible that they did not interpret the question in relation to the purpose of forensic investigation. The lack of knowledge and experience in this regard could have a negative consequence, in that they would not approach a child rape investigation by utilising the forensic investigation methodology.

### 2.6 OBJECTIVES OF FORENSIC INVESTIGATION

Having established a collective meaning of forensic investigation and being of the opinion that there is no significant difference in the meaning between the terms “forensic investigation” and “crime investigation”, the researcher uses the following discussion to focus on the objectives of an investigation. The qualifier “forensic” or “criminal” is not used.

Some authors refer to “objective” while others prefer the term “goal” (Bennett & Hess, 2004:5; Swanson et al., 2003:28; Van der Westhuizen, 1996:4). The researcher believes that these terms (“objective” and “goal”) are synonymous as both relate to an intention to achieve certain results. For the purpose of this research and dependent on the literature, both terms are used as reflected by the author being cited; the meaning of the words is deemed to be the same.
According to Van der Westhuizen (1996:4), “objective” describes more precisely a commitment that must be achieved within an appointed time and according to specified standards. He identifies the following as objectives of investigation:

- Identification of crime
- Gathering of evidence
- Individualisation of crime
- Arrest of offender
- Recovery of property
- Involvement in prosecution

Similarly Swanson et al. (2003:28) explain that the objectives of investigation are to establish that a crime has actually been committed, to identify and apprehend the suspect(s), to recover stolen property and to assist in the prosecution of the person(s) charged with the crime. Bennett and Hess (2004:5) list the goals of an investigation as follows:

- Decide as to whether a crime has been committed
- Identify the crime
- Find information
- Gather evidence to identify the suspect
- Arrest the suspect
- Retrieve stolen property
- Become involved in the prosecution process to ensure that the prosecutor receives the best possible case

The similarities in the content of the objectives and the goals of an investigation highlight the synonymous nature of these two terms and support the researcher’s stance taken above.

The participants were asked what they thought were the objectives of forensic investigation. Their responses were as follows:

- To achieve the truth (two participants)
- To obtain evidence in order to prove the commission of a crime (five
• A systematic plan process in order to collect evidence, recover exhibits, identify the perpetrator and ensure successful prosecution (15 participants)
• To investigate for court proceedings (three participants)
• To ensure that on arrest of the perpetrator he or she is linked to the crime (three participants)
• To use investigation equipment in order to gather evidence (two participants)

The participants were not able to list the entire spectrum of objectives in their responses as provided by the authors from the literature reviewed. Fifteen participants were able to mention four objectives in their responses (collect evidence, recover exhibits, identify perpetrators and a successful prosecution), while none of the participants made reference to specified standards, which Van der Westhuizen (1996:4) refers to. It may be because they have such a great number of dockets that these detectives tend to carry out investigations routinely, without emphasis on standards. This could compromise quality.

The researcher concurs with the comments of some of the participants, which were generally centred on gathering and collecting evidence to ensure success at court. Forensic investigation is a systematic and planned process to ensure positive results at court. A total of 15 participants highlighted this. For the purposes of this chapter, it is therefore valuable to consider what is meant by the postulation that forensic investigation is a systematic and planned process. This is dealt with in Section 2.7 below. However, the remainder of the responses also indicate a limited understanding of what the objectives are, and this has the danger of having a negative impact on the manner in which investigations are undertaken by these participants.

2.7 A SYSTEMATIC AND PLANNED PROCESS

“Forensic investigation is a systematic search for truth, with the primary purpose of finding a positive solution to a crime, with the help of objective and subjective clues” (Adams, Caddell & Krutsinger, 2004:4; see also Lee & Harris, 2000:3). A systematic plan of action, or investigative process in which information is gathered, forms the basis of any investigation (Adams et al., 2004:59; Ogle, 2004:19). Without such a systematic and planned process, very important and relevant evidence may be overlooked or
ineffectively collected, with the result that incorrect deductions are made and the investigation is pursued in the wrong direction (Fisher, 2004:54; Marais & Van Rooyen, 1994:18; Ogle, 2004:24).

A systematic plan arranges and directs the investigative procedures and can therefore assist the investigator in determining whether a crime has in fact been committed and who the perpetrator is, and in the process proving conclusively his or her guilt or innocence (Fisher, 2004:53; Van der Westhuizen, 1996:2). Van der Westhuizen (1996:2) explains further that information originates mainly from two sources, people as a direct source of information and objects as an indirect source of information.

The participants were asked whether they saw forensic investigation as a systematic process. They all replied in the affirmative. They elaborated and provided the following input:

- An investigation must be *planned*, organised and thoroughly probed (11 participants).
- An investigation must be guided by means of an investigation plan (nine participants).
- An investigation process is the gathering of evidence by means of enquiries and interviewing of persons in an organised fashion (10 participants).

The responses from the majority of the participants highlighted that forensic investigation is a planned process, where evidence is gathered in an organised fashion. The literature also emphasises that a systematic plan arranges and directs the investigation procedures, which could assist the investigator in determining if a crime was committed. The responses of the participants indicate that they understand that forensic investigation is a planned and organised process. However, in practice police officials sometimes neglect to plan and organise an investigation, which results in the procedural missteps highlighted in Chapter 1. In such a planned and systematic process, specific events happen. The events that make up the systematic process – the identification of the crime, collection of evidence, individualisation of the perpetrator and the arrest, the evaluation of information and the prosecution – are outlined below.
2.7.1 Identification of the Crime

Marais and Van Rooyen (1994:19) point out that the crime must be identified and/or recognised, not only in terms of the judicial requirements for the furnishing of proof but also in terms of initial observations that are made at the crime scene. The researcher agrees that observations at the scene are of vital importance to identify the crime; for example, in rape cases where a woman’s torn underwear and a used condom are found on the scene. Evidence thus identified at a crime scene, and later corroborated by the victim and/or witnesses, can assist in the identification of the nature of the crime. Evidence collected in this way can then be considered to determine the unlawful nature of the event, identifying it as a criminal offence (Dowling, 1997:1; Horswell, 2004:7).

Byrd (2004:1) advises that the forensic investigator should, prior to gathering evidence, recognise and identify all relevant information that can shed light on the crime committed. Identification also requires that the investigator is conscious of the possible value of each potential source of information and has extensive knowledge of the evidential requirements of the different types of crime (Van der Westhuizen, 1996:3). The recognition of the potential value of evidence, or information is important; for example, the DNA typing of semen found on a discarded condom at the scene can provide proof that the perpetrator was on the scene.

2.7.2 Collection of Evidence

According to Western and Wells (1997:61), physical evidence is any solid, semi-solid or liquid material however microscopic that may aid in determining the truth during an investigation. Once the type of crime has been identified, it is very important that the investigator be able to identify the types of evidence that may thus be found at the scene. This classification of identification is based on the principle that everything in the universe is unique, having its own particular distinguishing individual or class characteristics. This methodology is applied by various sciences to classify objects into different categories or groups; that is, to single out an object as belonging to a specific class of objects. The word “identify” comes from the Latin word *idem*, which means “the same” (Concise Oxford Dictionary, 2002:705). The word “identification” means to put something with other objects that have the same characteristics (Concise Oxford Dictionary, 2002:705). Fisher (2004:5) explains that identification means that the items share a common source and can be classified or placed into groups with all other items.
having the same properties.

In 1928, Edmund Locard stated, in his theory of transfer evidence, that whenever two surfaces are in contact with each other there is partial transfer of material from one on to the other. Locard noted that such evidence is a silent, yet certain, reliable witness of a person’s actions and contacts. Traces from the scene may be carried away by the perpetrator, or the perpetrator may leave traces at the crime scene (Western & Wells, 1997:61).

Byrd (2004:1) believes that the gathering of evidence begins at the crime scene because the crime scene contains both visible and hidden information. Great care should be taken to collect all possible evidence (Adams et al., 2004:71; Fisher, 2004:55; Ogle, 2004:20). Each piece of evidence should be identified, collected and preserved as a separate entity (Fisher, 2004:53; Van Niekerk, 2000:7). Evidence falls into two categories: testimonial evidence and physical evidence (Fisher, 2004:1; Ogle, 2004:1). According to Byrd (2004:1), the reason for collecting evidence at a crime scene is so that the evidence may:

- Prove that a crime has been committed
- Establish any key elements of a crime
- Link a suspect to a crime scene
- Establish the identity of a victim or suspect
- Corroborate verbal witness testimony
- Exonerate the innocent

Genge (2002:8) suggests that all physical evidence at the scene of the crime should be collected carefully and kept in such a way that its identity and legal integrity is protected. Maintenance of continuity and record-keeping of possession is of vital importance in the evidential process. This simply means that the continuous safekeeping and identification of physical evidence is important and thus cannot be compromised (Gardner, 2005:56; Van der Westhuizen, 1996:3).

The gathering or collection of evidence is one of the crucial steps in any successful investigation. As a result of his experience as an investigating officer, the researcher is of the opinion that direct or indirect evidence leads to a logical conclusion, which contributes to successful convictions.
2.7.3 Individualisation of the Perpetrator and Arrest

Lee and Harris (2000:14) and Dowling (1997:2) claim that a primary task of the investigator is to identify who has committed the crime. Fisher (2004:5) and Lee, Palmbach and Miller (2003:184) write that individualisation means that an item of evidence comes from a unique source. The pattern of class and individual characteristics establishes the individuality of a specific object. The item in question is therefore individualised when the examiner is able to match the set of individual characteristics found in the questioned item to be the same set as the characteristics in the known sample (Fisher, 2004:6; Lee & Harris, 2000:12). Thus, once a piece of evidence is identified as a fingerprint, then it is possible to individualise the perpetrator when an arrest has been made and a comparison is made with their fingerprints.

The emphasis here falls on the perpetrator's involvement in the crime; i.e. the probability, based on facts and information collected, that a particular individual could have committed the crime and that the facts collected are sufficient to justify the arrest of the individual (Marais & Van Rooyen, 1994:20; Van der Westhuizen, 1996:7). Van Niekerk (2000:4) points out that once all relevant evidence has been collected and the perpetrator positively individualised, the investigator can proceed with the arrest of the criminal.

According to Swanson et al. (2003:28), the investigator needs to be sure that the right person is arrested for the crime. Lambrechts (2002:83) believes that proving guilt conclusively also implies that the perpetrator will be brought to justice to account for their criminal action. This means that the factual and legal guilt of the accused must be determined. This requires that the gathering of information and facts should be conducted in a lawful way so that the evidence presented will indeed be admissible in a court of law as evidence. According to Van der Westhuizen (1996:2), the evidence presented should also be of such a nature that the unlawful act of the accused is demonstrated beyond any reasonable doubt.

2.7.4 Evaluation of Information

All information gathered during the investigation should be properly evaluated (Horswell, 2004:90). Ogle (2004:30) points out that this is essential, not only to determine whether the information is relevant and conclusive but also whether it has the
potential to shed light on the crime committed. For instance, it is desirable to evaluate
the information furnished by eyewitness on the basis of information already gathered, in
order to determine its reliability.

The evidence eventually offered at the trial is in fact the end product of the process of
discovering, tracing, evaluating and selecting relevant information. In the sifting process,
the investigator should take note of legal requirements regarding the proof and evidence
and the drawing of inferences in a manner that will not jeopardise the admissibility of
the evidence (James & Nordby, 2003:115). This requirement implies that evidence
cannot be based on assumption (Lambrechts, 2002:83). This puts a high premium on the
knowledge and ability of the investigator because they are responsible for gathering facts
which may serve as evidence that associates a suspect with a crime (Swanson et al.,

2.7.5 Important Aspects of Prosecution

According to Palm (2000:35), one of the objectives of an investigation is to assist the
public prosecutor in the prosecution process by presenting evidence and reconstructing
the crime in court. Gardner (2005:1) notes that in most instances the investigator will be
asked to testify in court. The successful prosecution of criminals depends to a great
extent on the skill and efficiency of the investigator who has conducted the investigation
explains that the investigator’s involvement in the prosecution process also entails the
duty to ensure that everyone (witnesses) and everything (material evidence) are present
at the court on the trial date. Bester (2002:29) concludes that in order to ensure
successful prosecution and conviction, it is important that the forensic investigator has
collected and documented enough evidence to link the accused to the crime.

The researcher is of the opinion that the relationship between the prosecutor and
investigator should be cordial and professional, with mutual respect to ensure
independent operational efficiency. It is the duty of the investigator to ensure a working
relationship with the prosecutor and attend court to assist the prosecutor if needed.

On the basis of the discussions in Sections 2.2 to 2.7, it is certain that investigators
should preferably possess a specific set of characteristics, which will empower them to
undertake the task expected of them effectively and efficiently. The discussion below
addresses the characteristics of an effective forensic investigator.

2.7.6 Characteristics of an Effective Forensic Investigator

Van der Westhuizen (1996:1) asserts that the collection of evidence or facts is one of the primary tasks within any investigation. Based on this and the preceding discussion, it is clear that an investigator should have a specific skill set and have specific characteristics. Swanson et al. (2003:29) believe that a successful investigator should:

- Have a strong degree of self-discipline
- Use legally approved methods and be ethical
- Have the ability to win the confidence of people with whom they interact
- Not act out of malice or bias
- Include in their case documentation all evidence that may point to the innocence of the suspect, no matter how unsavoury the suspect’s character
- Know that investigation is a systematic method of inquiry
- Use their own initiative and resourcefulness
- Have wide-ranging contacts across many occupations
- Make use of experts from many different fields to help the investigation onward
- Learn something from every person with whom they come into contact, knowing that the wider their understanding of other factors/things the more effective they will be
- Have the sensitivity and compassion to do their job without causing unnecessary anguish
- Avoid becoming callous and cynical from their contact with criminals, keeping in mind that criminal elements do not represent everyone

The participants were asked what characteristics are needed to be an effective forensic investigator. The responses of the participants were as follows:

- To be hardworking and use own initiative (three participants)
- To have good networking abilities (two participants)
- To have good understanding of the various investigative methods (three participants)
- To have wide experience combined with good knowledge, skills and capabilities
(three participants)

- To be able to determine which experts to employ (five participants)
- To be able to deploy correct resources (three participants)
- To be strong and assertive, but also sensitive and compassionate (three participants)
- To be open minded and willing to consult (three participants)
- To have a good attitude in the field of investigation (five participants)

From the responses of the participants, it is clear that individually they were not aware of all the characteristics of a forensic investigator. However, in the opinion of the researcher, the participants collectively gave a good account of the characteristics needed by an effective forensic investigator.

But their collective opinions would not enhance a child rape investigation. It is crucial that an investigator should be aware of what characteristics are needed to be an effective forensic investigator. A gap exists in the understanding of participants as to the characteristics of an effective forensic investigator. This shortcoming may not necessarily compromise a child rape investigation, but it may indicate an absence of a vital skill set. The researcher is in agreement with all the characteristics as highlighted above (see paragraph 2.7.6). Forensic investigation is crucial in child rape investigations and having the required characteristics provides the investigator with confidence when undertaking an investigation.

### 2.8 SUMMARY

This chapter has dealt with the meaning of forensic investigation, the definition of a forensic investigator, the mandate to investigate, the purpose and objectives of forensic investigation, and forensic investigation as a systematic and planned process, which includes the activities of the identification of crime, collection of evidence, individualisation of the perpetrator and arrest, evaluation of information and important aspects of prosecution. The last discussion brought all of this together with a discussion of the characteristics of a forensic investigator.

Forensic investigation is crucial in child rape investigation and provides the investigator with confidence when conducting an investigation. The effective investigator deploys
scientific methods and techniques in achieving success. Forensic investigation is a systematic fact-finding process that is dependent on different investigative tools, both scientific and traditional, for the gathering of evidence for the purpose of assisting a court of law to come to a conclusion regarding the crime being investigated. Questions were presented to the participants to gauge the level of their understanding with regard to forensic investigation, the forensic investigator, the mandate to investigate and the purpose of forensic investigation. From the feedback received from the participants it is possible to determine the level of their experience and understanding and to establish which specific areas are in need of development.

In areas such as the objectives of forensic investigation, investigation as a systematic and planned process and identification of crime, the level of the participants’ understanding was also measured by evaluating their answers to questions posed to them. Although some participants were comfortable in their responses, others revealed a lack of knowledge and insight in their responses.

In order to achieve the aims and objectives of a successful investigation, it is imperative that investigators understand the problems associated with child rape investigations. The following chapter deals with the shortcomings experienced in child rape investigations.
CHAPTER 3. SHORTCOMINGS ENCOUNTERED IN CHILD RAPE INVESTIGATIONS

3.1 INTRODUCTION

Rape is a psychologically motivated crime, which usually contains substantial amounts of behavioural information, which is displayed in the offender’s crime scene behaviour (Santtila, Junkkila & Sandnabba, 2005:88). In addition, rape is a contact crime, where the victim and the perpetrator touch one another. As a result of this contact, the blood, body fluids and hair of both the suspect and the victim are likely to be deposited at the scene of the rape. These are what are called “exhibits” or “physical evidence”. Some of these exhibits (such as hair follicles and semen) are barely visible and because of this they cannot be easily detected when transferred from one surface to another or when left behind (through transfer) at a crime scene (Houck, 2004:1). It is the purpose of this chapter to reflect on specific types of evidence found at the scene of a rape and then to consider, based on the empirical data, how investigators deal with this evidence in a practical manner. In so doing, this chapter addresses Research Question 2: What are the shortcomings with regard to child rape investigations at the selected police stations?

It is worth noting that a number of exhibits such as cigarette butts, knives, clothes, hair fibres, and nails may also be found at the scene of a rape. However, due to the limited scope of this study, it was not practical to focus on all the types of physical evidence that may be found at a rape scene and the researcher was obliged to select a few types of exhibits of physical evidence only.

For this reason this chapter discusses only particular types of the evidence that can be found at the scene of a child rape; the chapter then highlights some of the challenges encountered with the investigation of these types of evidence. The chapter focuses on evidence such as semen, blood, saliva and vaginal fluid. These exhibits were selected since they are generally the most commonly found evidence at crime scenes where a rape has taken place. The chapter also discusses the Locard Principle or Contact Theory in this regard and reflects on the physical crime scene where a child rape may occur. Lastly, the chapter highlights the importance and evidential value of the crime scene. Responses from the participants are clustered thematically and are thus not individually reflected, in order to provide an overview of the feedback received.
3.2 TYPES OF EVIDENCE

The crime scene usually has a high concentration of evidence, which is also referred to as “trace” or “physical evidence”. Ogle (2004:2) defines “physical evidence” as objects that are linked to the commission of a crime. The various classes of physical evidence found at a crime scene, such as semen or saliva, could link the perpetrator directly to the crime. Physical evidence is more influential and reliable and thus provides more valid information about a crime than does an eye witness (Houck, 2004:128). According to Lee, Palmbach and Miller (2001:113), physical evidence from the crime scene is the cornerstone of successful investigation.

Savino and Turvey (2005:166) make use of the term “biological evidence” when they discuss how semen and saliva (as types of biological evidence) can be analysed through the use of DNA. The researcher is of the opinion that the terms “physical evidence” and “biological evidence” are synonymous. The term “physical evidence” is used in this discussion.

According to Carney (2004:1), anyone new to the field of sex crimes will quickly learn that keeping an open mind to new and creative methods of investigation is vital to success. This is true as rape scenes (due to the heinous nature of the crime) are often extraordinary. The extraordinary situations are brought about by delays in reporting, lack of evidence, the guilt and shame of the victim, and prior victim and perpetrator relationships (Carney, 2004:1). It is against this background that this chapter endeavours to establish the importance of biological matter as evidence in child rape investigations. Physical evidence (biological matter) such as blood, urine or semen at the crime scene is of great evidential value and contributes to the successful prosecution of a child rape case. Unlike adults, children are not always in a position to be competent witnesses, thus the version of the child of what took place needs to be substantiated by the presence (or in some cases the absence) of physical evidence at the scene. In a child rape investigation, it is of more evidential value and more reliable to collect physical evidence such as blood, semen, vaginal fluids and saliva as the child’s testimony at court may not be reliable, particularly when subjected to cross-examination.

Physical trace evidence in an investigation, whether associated with child rape or not, represents an important and often critical aspect of the overall investigation process.
Hazelwood and Burgess (2001:261) write that various types of evidence play a crucial role in the successful investigation of sexual assault cases. Mindful that various kinds of evidence may be found at the scene of a child rape, for the purpose of this study specific attention was given to blood, saliva and semen. A discussion of vaginal fluids and swabs is also presented.

3.2.1 Blood

Blood is defined by Eckert (1997:168) as a fluid that consists of cellular components and plasma and that circulates under pressure through arterial and venous systems of the body. Further, according to Vander, Sherman and Luciano (1998:376), blood is composed of cells and liquids called plasma. These cells are erythrocytes and leucocytes, which refer to red and white cells respectively. While blood is red it loses its colour when it dries; however, it can still be identified (through scientific analysis) as blood because it carries certain cells which can be identified by means of scientific analysis conducted at an FSL.

Blood is commonly found as evidence in a sexual assault investigation (Hazelwood & Burgess, 2001:308). Blood is one of the biological traces that can be found at a rape scene and which can be analysed in the FSL, to trace its origin. This makes individualisation possible. Fisher (2004:5) and Lee et al. (2003:184) state that individualisation means that an item of evidence comes from a unique source. According to Hazelwood and Burgess (2001:321), the following questions can be answered through the analysis of blood:

- What events occurred?
- When and in what sequence did they occur?
- Who was there during the event?
- Who was not there during the event?
- What did not occur?
The participants were asked: What is blood? Their responses are summarised as follows:

- Ten participants described blood as liquid which flows in the arteries of living species.
- Five participants referred to blood as a plasma which will differ from one living species to the next, excluding plants, which can best be identified by the laboratories and differentiating between animal and human blood.
- Fifteen participants described blood as red liquid which may change colour depending on exposure and which flows in the muscles of humans and animals.

During the interviews with the participants it became apparent that they had a comprehensive understanding of what blood is and that their understanding was in line with what was found in the literature reviewed. However, there is a marked difference between knowing what something is (in theory) and being in a position to identify it in practice; which is what investigators are expected to do at crime scenes. For this reason it is important to consider the identification of blood as blood and the determination of its origin as animal or human.

### 3.2.2 Identification of Blood

The preceding discussion focused on what blood is. Since the burden of proof in a criminal investigation is “proof beyond reasonable doubt”, it is important that the investigator be accurate when they undertake their duties. It is therefore crucial that the investigator must be able to identify blood at a crime scene even if it has been affected by environmental factors, such as temperature and wind. If correctly identified, it then becomes easier for investigators to know what needs to be collected and what does not have to be collected. Hazelwood and Burgess (2001:312) state that there are certain dilemmas facing those who have to deal with blood. Firstly, blood is often mixed with contaminants and other body fluids, which may have an impact on the identification of something at the scene as “blood”. Secondly, blood evidence may be dried and may even have been dry for an extended period of time. This too impacts on the identification of the evidence as blood.
The participants were asked how they would identify blood. Their responses were as follows:

- Seventeen participants indicated that although it may be easy to tell that a certain liquid is blood, this should not be encouraged.
- Ten participants indicated that the presence of dark red liquid shows the presence of blood.
- Three participants stated that it would be best to get the victim to point out the blood.

The response of the first set of participants (17) was that although it would be easy to identify a liquid as blood, it should not be encouraged. The researcher, based on his background as a detective, is in agreement that blood is easily identified by its dark red colour. However, confirmation that the identified blood is in fact blood (and of human origin) is the task of the analyst at the FSL. For this reason the researcher infers that the first set of participants would not readily try to identify blood at a crime scene but would rather await the assistance of a forensic field worker.

The reply from the second set of participants (10) appears more confident. Their responses were perhaps based on the fact that they had more experience as detectives, with much more exposure to attending crime scenes and being able to identify liquid or matter at a crime scene as blood. The last set of participants (3) were of the belief that the victim would be in a better position to point out the blood as they would have a better acquaintance with the trauma they had experienced at the crime scene. The general practice in a preliminary investigation is to return to the crime scene with the victim to confirm the exact location and to identify the location of other important evidence, such as semen or saliva.

The literature reviewed suggests that there is nothing wrong with the investigators’ ability to make preliminary observations because if there were one rule or maxim for criminal investigators to follow, particularly where biological types of evidence are involved, it would be this: follow the evidence trail carefully and completely (Savino & Turvey, 2005:178). There will not be a second chance.

It is standard police practice that all serious crime scenes such as rape are photographed and a photo album is compiled for the case docket (South African Police Service,
2001:4). Important aspects of the crime scene (including the presence of blood, bloodstains and their directions) are also photographed. It often happens that crime scenes are not photographed; this is due to an oversight by the detective or at times the non-availability of an official photographer. Detectives could, in such instances, make rough sketches in their pocket books to indicate the presence of what they suspect to be blood.

The case docket analysis revealed that 15 case dockets had crime scene photo albums that revealed blood deposits on different surfaces at the crime scene. The photographs in the dockets showed that blood could be seen on different surfaces and in different forms. The case docket analysis revealed the following:

- In three dockets, blood was photographed in its liquid form at the scene.
- Four dockets contained photographs that showed blood smeared on the clothing of the victim.
- In eight dockets, blood was photographed on the walls, carpets and furniture of the scene.

The remaining 45 case dockets contained no crime scene photo albums, which meant that the crime scenes were not visited by the photographer and no photographs were taken. The policy on photography was implemented during 2001. Prior to this policy, crime scenes were photographed depending on the seriousness of the crime. In such instances the detective at scene made this determination.

The literature indicates that the identification of blood forms an important part of an investigation. The participants’ responses were that blood can be identified without difficulty. The researcher draws on his experience as an investigator to conclude that the identification of blood is crucial in a rape investigation because it is important to try to individualise the blood as that belonging to the suspect. One can also determine if blood left on the crime scene is that of the victim or perpetrator. This will assist in the elimination process in the endeavour to isolate and identify the perpetrator by means of DNA analysis. (DNA analysis is discussed later in the chapter.)

Marais (1992:113) states that blood is commonly found on almost any type of crime scene and should not be ignored in crimes where blood is not normally expected.
Owing to the heinous nature of the crime, the investigator is more than likely to find blood at a child rape scene (Ogle, 2004:131) and the first step after finding blood at the crime scene is to photograph it (Adams et al., 2004:81). Ogle (2004:131) supports this by stating that blood evidence can assist the investigator in establishing the elements of a crime. For example, blood stains found at the crime scene may support the victim’s statement of rape and may be an indication of a struggle and injuries. Marais (1992:115) states that blood patterns at the crime scene can provide the investigator with valuable clues and information.

3.2.3 Origin of Blood

Butler (2005:33) states that blood evidence is the most commonly tested substance in forensic laboratories, followed by semen. According to Hazelwood and Burgess (2001:308), forensic laboratories must initially establish that an unknown substance is blood and thereafter they must differentiate between animal and human blood. This view is supported by Fisher (2004:210), who submits that to give meaning to blood collected at a crime scene, blood samples from victims and suspects must be submitted to a laboratory for comparison and identification purposes. The origin of blood deals with whether it comes from a human being or an animal. That is, species origin is simply a test to determine the species of animal from which a blood sample has been taken (Fisher, 2004:211). Although, in practice, the difference cannot be detected superficially, it is crucial that the investigator keep both possibilities in mind as the presence of animal blood may indicate the presence of more sinister motives.

The participants were asked why the origin of blood should be established and they provided the following reasons:

- Ten participants indicated that measures should be taken to ensure that the criminal did not plant animal blood so as to mislead the investigators.
- Ten participants indicated that the origin of blood would assist in identification of blood; thus, blood could be quickly collected.
- Five participants were of the belief that establishing the origin of blood is the duty of the laboratory technician.
- Five participants were of the belief that the mere collection of blood samples should suffice and their origin was not important.
Blood evidence must always be collected at a rape scene, since blood can assist in the individualisation of the suspect through DNA typing. The DNA typing established from the blood evidence should be compared with samples of the possible suspect and with samples in the DNA offenders database, to establish individualisation; in other words, the DNA results can indicate that the blood originates from one specific person. Marais (1992:119) states that the collection of blood evidence should be left to trained crime scene technicians.

The feedback of the participants with regard to establishing the origin of blood was mixed as they differed in their opinions. These differences create the impression that some of them did not understand the question or the importance of establishing the origin of blood. The first set of participants (10) did not fully answer the question as they referred to placing of animal blood on the crime scene in order to mislead the investigation. This may indicate a mere misinterpretation of the question in that their understanding of the question, and in particular the phrase “origin”, directed their response to whether the blood was human or animal blood. The second set of participants’ (10) responses were pertinent to the question as these responses alluded to the fact that the initial identification of blood would speed up the collection process. The third set of participants (5) indicated that it was the duty of a laboratory technician to establish the origin of blood. The last set of participants (5) suggested that the mere collection of blood samples should suffice and its origin was not important. Thus, the feedback given by a third of the participants was in line with the literature reviewed while two-thirds of the participants failed to address the issue.

From the literature discussions, it is thus clear that one may reasonably expect to find blood at a rape crime scene; this is more likely so at the scene of a child rape (Marais, 1992:113; Ogle, 2004:131). Marais (1992:119) reminds the reader of the importance of leaving the collection of blood evidence to trained crime scene technicians.

During the crime of rape, which entails sexual contact, semen is also deposited on the victim or crime scene. According to Ogle (2004:146) and Carney (2004:47), semen is the most common biological material left behind at a rape scene. The next discussion will focus on semen.
3.2.4 Semen

Gilbert (2004:354) explains that semen is the male reproductive fluid and that it normally contains spermatozoa. The presence and appearance of spermatozoa within the semen is important to the value of the semen as a tracing clue. Spermatozoa are long structures with a rounded head, giving the cells the appearance of a tadpole (Gilbert, 2004:354). Spermatozoa cannot be seen without the aid of a microscope and are normally numerous in a fresh sample. According to Kobilinsky, Liotti and Oeser-Sweat (2005:36), semen contains spermatozoa in a liquid medium known as “seminal plasma”. According to Gilbert (2004:316), DNA is not found in the seminal fluid but in the actual sperm cells (spermatozoa). Males who have undergone a vasectomy or are sterilised are able to ejaculate semen only, which means that their semen contains no sperm cells. According to Marais (1992:126), DNA typing of a sterilised man would not be likely, since a sterile man cannot produce spermatozoa. However, if the laboratory is informed of this possibility, then another test can be performed, from which it is possible to extract DNA.

Semen, which has a liquid or mucus consistency, is fragile and for this reason is easily destroyed when exposed to unfavourable weather conditions. Semen, like any other body fluid, has a life expectancy of a few days outside the human body. The presence of seminal fluid, and in particular spermatozoa, is of critical importance because it is irrefutable evidence of sexual activity. The rich source of DNA contained in any spermatozoa heads can provide evidence in the individualisation of the suspect (Horswell, 2004:315). From the physiological point of view, the prostate gland and seminal vesicles secrete the bulk of the fluid in which ejaculated sperms are suspended. This fluid and the sperm cells constitute semen, the sperm contributing only a small percentage of the total volume (Vander et al., 1998:640).

The participants were asked about their understanding of the term “semen” and the responses were as follows:

- Ten participants described semen as the male sperm cells which are commonly produced during sexual activity.
- Five participants stated that it is a mixture of sperms and pre-ejaculation fluid produced by males before, during or after sexual activity.
• Five participants stated that it is a colourless substance produced by male genitalia during sexual activity.
• Ten participants believe it to be a fluid which is produced by males as a result of sexual activity.

All of the participants submitted that semen is a fluid that is produced by males during sexual activity. Participants were of the opinion that semen is connected to sexual activity, which may suggest that semen cannot be present where there is no sexual activity. Based on a comparison of the responses from the participants and the information obtained from literature, the responses of all the participants recognise that semen may be produced as a result of sexual activity. In essence, from the viewpoint of the participants and the literature, semen can be produced without actual penetration of the victim’s genitalia.

The participants were then asked where they thought semen could be deposited during a rape. They offered the following possibilities:

• Twenty participants indicated that it can be deposited inside the victim’s vagina.
• Five participants indicated that it can be deposited on the clothing of the victim and sometimes also that of the perpetrator.
• Five participants were of the belief that it may be deposited on different surfaces, including the beds, carpets, seats and other places.

During the case docket analysis and specifically the analysis of J88 medical certificates, certain observations were made with regard to the location of the deposit of semen. The medical certificates (J88) were attached in all 60 case dockets perused.

The J88 is a medical form completed by a doctor on examination of a victim. The doctor systematically examines the victim for injuries and physical evidence and accordingly completes the J88, which is then filed in the case docket. The doctor makes reference to his findings recorded in the J88 when testifying in court.
• In 45 case dockets the semen found was deposited in the victim’s vagina.
• In 10 case dockets it was recorded that the semen was found on the victim’s clothing, particularly the underwear.
• It was reported in five case dockets that no semen was found on the victim or the crime scene.

The analysis of the case dockets highlighted that semen was found in both the vaginal cavity of the victim and on the clothing of the victim. In light of this finding, it is very important that the examination of the victim by a medical practitioner should not be unduly delayed. Unnecessary delays will hamper the detection of semen, on the victim and on the clothing.

The content of the case dockets supported the submissions of participants that semen may be deposited in the vagina and on the clothing of those involved. Although the participants did not mention that semen might be absent in certain instances, this point is made since semen was reportedly not present or found in five of the cases analysed. The reason for this is not clear but it is possible that certain rapes can be committed by perpetrators who use condoms and, depending on whether the condom is collected, one cannot conclude that semen will be available at all rape scenes. The use of a condom by the suspect can be verified by the victim. It is very important that during the search of the crime scene a concerted effort is made to search for and retrieve any used condoms.

Fisher (2004:330) highlights several possible reasons why semen may not be found at a crime scene. It may be that the time period between the rape and medical examination was too long, or the suspect wore a condom, or the suspect penetrated but did not ejaculate in the vagina, or the doctor did not take an adequate sample (Fisher, 2004:330). In addition, Gilbert (2004:354) lists several other factors that may lead to the absence of spermatozoa as follows:

• Improper handling may destroy spermatozoa due to their fragile nature.
• Some suspects may have a condition called “aspermia” (a lack of spermatozoa in their semen).
• Semen may also be lacking as a result of a venereal disease that caused the sperm cell to be eliminated.
The participants were asked who they thought was responsible for identifying semen at a crime scene and they offered the following responses:

- Nine participants indicated that investigators on the scene of the rape are primarily responsible for securing the scene and give guidance as to what needs to be collected and not to try to identify semen.
- Ten participants indicated that investigators must be able to make an assumption of whether a particular fluid is semen or not. This kind of assumption may not be accurate as it can only be confirmed through scientific analysis.
- Six participants believed that the investigators must leave the identification of semen to the experts.
- Five participants indicated that the identification of semen is solely the responsibility of analysts. According to them, allowing the investigators to do that will lead to many mistakes being committed in the process.

There is confusion among the participants in terms of whose responsibility it is to make a preliminarily identification of semen. In order to clarify this confusion, the researcher had to analyse the literature further to establish what the norm should be regarding the identification of any such biological types of evidence. According to Bell (2004:8), the identification of a biological element does not imply comparison; it is a mere placing of an object within a particular class. It requires both visual examination and chemical tests (Bell, 2004:8). From this, it is clear that two things are involved in the identification of a substance as semen: visual and chemical examination. While the researcher is of the opinion that it is most probably a laboratory technician who does the chemical analysis, the preceding statement is not clear about who does the visual identification or whose responsibility it is to do the initial identification of a substance as possibly semen.

The researcher consulted the SAPS Policy on Crime Scene Management (South African Police Service, 2005a:9-16) for guidance in this regard. The following is a summary of guidelines contained in this policy:
• The first officer at the crime scene must take control of, protect and evaluate the crime scene.
• The crime scene technician must identify, note and protect the possible physical evidence.
• The crime scene processing team must record all physical evidence before it is collected by the crime scene technician.
• The investigating officer must complete all necessary documentation for opening a case, manage the investigation team to gather information and maintain the investigation diary of the case docket.

These guidelines specify that it is the responsibility of the crime scene technician to identify possible physical evidence. For the researcher, an additional important point is that it is necessary for the investigator to point out to the technician where to look. Thus, while the guidelines do not specify that it is the responsibility of the investigator to identify the physical evidence, it is possible that the technician will not be able to do this without the assistance or guidance of the investigator, who walks him through the scene.

Since semen is colourless, it is difficult to identify semen deposits at a crime scene without special technical equipment. This emphasises the importance of the presence of and contribution from experts other than the investigator in the investigation of rape cases. The ideal would be that investigators ensure that evidence is collected from the rape scene or from the victim to avoid oversight. This is summarised in what is called “the cardinal rule for investigators” as stated by Burns (2000:11), which is that those who attend crime scenes must thoroughly process these scenes. It is essential that specialist crime scene technicians be tasked with the collection of semen, as the actual identification and analysis is conducted at the laboratory.

The case dockets were perused to check whether semen was identified at the scene by the detectives and also whether it was sent to the FSL for identification. During the case analysis, the only information that could be gathered from the case dockets was that in those cases where a biological type of evidence suspected to be semen was collected from the scene of the rape, it was sent to the laboratory for analysis.
Sexual Assault Evidence Collection Kits (SAECKs) are used by medical practitioners to collect physical evidence (biological fluids) from the victim.

- In 53 case dockets, the SAECKs in respect of sexual assaults, which were collected during a medical examination, were sent to the laboratory for DNA analysis purposes, with a request to identify spermatozoa. Unlike the J88, which is completed by the medical practitioner in respect of each victim examined, the SAECK is usually utilised by the medical practitioner, if the date of the examination is within a week of the date of the alleged incident. It is thus important that the victim be examined without unnecessary delays.
- In two case dockets, it was indicated that semen was collected from the place where the rape took place and was sent to the laboratory for analysis.
- In five case dockets there was no indication of whether semen was found or if anything was sent to the laboratory for further analysis.

From the preceding discussion, it appears that there is confusion as far as the initial identification of semen and its collection at a crime scene is concerned. The SAPS policy on crime scene management, however, outlines clear guidelines in this regard as stated above. Although it is surprising that none of the participants referred to this policy, the policy goes a long way in addressing the roles and responsibilities of different individuals on the crime scene. Crime scene technicians are available on a 24-hour basis to attend to crime scenes.

Just like blood and other physical evidence found on the scene of rape cases, it is crucial to establish the origin of any semen found on the scene. This is dealt with below.

### 3.2.5 Origin of Semen

Physical evidence covers a wide range of possible items and material from the rape scene. However, Carney (2004:47) and Fisher (2004:331) state that semen is the primary bodily fluid left behind by the rapist and can be found wherever the rapist ejaculates, assuming no condom was used. It is also by far the most commonly sought after evidence at the rape scene. Ogle (2004:146) states that semen evidence may play a role in other types of crimes but that the majority of cases involving semen evidence are sexual assaults.
Criminals sometimes think ahead and this may have an impact on an investigation if the investigator does not take this into consideration. Inside the house, the investigator should look for bedding material, such as a mattress, sheets, blankets, comforters and carpets (Marais, 1992:126), which may contain valuable physical evidence such as semen.

However, if the rape occurred in an open veld, the investigator should look for semen on gravel, stones, dry leaves, and on pieces of paper lying on the ground near the crime scene (Marais, 1992:127). According to Geldenhuys (2006:41), body fluid detection dogs are the latest method used in processing rape crime scenes. The dogs were introduced in 2004 into the SAPS and can assist crime scene technicians in locating physical evidence such as semen. The semen found at the scene has to be conclusively linked to the perpetrator by means of a DNA profiling process conducted at the FSL. This will entail that a control sample be taken from the suspected perpetrator for comparison purposes.

The participants were asked why it is important to establish the origin of semen and they provided the following input:

- Seventeen participants indicated that criminals will always be manipulative and will do anything to mislead investigations.
- Three participants indicated that one must be vigilant when dealing with the samples obtained from the scene of rape cases.
- Seven participants believe that the use of serological processes can be used to establish the origin of semen found at the crime scene or the victim.
- Three participants did not provide any answers to this question.

The responses of the majority of the participants provide an indication that there was a misinterpretation of the question. The purpose of the question was to establish the origin of semen in respect of its exact location. The responses of the third set of participants (7) were in relation to the question at hand. They implied that determining the origin of semen is important in rape investigations in that they mentioned processes that can be used to establish the origin of semen at the crime scene or on the victim. The
identification of semen can be facilitated by the aid of a body fluid detection dog. The identification of the semen would assist in the speedy collection of the evidence for analysis and then the FSL would proceed with further analysis.

3.2.6 Vaginal Fluids and Swabs

The female reaction in sexual activity is characterised by marked vasocongestion and muscular contraction in many areas of the body, as argued by Vander et al. (1998:661). According to these authors, during sexual activity the vaginal epithelium becomes highly congested and secretes a mucus-like lubricant. The question as to what can be found in the vaginal fluids is answered by Vander et al. (1998:663), who submit that after a minute or so during sexual activity some sperm can be detected in the uterus. Thus, it is probable that the vaginal fluid is likely to be a carrier of biological matter that may be exchanged during sexual offences such as rape.

During examination of the perpetrator, some vaginal genetic material may be found on the body or penis of the perpetrator. This is due to an exchange of traces taking place, which has become known as the Locard Principle. This means that there will be a cross-transfer of genetic material such as sperm and vaginal fluids, especially when vasocongestion and muscular contraction occur in a woman’s body (Vander et al., 1998:661).

According to Hazelwood and Burgess (2001:321), swabs are used to recover biological fluids (physical evidence) such as semen in sexual assault cases. During medical examination of the victim, the doctor will take swabs from the vaginal area and from the area were the suspect ejaculated, in order to collect the physical evidence. This is done in private during the examination and the doctor thereafter places the swab in the crime kit and seals it. The investigator is not present during this process and has no access to the contents of the crime kit.

The participants were asked what they understood by the terms “vaginal fluids” and “swabs” and they responded as follows:

- Fifteen participants’ responses were that vaginal fluids are similar to semen, which is produced by males during sexual activity.
• Twelve participants believe that it is the liquid which is produced before, during or after the sexual activity or sexual intercourse by a female.

• Three participants indicated that it is fluid from a woman during sexual activity, which may conceal lots of clues such as foreign hair, seminal fluid of the perpetrator and other clues that are very instrumental in investigation of rape cases.

None of the participants mentioned the swabs. The researcher is of the opinion that the participants were not aware that biological evidence could also be retrieved by using the swab method. This could be due to a lack of knowledge or training or it might be that they are so focused on the physical evidence that they lose sight of other possibilities.

All the participants attributed and linked vaginal fluids to sexual activity. The responses of the last set of participants were that vaginal fluids are fluids from a woman which may conceal many clues such as foreign hair. This view is supported by Van der Westhuizen (1996:209), who states that vaginal secretions can contain vibrissae and pubic hair, which in turn offer the possibility of hair examination.

From his experience of rape investigations, the researcher can confirm that, during the medical examination, one of the primary focus areas is the collection of vaginal fluids since they could contain biological clues. The vaginal fluids are likely to contain very important clues that can assist with investigation of rape cases. The next section discusses the identification of saliva at a crime scene.

3.2.7 Saliva

Jackson and Jackson (2004:124) state that saliva cleanses the mouth and provides necessary lubrication. It enables partly broken food to be formed into a ball in preparation for swallowing and the enzymes found in the saliva helps to break down starch into maltose and dextrin. Everything that has come into contact with the mouth, such as chewing gum, cigarette butts, and handkerchiefs, is likely to contain saliva. According to Kobilinsky et al. (2005:39), saliva is detected chemically by the presence of one of its components called “amylase”. The strength of the usage of saliva as evidence in the investigation of rape cases is that it is more often than not present.
Locating saliva can be achieved easily by interviewing the victims and witnesses to establish the course of events and therefore the possible location of saliva. For instance, the witnesses may give a statement to the effect that the victim managed to bite or was bitten by the perpetrator. The information given by the witnesses may be further corroborated by the observation of the crime scene and an eventual search of the crime scene.

The participants were asked how they would describe saliva. They responded as follows:

- Ten participants indicated that saliva is a mucus-like liquid which is always found in the mouth of human beings.
- Five participants indicated that a certain liquid is saliva because it is mucus-like and normally colourless.
- Eight participants indicated that it is a watery substance and produced in the mouth of human beings.
- Seven participants stated that it is dangerous to give a superficial description of saliva as it is common to many other excretions such as mucus, nasal discharges and even semen in certain instances.

The first three sets of participants were in the position to provide a clear description of saliva, which is in line with information obtained from the consulted literature. The responses of the last set of participants did not relate to the question but rather presented a technical argument with regard to other body excretions.

It is the researcher’s opinion that although saliva may be similar to other secretions, identifying it is of importance as it is required that the exhibit material should be identified and subsequently individualised for DNA analysis purposes. The next section addresses the identification of saliva at a crime scene.

3.2.8 Identification of Saliva at the Crime Scene

Jackson and Jackson (2004:124) explain that saliva is a watery substance and that it consists of 99 per cent water and has a pH of between 6.8 and 7.0. Saliva also appears in a mucus-like liquid when it has fallen on hard surfaces such as cement floors, tiles
and wooden, steel and other non-absorbent surfaces. The researcher is of the belief that saliva is also an important type of evidence for DNA profiling purposes. Saliva is liquid and this suggests that it may not be readily visible when it has fallen on certain surfaces such as loose soil, clothing, bedding and other materials that have an absorbing capacity.

Lee et al. (2003:4) explain that crime scene investigation is an investigation aimed at the crime scene, where the investigator seeks to discover all the aspects of the criminal activities at the crime scene. Thus, it is a process to locate and gather physical evidence from the crime scene. Literature suggests that biological fluids, such as saliva must be collected in a very careful and prescribed manner in order to ensure maximum benefit (Fisher, 2004:208). According to Horswell (2004:27), saliva should be collected before other evidence in light of its fragile nature.

According to Lee et al. (2001:4), one must clearly distinguish between the location of the evidence and the gathering of the evidence. This reasoning means that a good investigator will be able to conduct a preliminary location of exhibits and will be able to guide the crime scene technician on what is available and what can be collected.

The participants were asked who they thought was responsible for identifying saliva at the crime scene, and they offered the following:

• Fifteen participants were of the belief that the task solely belongs to the forensic analysts, meaning the forensic field worker.
• Five participants were of the opinion that the forensic field worker is called out to the scene and he must do the preliminary identification, which will then be confirmed by the analysts in the forensic laboratory.
• Six participants were of the belief that due to experience that they have acquired over time, they will be able to identify saliva but the collection is done by the forensic field worker. They said this is especially possible when the saliva has fallen on a hard surface.
• Four participants did not respond to this question. In the analysis of the demographic information of these participants, it became clear that they had an average of two years’ relevant experience in the investigative environment.

These responses contain both similarities to and differences with the literature reviewed. Just as other exhibits, saliva forms part of the evidence that is important to identify at the crime scene (Gardener, 2005:1).

The responses of the first (15) and second (5) sets of participants were that the identification of saliva is the responsibility of the forensic field worker. The third set of participants (6) indicated that because of their vast experience they would be able to identify saliva but the collection of the evidence would be done by the forensic field worker. The participants gave a good account of their roles and responsibilities at the crime scene.

During the analysis of the case dockets, no evidence was found that the investigators identified any secretion at the crime scene that they requested analysis on for its possible identification as saliva. Twelve case dockets contained letters written to the laboratory requesting that the collected secretions be analysed to identify whether it was saliva, and, if so, whether it could be individualised to anyone. The request letters in question were from the crime scene technicians and not the detectives.

Saliva plays an important role when it is analysed for DNA in determining its origin, thus assisting in a rape investigation. Marais (1992:131), Fisher (2004:167) and Horswell (2004:30), state that ashtray contents such as, cigarettes, cigarette butts and ash, are frequently found at crime scenes and are at times overlooked as potentially useful evidence. From the literature reviewed, it is clear that it is also important to identify the location of saliva for speedy collection, as the challenge posed is that the quality of the DNA within the saliva may deteriorate if collected after 72 hours. This is because saliva is more often than not mixed with various other substances, such as food, alcohol and nicotine.

Newburn, Williamson and Wright (2007:366) submit that there are certain challenges when testing saliva for DNA, since oral bacteria can degrade the DNA present in such
cellular materials. This means that recovered items have to be analysed as soon as possible. DNA on partly chewed food has different degrees of success of extraction, depending on the chemical content of the food. It is worth remembering that saliva may also be found on items at the crime scene such as beer or soft drink cans, eating utensils and cigarette butts.

The participants were asked why it is important to identify the origin of saliva and they responded as follows:

- Eighteen participants indicated that like any other biological kind of evidence discussed earlier, it is important to establish whether the saliva is that of a human being or not.
- Eight participants indicated that the main reason for this establishment is that in all rape cases, perpetrators are human beings.
- Four participants are of the belief that criminals may place saliva from an animal on the scene of the crime to mislead the investigation of rape cases.

The researcher is of the opinion that the initial identification of something which may be saliva at the crime scene will facilitate the timeous collection process. The first (18) and the second (8) set of participants alluded to the importance of identifying the origin of saliva, as to confirm its human origin. The remaining four participants highlight a different reason which may allude to a more sinister reason for the rape or it may indicate that the perpetrator took active steps to throw investigators off. None of the participants linked the saliva to DNA typing of the perpetrator.

Thus far the discussions have focused on the physical evidence that one may expect to find at the scene of a rape, and thus this would include a child rape. What is perhaps equally important to consider is the initial identification of the location of such an event: the rape crime scene.
3.3 THE RAPE CRIME SCENE

According to Horswell (2004:2), a crime scene is the location or “locus” of an incident or where crime is committed. Gardner (2005:67) and Lee et al. (2001:2) share this definition and state that a crime scene is not only a place where a crime has occurred but is also a place where a high concentration of evidence may be found.

The participants were asked to describe what a crime scene is. The responses were as follows:

- Sixteen participants indicated that crimes occur at a place known as the crime scene.
- Four participants indicated that crimes take place and clues are normally left, which could assist the investigating officer.
- Three participants indicated that the first reporting officer will officially declare the crime scene.
- Seven participants indicated that the area pointed by the first officer has useful clues which must be secured and protected.

Although phrased differently, the responses of the various participants indicated that they know what a crime scene is. The second set of participants (4) as well as the last set of participants (7) went a step further by elaborating that clues are left behind and the location must be secured and protected.

Gardner (2005:67-68) classifies the scene of crime into primary and secondary crime scenes. A “primary scene” will be where there is a concentration of physical evidence (Gardner, 2005:67) whereas a “secondary scene” refers to a place where the clues may be found without any emphasis on concentration (Horswell, 2004:3). In the responses by the participants, nobody mentioned a second crime scene. This may be an indication that they invariably focus on the location where the reported crime has taken place as the crime scene and they do not consider the victim as a crime scene.

The participants who mention only that a crime scene is a place where a crime took place without further elaboration may have the same one-dimensional approach when
dealing with the scene. The reality is that any place where there is the concentration of clues can be referred to as a crime scene. The critical question will be: what if it is still unknown that a crime has been committed? Three participants highlighted in an alternative argument that a place becomes a crime scene only after a determination has been made (see also Gardner, 2005:67; Horswell, 2004:3).

The reason for searching a crime scene is that the investigators expect to find evidence that can help with the investigation of the rape case suspected of having taken place there, as argued by Adams et al. (2004:3). It is not always that the scene will provide all the answers to the questions that the investigators are asking themselves, but, as suggested by these authors, the best place to start an investigation will always be the crime scene. It is imperative that investigators search the crime scene objectively for any physical evidence, especially so in rape investigations.

The participants were asked to identify at least one place where they thought that a rape could be committed? The responses were as follows:

- Ten participants indicated that a rape can be perpetrated in a secluded area.
- Twelve participants indicated that a rape can be committed in a bedroom.
- Five participants indicated that a rape can occur in a motor vehicle.
- Three participants indicated that in any place that is convenient to the rapist can become the place where a rape is committed.

According to Horswell (2004:314), the scene of rape is classified as the place where the rape took place, the body of the suspect and the body of the victim. However Carney (2004:37), in any rape investigation, there are two scenes of crime: the location of the occurrence and the victim’s body.

From the responses of the participants to the question: How would you describe a crime scene? It is clear that the participants’ understanding of the concept of a crime scene is limited to the actual place where the physical act of rape occurred.

None of the participants indicated that the victim or perpetrator can be included as secondary crime scenes. While it is not common to refer to a body as a place as a crime
scene per se, it is an indication of the versatility of crime scenes. From his experience as an investigator and the insight he gained from conducting compliance inspections of case dockets, the researcher agrees that primary and secondary crime scenes exist. Physical evidence is collected from the actual location of the physical act of rape and from the victim and perpetrator.

The docket analysis identified various places as crime scenes:

- In 18 case dockets, rape took place in a bedroom.
- In 12 case dockets, rape took place in a motor vehicle.
- Three rapes were allegedly committed in a public toilet of a bar.
- In 12 case dockets, rape took place in an open veld.
- In 10 case dockets, rape was committed in a back room of a shebeen.
- In two case dockets, the victims did not know the place due to the use of drugs; this type of rape is commonly known as date rape.
- In three cases, the rape happened on school grounds.

Through the triangulation of the data sources, the researcher was able to establish that all three sources of data in this study mentioned the same types of places as possible crime scenes. That is, during interviews, different places were mentioned, which were then confirmed by the analysis of the case dockets and in the literature review (Carney, 2004:37; Horswell, 2004:37).

3.3.1 Rape Proximity

According to Gardner (2005:87), the initial officer should clearly define the scope of the scene, identifying specific boundaries and reasons why areas are included or excluded in the initial perimeter.

The participants were asked whether they considered the place where the rape took place to be a crime scene.

- All the participants agreed that any place where rape took place is a crime scene.
All the participants felt that the place where the rape took place was the crime scene as the victim would normally point out the place where the rape took place. These responses and the literature reviewed, particularly Lee et al. (2001:2) and Gardner (2005:67), allows the researcher to conclude that it is critical for the investigator to establish where and under which circumstances the rape took place. The places where rape can occur are numerous. Horswell (2004:314) points out that many rapes occur in dwellings and public places, such as halls, parks or public transport facilities. What is vital in such a situation is the identification of the scene followed by the securing of the scene. Care should also be taken that the integrity of the scene is protected, even while evidence is being sought and gathered.

The participants were further asked to mention at least one exhibit that might be found at a place where a rape took place, which might be instrumental in assisting the subsequent rape investigation. The responses were as follows:

- Nine participants mentioned beer bottles.
- Two participants mentioned cigarette butts.
- Four participants mentioned condom wrappers.
- Five participants mentioned used condoms.
- Two participants mentioned towels.
- One participant stated bedding.
- Three participants mentioned underwear.
- Four participants mentioned tissue paper.

The researcher believes that the participants’ responses correlated with the viewpoints of the authors Gardner (2005:67), Horswell (2004:314) and Lee et al. (2001:2), which were that physical evidence such as the objects mentioned would be present at a rape scene. There is therefore agreement between the literature and participants that certain types of physical evidence such as those mentioned by the participants will be found at the place where a rape has taken place.

During the case docket analysis, it became apparent that all cases identified a place where rape took place, except for two dockets where the usage of drugs was suspected and the victims could not tell where the alleged rape took place.
The participants were asked whether the body of a victim could be considered a scene of crime. Their responses were as follows:

- Nineteen participants agreed that it was a scene of crime.
- Eleven participants agreed with the statement but also mentioned that the body of the victim should not be seen as the sole scene: investigators must visit the scene where rape took place.

In practice, a victim of rape is taken to a medical practitioner for examination. This examination is tantamount to the searching of the physical crime scene. Carney (2004:37), Genge (2004:149) and Savino and Turvey (2005:120) acknowledge that the body of a victim is considered a scene of crime in rape cases since it is believed that it is almost impossible for clues not to transfer from one body to the next during sexual intercourse.

There are a few challenges with the victim’s body as a scene of rape that the investigators must be aware of, as the victims are often physically and psychologically traumatised. According to Jackson and Jackson (2004:41), a crime scene is a changing environment and in order to ensure that maximum information is retrieved, the crime scene must be processed without any delay while taking into consideration the emotional status of the victims. Some of the victims may wash, clean their clothes, or comb their hair, in this way destroying crucial evidential traces. In the final analysis, the clothes of the victim must also be collected, preserved and sent to the FSL in order to extract DNA traces.

The analysis of 60 case dockets indicated the following:

- In 56 dockets, the victims were taken to the doctor for examination immediately after rape.
- In four dockets it was clear that the investigators did not take the victims to the doctor as there was a time lapse of five days between the commission of rape and the time it was reported.
In this regard there is consistency between the results of the case docket analysis, literature review and the responses of the participants. Victims are taken for medical examination as soon as is practically possible after the reporting of the incident, with the primary purpose of gathering evidence.

The participants were asked whether they considered the body of the perpetrator to be a scene of crime. The responses were as follows:

- Five participants did not consider the body of the perpetrator as a scene of rape.
- Three participants believed that it could be considered as a scene of rape.
- Twenty-two participants said that the body of a perpetrator is indeed a scene of crime in investigation of rape cases.

Since there were minor differences between the participants, the researcher compared their input with the literature. Semen and other fluids located on the perpetrator’s body cannot on their own document a criminal offence (Gilbert, 2004:354). This does not mean that the body of the perpetrator is not a rape scene but does pose some challenges as far as that scene is concerned. Horswell (2004:3) classifies the body of a perpetrator as a secondary scene of rape cases. There is discord between Horswell (2004:3) and Hazelwood and Burgess (2001:262), who argue that the suspect’s body cannot be classified as a scene of crime for rape, since it is not the place where the crime has been committed. The researcher shares the same sentiment as Horswell (2004:3), who classifies the body of a perpetrator as a secondary scene in rape cases.

In support of this theory is the indisputable fact that rape is a contact crime and there is a likelihood that the victim and the perpetrator will come into contact with one another. Due to the Locard Principle (which is discussed below) and the understanding that a crime scene is a place where clues (or evidence) may be found, it is possible that the body of the perpetrator may constitute a crime scene (due to the concentration of evidence). It is the conclusion of the researcher that the body of the perpetrator should be considered as a crime scene in the investigation of rape cases (albeit a secondary one).
During the analysis of the 60 case dockets, it was apparent that 15 perpetrators out of 60 case dockets were taken for examination immediately after the incident. A further 11 perpetrators were taken for medical examination for the sole purpose of collecting reference samples for DNA comparison but this was done almost six months after the alleged incident. In five other cases, the perpetrators were arrested immediately after the alleged incident and taken for medical examination, where physical evidence was collected. In seven cases, the perpetrators were arrested several days after the alleged incident but were not taken for medical examination.

In essence, in 38 cases out of the sample of 60 cases, medical examinations were undertaken in order to obtain DNA samples for individualisation purposes. The remaining 22 cases were closed as undetected as the perpetrators were unknown and thus not apprehended. The researcher was of the opinion that although the investigators were inconsistent in their response time of taking perpetrators for medical examination, those instances where the perpetrators were taken for examination indicates that they were aware of the importance of the perpetrators’ examination for DNA. The Locard Principle is discussed below.

### 3.4 THE LOCARD PRINCIPLE

As discussed in Section 2.7.2, French scientist Edmund Locard (1877-1966) believed that every criminal could be linked to the crime scene by the examination of transferred trace materials (Houck, 2004:1). This famous exchange principle, which has been characterised by the statement, “every contact leaves a trace” (Houck, 2004:1), has been labelled the Locard Principle. The success of this principle is echoed by other authors such as Fisher (2004:30), who comments that it is not possible for anyone to enter a place without changing it in some way, either by bringing something to it or by removing something from it. Sometimes the changes made to the scene may be exceptionally small, but the course of an investigation may well hinge on their detection. The participants were asked what they understood by the term “Locard Principle”. They responded as follows:

- Sixteen participants indicated that rape is a contact crime. This means that every time this crime is committed, two or more objects come into contact and transfer traces from one host to the next.
• Eight participants indicated that commonly in rape cases, the suspect and the victim come into contact with each other and with different surfaces such as bed, carpets, bedding, car seats and others. During this contact, traces may be transferred from one person to the next and this process is called the “Locard Principle”.

• Four participants described the Locard Principle as a process whereby two objects exchange traces during contact, whether it is rape, murder or any other crime.

• Two participants described the Locard Principle as the movement of traces from one host to the next.

The responses of the participants, although phrased differently, were basically the same. Adams et al. (2004:3) emphasise that it is possible that a perpetrator both leaves something behind at the scene and takes something away from the crime scene. The following statement from Newburn et al. (2007:320) compares and fits accurately with the responses of the participants.

No one can act with the intensity that the criminal act presupposes, without leaving numerous marks in his wake, either the criminal will have left traces of his activity, at the scene or, by an inverse action. He would have carried indication of his stay or his action in his body or on his clothing. (Locard, 1923, translated in Newburn et al., 2007:320).

Participants were asked: “What is the relevance of Locard Principle with investigation of rape cases?” The responses were as follows:

• Twenty-three participants indicated that the Locard Principle makes the scene of rape cases very important in any investigation. Through an understanding of the Locard Principle, the investigators can reasonably expect to solicit necessary biological evidence from the scenes of rape discussed earlier.

• Seven participants indicated that rape is a contact crime and investigators can expect to find certain traces transferred from one host to the next.
The participants were in agreement as far as the relevance of the Locard Principle to the investigation of rape cases is concerned, although what Locard had in mind was presumably the transfer of microscopic traces such as dust, dirt, nail debris, fibres left or collected during the commission of crime. However, the “transfer principle”, as it is known today, is equally applicable to the things that can be seen with the naked eye (Newburn et al., 2007:320). In addition, as the quotation from Locard suggests, transference may go either way (Newburn et al., 2007:320), which shows the relevance of the Locard Principle in trying to trace the perpetrators of rape.

Therefore means that the action or inaction of the first officer/s at the scene may influence the investigation. This is equally true in the context of a rape investigation. There are a lot of many small traces that can assist the investigators with the investigation of rape cases. Physical evidence such as hair fibre, seminal or vaginal smears, saliva and other biological evidence that can assist in the investigation of rape cases and the identification and successful prosecution of the suspect. The challenge it would seem is that this evidence must first be found and thereafter handled correctly.

### 3.5 SUMMARY

Physical evidence such as biological traces is crucial in child rape investigation and provides the investigator with important leads to commence the investigation. This chapter briefly discussed the physical (biological) evidence that may be found at the scene of a child rape and its crucial characteristics in matching or linking a suspect in the investigation.

Child rape investigations are fraught with a number of challenges, which may have a detrimental impact on an otherwise successful investigation. These include the age of the victim, (not discussed in this study), a possible lack of corroborating evidence or sometimes a negligent attitude to the vigorous pursuit of the gathering of physical evidence.

In addressing the challenges with regard to child rape cases, the discussions probed various types of biological evidence such as blood, semen and vaginal fluids. Other related issues such as swabs, the scene of rape and the Locard Principle were also explored. The discussions in this chapter clearly illustrate that physical evidence is
available at the crime scene and on the victim’s body and the suspect’s body. Several shortcomings pertaining to these categories of physical evidence were evident from the data.

On the basis of the literature review, interviews with the participants and the case docket analysis, the researcher is of the opinion that the shortcomings highlighted in this chapter have the potential to compromise a successful child rape investigation. This study revealed that the investigation approach, the handling of the scene of a child rape and the collection of physical evidence are at times dealt with in a superficial manner. Several positive points were obtained from the case docket analysis and the interviews, such as the number of victims taken for physical examinations and the number of perpetrators that were subjected to physical examinations. While the shortcomings are unfortunate and demand attention, they should not detract from the good that is being done. The next chapter explores the correct procedures to follow in a child rape investigation.
CHAPTER 4. CRITICAL PROCEDURES TO BE FOLLOWED IN CHILD RAPE INVESTIGATIONS

4.1 INTRODUCTION

Laganparsad (2007:5) in a newspaper report entitled “Police incompetence leads to discharge of rape accused” writes that “The magistrate described the way in which rape was investigated by the police, as highly disturbing.” In this report, Laganparsad states that the magistrate slammed the police for not collecting DNA evidence and key statements, which forced the court to acquit the suspect.

During the trial, the magistrate said that she was displeased at the incompetent manner in which the police were investigating the case. She ruled that the investigating officer had continually bungled the case as the court hearing was repeatedly adjourned because the investigating officer had not followed up on DNA evidence or had not taken statements from other police officers involved in the case. These issues highlight the vital importance of adhering to the procedures to be followed to ensure a successful investigation.

The Constitution of the Republic of South Africa, 1996, protects the rights of its citizens. Any law or action that is inconsistent with the Constitution will be null and void. The supremacy of the Constitution means that correct investigative procedures need to be followed, where investigation must be carried out justly, fairly and within the ambit of the law. This means that correct procedures have to be adhered to during any investigation with prospects of successful prosecution. Critical procedures will determine the successful prosecution of the suspect. Adherence to these procedures is vital for any investigation, but more especially so during the investigation of the rape of a child.

The researcher from his experience in the field of investigation is of the opinion that rape can be categorised as an extraordinary investigation, which is dependent on scientific or biological evidence, as well as the processes involved with that evidence. A classical situation is where the version of the victim differs from that of the suspect, especially if there are no witnesses. In this instance, corroborating evidence in the form of biological evidence would be critical for the investigation. But the manner in which
such evidence is collected and handled is a critical factor in terms of its evidentiary value.

It is within this context that this chapter looks at some of the critical procedures that must be followed in child rape investigation. These procedures include the processing of the crime scene, the search for biological evidence such as DNA, the collection of biological evidence, use of the correct procedures when collecting evidence, the packaging and preservation of the evidence, the chain of custody, and the corroboration of the testimony of the victim and linking the suspect to the scene. This chapter addresses Research Question 3, which concerns the correct procedures that should be followed in child rape investigations.

It is envisaged that the research may empower investigators to adopt a correct process during child rape investigations. Evidence in a rape case is often the only voice that can testify on behalf of the child witness. Once again the responses from the participants are clustered thematically and are thus not individually reflected, in order to provide an overview of the feedback received.

4.2. CRIME SCENE PROCESSING

The manner in which a crime scene is processed will have an impact on whether the biological evidence collected from that scene will be admissible or not in a court of law. According to Gardner (2005:1), the purpose of processing the crime scene is the express recovery of physical evidence and the documentation of such evidence, which is an inherent task associated with investigation. This processing must be carried out methodically, systematically and, most importantly, with due consideration to the legal and scientific aspects of investigation (Fisher, 2004:75). There is no doubt whatsoever that failure to observe legal and scientific requirements of scene processing will render evidence inadmissible.

Jackson and Jackson (2004:12-13) describe the processing of the crime scene as the sum total of activities performed at the crime scene. Regardless of who processes the scene, the goals are the same: protect, document, preserve, and collect. Furthermore, those charged with processing the scene must endeavour to protect evidence from contamination and damage until the collection begins (Savino & Turvey, 2005:65).
The participants were asked what the processing of a crime scene is. They responded as follows:

- Fifteen participants stated that it is various activities by the investigators at the crime scene.
- Ten participants stated that it deals with searching of the scene for critical clues and evidence.
- Five participants described it as steps of investigation once one gets to the crime scene.

From the responses of the participants and the comments of the authors, especially Savino and Turvey (2005:66), it is clear that the processing of the rape crime scene consists of the following:

- Collection of biological evidence and other evidence,
- Observation of guidelines on how to collect evidence, and
- Packaging of evidence and preservation.

During the case docket analysis, there was no clear indication as to how the crime scenes were processed. As highlighted in Chapter 3, the availability of biological evidence such as blood, urine or semen at the crime scene is vital for successful prosecution in a child rape case. Unlike adults, children are not always in a position to be competent witnesses; thus, the version of the child needs to be substantiated by the presence of relevant biological evidence.

The case docket analysis revealed that, during the ensuing processing of crime scenes, emphasis was not placed on photographing of the crime scene. Crime scene photographs make a visual presentation of the actual crime scene to the court, which empowers the court to interpret and relate to the crime scene more clearly and puts it in a better position to make inferences.

The SAPS Policy on Crime Scene Management (South African Police Service, 2005a), which is discussed in Chapter 3, further summarises the guidelines of the policy, in relation to the importance of photographing a crime scene.
4.3 EVIDENCE AT THE CRIME SCENE

Physical evidence from the crime scene is often the cornerstone of successful investigation (Lee et al., 2001:113). Ogle (2004:2) defines physical evidence as objects that are linked to the commission of a crime. Physical evidence in criminal investigations, whether associated with child rape or not, represents an important and often critical aspect of the overall criminal investigation process (Hazelwood & Burgess, 2001:261).

According to Ogle (2004:208), physical evidence most often encountered at crime and rape scenes includes the following: semen, saliva, hair, footwear impressions, soil, blood, fingerprints, clothing or articles from the suspect or victim left at the scene. In rape investigation, emphasis is placed on body fluids, which are also referred to as “biological evidence”. The discussions that follow address the correct procedures for collecting, handling and dealing with such biological evidence.

4.3.1 Collection of Biological Evidence

According to Savino and Turvey (2005:80), biological evidence such as blood, semen, saliva and other excretions may be found on any surface of the crime scene. Horswell (2004:27) highlights that the collection of this evidence encapsulates an assessment of the scene, documentation of the evidence at the scene, and searching for clues. This process is very difficult because there are many considerations that must be taken into account to ensure that the evidence collected satisfies the admissibility requirements, as pointed out by Lee et al. (2001:132). These admissibility requirements are that evidence is collected in a primary container and placed in a secondary container. The outer container (secondary container) is sealed with evidence tape and marked with a covering minute which contains information about the evidence, identification of the collector, date, time and location at which it was collected, case reference number and a brief exposition of the evidence and its location. Fisher (2004:208) states that once biological fluids such as blood and semen are found, they must be collected and preserved in a prescribed manner that will ensure maximum benefit.

Apart from the difficulty associated with the collection of evidence at the scene, it is at this stage that the actual scene of the crime or, in this instance, the scene of the rape will be changed forever. This is because as the clues are being collected from the scene, the
scene will be altered, or changed from what it was like before the process began (Gardner, 2005:77). It is within this context that the collection of evidence can either build or break the case as it will determine the admissibility of the evidence collected. According to Gardiner (2005:347), the purpose of the collection process is to collect physical evidence, for analysis at the crime laboratory to produce scientific information with evidential value.

The participants were requested to give a brief exposition of the collection of biological evidence and their responses were as follows:

- Twenty-one participants viewed collection as the removal of evidence from its original position in preparation to send it to the laboratory for analysis.
- Five participants described collection of exhibits as identification, documentation and removal of exhibits from the scene of crime.
- Four participants described collection of biological evidence merely as taking the samples from the scene of rape, by starting with the fragile ones such as blood and semen to avoid possible damage.

These responses were compared with information obtained from the literature and it became obvious that investigators possess knowledge about the collection of biological evidence. The majority of the participants viewed collection as the removal of samples of evidence from the original position at the crime scene in preparation to send them to the laboratory for analysis, as discussed by Gardner (2005:347). Four of the participants alluded to the methodical manner in which collection must be undertaken to ensure that the chain of custody (from collection right through to presentation as evidence) is preserved and to prevent the destruction of exhibits, as discussed by Fisher (2004:208).

The researcher from his experience is of the opinion that biological evidence needs to be collected with caution as it is fragile. The collection of evidence is in fact a disturbing process and for this reason the collection of biological evidence needs to be prioritised and the collected evidence very carefully documented and photographed. It cannot be over emphasised that biological evidence is corroborative evidence and often substantiates the victim’s testimony. The next section deals with the correct procedures that should be followed when biological evidence is collected.
4.3.2 Correct Procedures when collecting Biological Evidence

According to Fisher (2004:208), biological evidence such as blood and semen is very fragile and can be easily destroyed; hence, it is advisable that it is collected first before other physical evidence is collected. Horswell (2004:27) adds to this statement by submitting that fragile evidence is collected first in order to prevent damage and contamination. Both these authors conclude that there is a need to follow certain procedures to maximise the evidential benefit of biological evidence. Savino and Turvey (2005:83) highlight the following as correct procedures when collecting biological evidence in rape cases:

- Victims and suspects alike must be examined in a hospital or physician’s office, using standardised sexual assault evidence collection protocols.
- Items of suspected biological transfer evidence must be collected through the use of hand gloves to prevent contamination.
- Items should not be collected together and placed in a single plastic container.
- Gloves should be changed before each item of evidence is collected.
- When items to be collected are wet or only partially dry, they should be rolled or wrapped first in clean paper.
- An entire object should be collected if possible.

The collection process usually starts with the collection of the most fragile or most easily lost evidence (Horswell, 2004:27), and blood is perhaps the most fragile evidence found at the crime scene (Fisher, 2004:208). Horswell (2004:27) believes that to collect the fragile evidence first will prevent possible contamination and damage of the blood evidence at the scene.

The SAPS manual “Management of Exhibits” (South African Police Service, 2005b:7-8, 11-12) summarises the correct procedures to be followed when biological evidence is collected from the scene of crime. These procedures are:

- Latex or other gloves must be worn each time during the collection of evidence.
- All evidence at the crime scene must be treated with care to avoid trampling on it or destroying it.
• The position of evidence must be marked properly and this can be done through the use of cones.
• Evidence must then be photographed in its original position before it is lifted.
• After photographing, the evidence can be lifted up one by one.
• The most fragile evidence such as blood, semen, saliva and others must be collected first, finishing off with hard pieces of evidence.
• Each and every exhibit must be placed separately in an appropriate packet. For instance, wet evidence must be placed in a plastic packet after being dried.

These procedures are not different from those provided by other literature consulted as each step could be found in the submissions of Fisher (2004:328); Gilbert (2004:336); Nickell and Fischer (1999:32); Ogle (2004:212) and Pepper (2005:102). In the investigation of rape cases, the collection of biological evidence will not be complete if no references are made to the body of the suspect and that of the victim. The literature consulted summarises the procedures for collection of biological exhibits from these bodies (Fisher, 2004:329; Hazelwood & Burgess, 2001:375). The following points are crucial as far as the collection of evidence from the human body is concerned.

• Medical personnel are the officials who can collect this evidence.
• The medical personnel will use the SAECK, as alluded to by Hazelwood and Burgess (2001:63). The status quo in this regard is also applicable when dealing with victims.
• Smears and swabs will be obtained from the person and this should preferably be done within 72 hours (Savino & Turvey, 2005:120).
• These swabs will be taken mostly from the vaginal area and any other area where the suspect may have ejaculated.
• The medical personnel may decide to include the victim’s panties in the SAECK as the clothing may contain evidential traces (Ogle, 2004:147).
• When the medical personnel are done with the collection, they will then seal the SAECK as per the instruction provided on that kit. (Although it is important to state this here, it is further discussed under Section 4.3.3.)
The participants were asked to mention at least one procedure in collecting biological evidence. The responses were as follows:

- Seventeen participants stated that the first responding officer must cordon off the scene.
- Six participants believe that movement on the rape crime scene must be controlled.
- Five participants stated that wet samples must be dried before packaging.
- Two participants stated that collection must be done in a sequence, starting with the most fragile.

With reference to the responses of the first and second sets of participants, sufficient consistencies could not be established between their responses and the literature. The majority of the participants (23), namely (17) and (6), focused on the action steps to be taken at a crime scene. The question at hand related to the correct procedure in collecting biological evidence. They could have misinterpreted the question or perhaps looked beyond merely collecting evidence, thus responding by providing the action steps to be taken at crime scenes.

The third set of participants alluded to the fact that wet samples must be dried before packaging. Although this response was not a clear reflection of their understanding of the question, it was in line with bullet point 7 of the SAPS manual “Management of Exhibits”.

The last set of participants were more clear and direct in their response, that collection must be carried out in sequence, starting with the most fragile. Their responses supported the information obtained from the literature and in particular Fisher (2004:208) as well as the SAPS manual “Management of Exhibits”.

From his experience as a detective, the researcher concurs that the collection process follows assessment, documentation and search stages. The researcher also confirms that blood and semen are commonly found at a child rape scene. The biological evidence is most fragile or most easily lost (Horswell, 2004:27) and therefore it is of value to discuss how such evidence is to be packaged and preserved.
4.3.3 Packaging and Preservation of Biological Evidence

Packaging of biological evidence is very important in determining its admissibility in court as it has a direct impact on the integrity of the samples. Savino and Turvey (2005:83-84) submit that packaging should be done in such a way that the evidence is able to “breathe”. These authors argue that plastic enclosures will cause condensation of moisture and promote bacterial and fungal growth when evidence that is wet is packaged. According to Fisher (2004:89), evidence sent to the laboratory should be packaged to prevent breakage, spoilage or contamination, which will destroy its value. Fisher writes that when evidence consists of several objects, they should be packaged in separate containers or wrapped individually. Contaminated evidence will be disputed in court and not admissible as evidence.

The SAPS “Forensic Science Manual” (South African Police Service, 2013:20) summarises the SAPS exhibit packaging guidelines as follows:

- All packages containing exhibit material must be sealed. The seal must be intact and legible.
- The FSL will only accept exhibits packaged in the FSLs’ approved exhibit bags from SAPS members for examination.
- Exhibits submitted by departments and organisations other than the SAPS must be packaged in evidence bags with unique numbers.
- Exhibits packaged in other packaging material will be accepted only when the exhibit is too large to fit in one of these bags, provided that these exhibits are delivered by hand at the relevant FSL. Exhibits wrapped in two exhibit bags from both ends of the exhibit are not properly sealed and the FSL will not accept these exhibits.
- Only exhibits pertaining to a single reference number should be put in the same exhibit bag. Exhibits meant for different sections at the FSL must be packed separately, each with its own covering letter. Exhibits from suspects and victims must be individually packaged and sealed before being put together in a larger bag (marked and sealed).
- The details of the seal must be correctly captured in the covering letter.
• All exhibits must be air dried before packaging. The only exception to this rule is exhibits for the analysis of flammable liquids as in the case of suspected arson.

• Exhibits must always be packed in such a way that deterioration and damage are prevented. If available appropriate exhibit collection kits should be used.

Savino and Turvey (2005:83-85) provide clear guidelines on how different samples of biological evidence should be packaged to be admissible as evidence.

The guidelines are as follows:

• When collecting wet or only partially dry items, roll or wrap them first in clean paper, and then use a paper bag to package them so as to allow for ventilation.

• Dry items containing biological deposits must be wrapped in a clean paper and then placed in a paper bag.

• Biological deposits on a pliable surface such as cloth, rubber or paper can be folded in some way but not across the deposit for the purpose of packaging.

• Scraping can be used to remove dried, crusted stains from smooth surfaces, putting it on paper, which will be folded and can be placed in an evidence envelope.

According to Fisher (2004:208), failure to preserve evidence properly could exclude the evidence in court or in some instances result in the entire case being thrown out of court. Van Rooyen (2004:12) provides the following guidelines for preservation of evidence:

• Evidence presented in court must be the same as it was found at the crime scene.

• There should not be any opportunity to replace or improperly alter the evidence.

• Any changes in the condition of the exhibits, such as destruction through laboratory analysis, must be explained.
Participants were asked whether they could explain the packaging process of biological evidence. Their responses were as follows:

- Eleven participants stated that separation of samples during packaging is an absolute must.
- Seven participants stated that packaging of wet material must be different and separated from the dry samples.
- Nine participants stated that, where possible, the whole surface where a biological material may be deposited should be packaged and sent as it is to the laboratory.
- Three participants stated that packaging should be done in such a way that the samples are properly sealed and cannot be accessed illegitimately during transportation or anytime between collection and analysis.

Once again, collectively the participants understand the importance and value of correct packaging. Their individual insight is however limited. The integrity of evidence will not be complete if evidence is not preserved within the prescribed guidelines. The next step after packaging, and throughout the processing of the crime scenes, will be the preservation of that evidence.

The participants were asked to explain how biological exhibits can be preserved. They responded as follows:

- Twelve participants stated that the chain of custody must not be broken in order to preserve biological evidence.
- Ten participants said that all biological evidence must be sealed in such a way that no one can tamper with the collected evidence.
- Three participants believe that any changes to the exhibits must be explained.
- Five participants submitted that preservation means that the exhibits are cared for so much that there is no difference between the evidence presented in court and the sample collected at the crime scene.

From the literature study, it was established that a satisfactory maintenance of a chain of custody is automatically equivalent to preservation of evidence. This statement can only be correct if the investigators take all the precautions necessary to keep the
evidence intact while it is in their custody. The researcher does not ignore the fact that despite the chain of custody being maintained factors such as high temperatures and exposure to moisture may still degrade the evidence. This means that if an investigator is aware of all factors necessary for the handling of evidence, the chain of custody is likely to be achieved simultaneously with a good preservation of evidence. It will not be beneficial to an investigation if investigators maintain the chain of custody but still deliver evidence to the FSL under degrading conditions such as high temperatures or exposing exhibits to moisture. This means that there must be a clear record of handling of evidence from the time it is identified at the crime scene until it is stored behind lock and key at the laboratory or analysed and ultimately presented at court.

The participants showed good insight into how exhibits can be preserved. In particular, the first, third and fourth sets of participants’ responses were in line with the guidelines of Van Rooyen (2004:12). The responses of the participants were in line with the literature particularly with the exhibit packaging guidelines of Savino and Turvey (2005:83-85). From the responses of the participants, the researcher is of the opinion that they do have adequate understanding of the packaging process. From his experience, the researcher can confirm that the packaging process is essential for securing the integrity of the exhibits. The correct due processes could have a positive influence on the outcome of a case.

### 4.4 CRITICAL ASPECTS OF BIOLOGICAL EVIDENCE

#### 4.4.1 Handling of Biological Evidence

The investigation of the crime scene is characterised by three essential conditions for success organisation, thoroughness and caution (Fisher, 2000:53). The fact that those who handle the evidence must do so with caution also means that the integrity of biological exhibits must not be compromised or contaminated.

Gardner (2005:75) further asserts that the investigators are not exempted from the Locard Principle, which means that their actions can also have an impact on the scene and on the integrity of biological evidence. The investigators must therefore minimise the handling of possible evidence. Contaminated evidence cannot be admissible in court, as summarised by Pepper (2005:13), who submits that, considering the ever-increasing importance of physical evidence in the detection and prosecution of crime,
the skills and abilities of the investigators (especially when dealing with evidence) are
crucial to any investigation.

Owing to the importance of ensuring non-contamination of evidence, Horswell (2004:19) provides certain procedures that can prevent contamination. These
procedures are:

- Gloves must be worn when collecting biological evidence as this will prevent
  perspiration from the collector’s hands from contaminating the samples.
- All collection equipment must be clean when collecting the evidence.

It is clear that the guidelines issued by the SAPS speak to these guidelines also. In
addition, Ogle (2004:270) affirms that access to the crime scene must be limited to the
crime scene personnel only.

Participants were asked to explain their understanding of contamination. The responses
were as follows:

- Six participants said that contamination includes degradation by means of high
  temperatures and moisture on the exhibits.
- Ten participants believe investigators mishandle the evidence by having their
  own traces transferred to the samples in this process, which leads to
  contamination.
- Seven participants stated that contamination normally happens when those
  handling the samples fail to wear protective gloves.
- Seven participants stated that contamination means a change to the exhibits as a
  result of uncontrolled and uncoordinated activities at the crime scene.

These responses support the view of Gardner (2005:347), who argues that during the
interpretation phase the analyst expects to analyse evidence that is clean, separate and
specific. This means that biological evidence must be handled in such a way that it
reaches the FSL undamaged and uncontaminated as it is at the FSL where the analysis
is conducted.

The responses of the first set of participants (six participants) raised an important point
as they indicated that degradation may also be a result of high temperatures and
moisture. This means that the investigators must not transport exhibits in the boot of vehicles over long distances or during a hot day. Contamination may therefore occur at any stage of the handling of evidence. This includes exposure to moisture, the packaging of evidence while still wet or not drying evidence where required.

The participants generally had a good understanding of contamination. The viewpoints of the various authors also highlight the importance of avoiding contamination and of keeping and maintaining evidence in its original condition and in particular during the analysis process. The researcher strongly agrees with the views of the participants and authors. The researcher has seen from his personal experience as an investigator that contamination of evidence must be avoided at all costs. Uncontaminated evidence is admissible at court, in this way strengthening the case against the accused.

4.4.2 Chain of Custody

The maintenance of a chain of custody is an admissibility requirement for all types of evidence. According to Van der Westhuizen (1996:3), evidence must be collected and preserved in such a way that its legal integrity is maintained. For Van der Westhuizen (1996), maintenance of the continuity of a chain of custody is of vital importance in the evidential process and this simply means that the continuous safekeeping and identification of physical evidence will prevent contamination.

The chain of custody provides an account of changes in evidence, noting, for example, if any portion has been used for laboratory analysis. This account begins as soon as the evidence has been found at the scene until it is produced as evidence or proof in court (Swanson et al., 2003:33). From the moment that an item is collected from a crime scene until the moment it is introduced in the court room as evidence, a lengthy period of time may have elapsed. The collection, handling, safekeeping, packaging and dispatch of evidence are encapsulated in the chain of custody (Kobilinsky et al., 2005:43).

According to Van Rooyen (2004:12), the following procedures can ensure the maintenance of a chain of custody:

- Any changes to the evidence must be recorded and later reported in the courts.
- Once evidence leaves possession of an individual, a recording must be made.
A signed receipt must be obtained from anyone accepting the sample.

The number of people who handle the evidence must be limited.

When evidence is returned it must be established whether any changes were made to the evidence.

The participants were asked how they would maintain the chain of custody of exhibits. The responses were as follows:

- Nineteen participants indicated that the number of people coming into contact with the biological evidence must be limited.

- Eleven said there must be clear record keeping of all those that come into contact with the exhibit while only four (of the eleven) further elaborated that those who come into contact with the exhibit must provide a statement to that effect.

The responses were compared with the literature and it became clear that they touched on some of the procedures as contained in the literature and in particular the handling of and dealing with biological evidence. Based on their responses, the researcher is of the opinion that the participants’ knowledge of chain of custody is limited to the administrative processing of exhibits only. This could have a negative impact on the integrity of the chain process and subsequently bring the analyst’s report into question.

Participants were asked: “Why is it important to maintain the chain of custody when investigating rape cases?” Their responses were as follows:

- Seven participants stated that the maintenance of a chain of custody will render evidence presented at court to be admissible.

- Five participants indicated that the chain of custody is important for administrative purposes and to ensure that the whereabouts of the samples are always known.

- Seven participants indicated that the chain of custody ensures that the material admitted in court is indeed that which was retrieved from the crime scene. It ensures that evidence was not tampered with.
• Three participants stated that the chain of custody proves that the third party or any other person who came into contact with the sample declares how it was stored and handled during transportation.
• Six participants indicated that the integrity of samples must not be deliberately compromised and that the chain of custody ensures that integrity remains intact.
• Two participants stated that the chain of custody will assist in differentiating the environmental impact and mishandling of samples. According to them, one will be able to tell if other factors such as temperatures and light may have degraded the sample.

The responses of the participants are comparable to the procedures elicited from the case of S v Kaptein 1984 (3) SA 316 (CPD).

• All evidence must be handled with care.
• An accurate record is to be made each time the evidence is moved, handled or comes into contact with other persons.
• Evidence should be properly marked and have sufficient and accurate record of measurements of quantity and weight.
• Few people must be allowed to handle any evidence.

In this case, the court held that the chain of custody was compromised after the pharmacist who was giving expert testimony measured the weight of dagga to 738 grams instead of the original record of 745.5 grams. In this case, further confusion was caused by flawed marking of the exhibit and lack of accountability by the members of the SAPS. The findings of this case also indicate that the guidelines provided by Van Rooyen (2004:12) were not adhered to.

During the case docket analysis, the following breakdown was made:

• Fifty three out of the 60 case dockets analysed contained chain of custody statements. The dockets had statements that indicated how the crime kits were handled, stored and sent to the laboratory. In these cases, the final analyst report pertaining to the evidence was admissible at court.
• Seven dockets did not contain such statements but the reason was that neither the victims nor the suspects were taken to the doctor (the suspects would
normally be taken to the doctor for the taking of control samples). These cases were unsuccessful at court and were instead provisionally withdrawn from the court roll.

The case docket analysis in respect of the chain of custody statements is an indication that, when maintained correctly, the chain of custody will stand up when scrutinised in court. In this regard the analyst reports were admissible at court.

4.4.3 Constitutionally and Legally Obtained Evidence

The most important facts that arose from the interviews with the participants were that consent must be given in each case where biological samples are collected from any person and that the task of collecting biological samples from a person must be performed by a medical practitioner or a registered nurse. Consent by the person from whom the samples are to be taken is of the utmost importance. This is clearly recorded in a form called SAPS 308, which accompanies the J88 medical certificate. The SAPS 308 can prove to the attending medical practitioner that the person consented to the taking of the sample. Consent is also referred to in the decision of S v R and Others 2000 (1) SACR 33 (W), where it was held that the fundamental test for the admissibility of evidence was its relevance and that the evidence must be obtained constitutionally. Evidence would not have been obtained constitutionally if the person involved was not given a chance to give consent. However, the exception to this is the ruling in S v Huma (Steytler, 1998:76). The case of S v Huma laid down very important guidelines as far as section 37 of the CPA is concerned (S v Huma). These guidelines are summarised as follows by Steytler (1998:76):

The taking of blood is by its very nature a physical intrusion, as the imposition of such pain is neither subjectively or objectively intended to be cruel, inhumane or degrading but is done in pursuance of the legitimate objective of evidence gathering, there would be no violation of Section 12(1)(e) of the Constitution.

According to Steytler (1998:76), the police may use force in effecting a number of investigative procedures, such as taking fingerprints and taking of blood samples. The question that remains is whether taking blood would not infringe on the general right to “be free from all forms of violence”. This question was answered in the case of S v
Huma (2) 1995 2 SACR 411 (W), where it was held that although taking of blood involves the rupture of the skin and is accompanied by a small element of pain, it is done in pursuance of a legitimate objective of evidence gathering and does not amount to violation.

Participants were asked to mention a legal consideration in respect of obtaining biological evidence from suspects. Their responses were as follows:

- Fifteen participants said that the evidence must be taken in a humane way and in accordance with section 37 of the Criminal Procedure Act (CPA) of 1997.
- Ten participants indicated that those from whom the samples are to be taken must be informed of the reasons and given information about the charges against them.
- Five participants indicated that everyone shall have a right against illegally obtained evidence in accordance with section 35 of the Constitution, which includes a fair trial.

The first set of participants referred to section 37 of the CPA, which provides for the ascertainment of the bodily features of an accused person. This response is in line with the submission of Steytler (1998:97), who submits that this section must be observed to ascertain a certain condition or for evidential purposes.

The responses of the various participants were that biological evidence must be obtained from a suspect within the legal framework of the Constitution as well as the CPA. The authors consulted also make reference to the legislation to comply with when obtaining biological evidence. Biological evidence obtained within the legal framework would be admissible before a court.

4.5 SUSPECT AND PROCEDURE

4.5.1 Linkage of the Suspect to the Scene

A suspect in a rape case may be individualised but this individualisation will not be complete until the suspect is placed at the crime scene. According to Fisher (2004:330), the suspect’s identity may be established by the usual means such as eye witnesses and fingerprint identification, but in rape cases there is more emphasis on the use of DNA
typing by analysing biological evidence such as blood, semen and other forms of biological matter found at the scene. The most common defence in criminal cases is alibi. In rape cases, the possibility also exists that the suspect will deny that he was ever at the scene of the rape.

Criminal investigation is the process that is undertaken to establish whether an act, intention to act or omission may be labelled a crime and, if it is so labelled, the collection of evidence to determine those responsible (Newburn et al., 2007:303). The latter part of this statement forms the crux of the discussion. This means that the suspect is individualised but the investigators want to place the suspect at the scene of crime to prove to the court that the suspect was involved in some way with the crime under investigation. According to Horswell (2004:314), the scene of rape can be classified as the place where rape took place, the body of the suspect and the body of the victim.

During the case study, 60 case dockets were analysed and the following information was collected:

- In 42 dockets, it became apparent that the Section 212 certificate would conclude that the blood found at a particular scene belonged to a particular individual.
- In 15 case dockets, the Section 212 certificate reported that through the use of the SAPS DNA database, it was established that semen analysed matched the DNA typing of a particular person.
- In three case dockets no linkage was established as there were no Section 212 certificates.

For clarity a Section 212 certificate is the written affidavit of the expert which is tendered at court instead of the oral testimony of the expert. Participants were asked what they understood by the phrase “linkage of the suspect to the crime scene”, and their responses were as follows:

- Fifteen participants stated that this means finding common traces from the suspect and that found on the scene of rape.
- Eight participants stated that it is the ability to place the suspect on the scene of rape through the use of scientific results.
• Four participants stated that linkage means analysis aimed at counteracting the alibi of the suspect. According to them, the suspect will have to explain the presence of certain things such as semen, saliva and blood at the crime scene.

• Three participants described linking the suspect to the crime scene as a reconstruction of what may have happened with the intention of providing a picture that the suspect will have to contest.

There were common factors between the responses of the participants and the literature. The starting point is that it is often difficult to prosecute rape cases due to a lack of evidence (Brown, 2001:11), which means that there is a need to look for substance and evidence that can prove sexual contact between victim and the suspect (Adams et al., 2004:126). From this statement and the responses from the participants, it can be concluded that the linkage of the suspect to the scene of rape is a step further than individualisation. From individualisation, it can be concluded that the semen belongs to person B, while from linkage it can be concluded that the evidence suggests that B was at place C at a specific time.

The case docket analysis revealed that biological evidence such as blood, semen and hair plays an important link in identifying the suspect and placing him at the scene, as was done in 57 of the 60 cases examined. In rape cases, the presence of biological evidence would strengthen the version of the victim over and above the absence of consent, which is a primary requirement in a rape case.

In the previous chapter, which dealt with the critical aspects of the processing of a child rape crime scene, the participants mentioned that a crime scene is a place where a crime has taken place, without further elaboration. Thus, their responses were one dimensional. The reality is that any place where there is a concentration of clues can be referred to as a “primary crime scene”. The reason for searching crime scenes is that investigators expect to find evidence that can help with the investigation of rape cases, as argued by Adams et al. (2004:3).

It is imperative that investigators search the crime scene objectively for any physical evidence, particularly in rape investigations (Horswell, 2004:314).
4.5.2 Corroboration of Eye Witness/Victim Testimony

The fear of sexual assault, particularly when committed by strangers, has had wide implications for our society that extend beyond the physical and emotional trauma of the victim, thus impacting on entire communities (Carney, 2004:7). This statement highlights the importance of using the correct procedures in child rape investigations. It is evident from the literature (such as Adams et al., 2004:1) that some of the limiting factors are a lack of sufficient reliable evidence to secure a conviction and the reluctance of victims and witnesses to come forth and testify in court. For the purposes of this research, it is evident that it is unwise to rely on the testimony of the rape victim and/or the witness testimony only during the trial proceedings.

According to Fisher (2004:21), the experts should not care whether the case results in a guilty or not guilty verdict and instead of getting involved they should only play the role of advocating their own opinions.

Fisher (2004:330) provides the example that the biological evidence of the presence of semen in the vaginal area is suggestive of vaginal penetration. Of interest is that the biological evidence will indicate this information in addition to the oral testimony of the victim or even in the absence of such information from the victim or the witnesses. According to Ogle (2004:147), biological evidence may corroborate the testimony to the effect that the sexual intercourse was non-consensual. This information may have been provided by the witness or victim but can be verified by the fact that there were bite marks and bruises on the victim’s body, which may indicate that the sexual intercourse was not consensual (Fisher, 2004:330). This is also true of the availability of blood and its identification.

Participants were asked what they understood by the concept of corroborating the victim’s testimony. Their responses were as follows:

- Fifteen participants stated that this means bringing in other evidence that is not based on a personal account of events of the victim.
- Five participants believed that the corroboration means using other mute evidence derived from other sources than those who witnessed it.
• Ten participants stated that the victims of rape are known for their vulnerability, bitterness and sometimes anger. Their evidence should be coupled with someone’s account that was not involved in that crime and presumed not to have an interest in the outcome.

Although put differently by different sources of data in this study, the common theme is that corroboration means addition to the existing evidence by other evidence not originally coming from any of the eye witnesses (Fisher, 2004:21).

As a follow-up question, the participants were asked whether they thought that biological evidence can corroborate the victim’s testimony. Their responses were as follows:

• Sixteen participants stated yes and elaborated that biological evidence is like a mute witness, which will say things that cannot otherwise be said by the witnesses.
• Nine participants stated yes but biological evidence will not change the trauma that the victim of rape may experience.
• Five participants stated that the biological evidence would corroborate the testimony of the victim.

The responses of participants confirmed that biological evidence can corroborate the testimony given by the witnesses or the victims of rape cases. Their responses are in line with Fisher (2004:330), who also touches on an important aspect of the investigation of rape cases. Through the responses of the participants and information found in the literature, it is concluded that biological evidence plays an important role in corroborating the testimony of the witnesses or victims of rape.

4.6 SUMMARY

This chapter focused on highlighting the correct procedures and processes of child rape investigation in terms of the collection and preservation of biological evidence gathered at the scene. It is evident that basic aspects, which are sometimes regarded as routine, could if compromised place a child rape case in jeopardy. The success of a case hinges on the correct procedures regarding certain critical aspects of the investigation protocol. Among other things, the chapter revealed that certain critical aspects need to be adhered
to, such as the processing of the crime scene, the search for biological evidence, the collection of biological evidence, and the packaging and preservation of biological evidence, not forgetting the chain of custody of evidence and linkage of the suspect to the scene.

In many cases, the investigative process focuses mainly on the crime scene, evidence, packaging and preservation of the evidence as well as the chain of custody in relation to the evidence. Other critical aspects pertaining to procedures of a rape investigation are often overlooked. This chapter also endeavoured to place critical focus on the Constitution and legally obtained evidence, linkage of the suspect to the crime scene and corroboration of the victim’s testimony. The researcher is of the opinion that a critical point highlighted by the chapter is the ruling made in the case S v Huma (2) 1995 2 SACR 411 (W). This ruling seeks to dispel the myth that suspects cannot be compelled to provide control or reference samples of blood for comparison purposes. The researcher found during case docket inspections that the investigators had allowed suspects to resist supplying control samples.

From the responses of the participants, the case docket analysis and the literature review, it became apparent that the skills of investigators need to be improved in areas concerning the correct procedures of rape investigation. This chapter highlighted the importance of the correct procedures intended to benefit investigators in achieving success in identifying and convicting rape suspects.
CHAPTER 5. FINDINGS AND RECOMMENDATION

5.1 INTRODUCTION

In this study, the procedures followed in child rape investigations were explored and described in order to evaluate them critically. The findings are derived from the interpretations of the sources of the data: the literature review, interviews and case docket analysis.

According to Leedy and Ormrod (2001:4), research is a systematic process of collecting and analysing data in order to increase the understanding of the phenomenon under question. This chapter summarises the findings, which were derived from the data collected from the various sources. The aim of the research was to determine the critical procedures to be followed in child rape investigations. To address the research problem, the following questions were asked:

- What is forensic investigation?
- What are the shortcomings with regard to rape investigations at the selected police stations?
- What are the correct procedures that should be followed in child rape investigations?

5.2 PRIMARY FINDINGS

The primary findings regarding the research questions and research aims are addressed below.

5.2.1 Research Question 1: What is forensic investigation?

The following were the primary findings regarding Research Question 1:

- From an array of literature this research found that forensic investigation is a systematic fact-finding process, which is dependent on different investigative tools, both scientific and traditional, to gather evidence for the purpose of assisting a court of law to come to a conclusion.
- The majority of participants (19) felt that forensic investigations involved the use of scientific methods and techniques with the investigative process.
- The remainder of participants (11) were of the view that forensic investigation is
that which is the relevant to laboratory work such as experiments.

- It is the view of the researchers that before “forensic investigation” as a term became the catch-all phrase for all types of apparently intricate investigations; it was used primarily to explain the work done by experts who were from laboratories such as the FSL of the SAPS. It is thus possibly for this reason that answers given by these 11 participants highlighted just the biological or laboratory side of the investigations.

- The researcher wants to believe that there is a distinct probability that the explicated view of the 19 participants will have a positive impact on their work environment. During the course of their duties they will be aware of the two sides - investigative side and the biological (analysis) side and therefore be mindful of both when conducting investigations.

- As for the remaining 11, there is also the probability that since they do not link the two ‘sides’ and not realising the impact the two sides have on each other; they will have a much more narrow approach to the crime scene.

- The feedback from the participants in respect of their understanding of defining a Forensic Investigator may have been due to a misinterpretation of the question. The feedback from 10 participants was closely related to literature. The remainder reflected this back to what forensic investigation entails.

- Since the mandate to investigate will have an impact on who does a forensic investigation, it was valuable to obtain the viewpoint of the participants in relation to this. The majority of the participants (16) are of the belief that the mandate to conduct investigation lies exclusively with the SAPS. Nine participants placed the mandate in the private/corporate domain. The majority of the participants are not aware that there are numerous other bodies within South Africa who undertake investigations daily. This may result in them wanting to arrest other investigators who they view as interfering with their investigations.

- The terms “objectives of investigation” and “goals of investigation” are synonymous in that both the goals and objectives of investigation are to establish that a crime has been committed, to identify and apprehend the suspect, recover stolen property and to assist in the prosecution of the person charged with the crime.
5.2.2 Research Question 2: Shortcomings identified with regard to child rape investigations

The challenges regarding child rape investigations were found to be the following:

- Physical evidence from the crime scene is the cornerstone of successful investigation, as it consists of objects that are linked to the commission of the crime. Physical evidence is more influential and reliable, thus providing more valid information about a crime as opposed to an eyewitness’s account of events.
- The participants are all familiar with what blood, saliva, semen and vaginal fluids are. Their understanding of the importance of quickly identifying and collecting these types of biological evidence however is questionable.
- The majority of the participants’ responses were in line with the literature, which is that one may reasonably expect to find blood at a child rape crime scene. They also emphasised the importance of determining the origin of the blood.
- Some participants were of the opinion that the mere collection of blood samples should suffice, determining the origin was not important.
- During the case docket analysis, it was established that out of the 60 case dockets analysed, 45 dockets contained no crime scene photo albums. This implies that the crime scenes were not visited by the photographer and photographs were not taken. The policy on photography was implemented during 2001 which makes it compulsory to attend and photograph such crime scenes.
- Therefore there is no visual record of what the crime scene looked like which is very problematic.
- The feedback of the participants with regard to establishing the origin of blood was not clear. The differences between responses create the impression that the question was possibly misunderstood. The responses of one third of the participants were in line with literature while the remainder did not address the question.
- Notably not a challenge, but worth mentioning is that a J88 medical certificate was found in each of the 60 case dockets perused. This is therefore a positive finding and indicates good practice.
• An analysis of these forms showed that in 45 cases semen was found in the vaginal cavity of the victim, in 10 cases semen was found in the clothing and underwear of the victim. It was only in 5 cases where no semen was found. This is significant since places where semen was actually found corresponds to that highlighted by literature as well as that indicated by the participants.

• More importantly is the actual finding of semen, highlighting the vital importance of taking the victim for a medical examination as soon as possible after the incident since the detection of semen is time bound. This was done in the majority of the cases analysed.

• On the converse side, it highlights the importance of taking the victim for a medical examination as soon as possible in order to gather seminal fluid evidence.

• The study found that there was confusion about whose responsibility it was to identify the semen at the crime scene. The SAPS have guidelines that specify that it is the responsibility of the crime scene technician to identify possible physical evidence, which would include semen.

• Thus while the guidelines do not specify that it is the responsibility of the investigator to identify the semen, it is probable that the crime scene technician will not be able to do this without the assistance or guidance of the investigator, who walks him through the scene.

• An analysis of the case dockets showed that in 53 case dockets, the SAECKs in respect of sexual assaults, which were collected during a medical examination, were sent to the laboratory for DNA analysis purposes, with a request to identify spermatozoa. The SAECK is used by the medical practitioner, if the date of the examination is within a week of the date of the alleged incident. It is thus important that the victim be examined without unnecessary delays. In two case dockets, it was indicated that semen was collected from the place where the rape took place and was sent to the laboratory for analysis. While this aspect is not identified as a challenge, it is reported on as good practice.

• The findings in relation to determining the origin of semen was problematic but it is suspected that the participants misinterpreted the question. Only 7 participants provided an answer in relation to the question at hand.

• When asked about vaginal fluids and swabs, none of the participants mentioned
the swabs. It is unclear why they have this one sided focus but the researcher postulates that they may be too focused on the physical evidence (the actual biological evidence) that they lose sight of other possibilities.

- The response from the participants about knowing to identify saliva did not contain the suggestion to use the saliva for DNA typing – this indicates a gap in their knowledge about the value of saliva specifically.
- The participants’ understanding of a crime scene is limited to the actual place where the physical act of rape occurred. None of the participants indicated that the victim or perpetrator can be included as secondary crime scenes.
- The participants indicated that rape is a contact crime. This means, according to the Locard Principle, that every time this crime is committed, two or more objects come into contact and transfer traces from one host to the next.
- In a child rape investigation, it would be of more evidential value and reliable to collect physical evidence such as blood, semen, vaginal fluids and saliva as the child’s testimony at court may not be reliable, particularly when subjected to cross-examination. Unlike adults, children are not always in a position to be competent witnesses.
- The researcher is of the opinion that the participants’ knowledge of the chain of custody is limited to the administrative processing of exhibits only. This may present a challenge to the investigator and could have a negative impact on the integrity of the chain process.

Child rape investigations are fraught with a number of challenges, which may have a detrimental impact on an otherwise successful investigation. The various responses of the participants were an indication that they were not familiar with the challenges of the child rape investigation or with the value of biological evidence. The study found that the investigation approach, processing of the scene of a child rape and the collection of biological evidence are at times dealt with in a superficial manner.

The above mentioned shortcomings identified from the interviews with participants and the case docket analysis could compromise a child rape investigation.
5.2.3 Research Question 3: What are the critical procedures that should be followed in child rape investigations?

The following were the primary findings regarding Research Question 3:

- Biological evidence needs to be collected with caution as it is fragile. The collection of evidence is in fact a disturbing process (the crime scene may be disturbed) and for this reason collection of biological evidence needs to be prioritised and very carefully documented and photographed. It cannot be over emphasised that biological evidence is corroborative evidence and often substantiates the victim’s testimony and disproves the perpetrators allegation that he was never at the scene.

- It was established that the accurate maintenance of a chain of custody is automatically equivalent to preservation of evidence. This statement can only be correct if the investigators take all the necessary precautions to keep the evidence intact while in their custody.

- Biological evidence must be handled in such a way, that it reaches the FSL undamaged and uncontaminated as the analyses are conducted at the FSL. Participants indicated that degradation may also be as a result of high temperatures and moisture. This means that investigators must not transport exhibits in the boot of vehicles over long distances or during a hot day.

- The chain of custody is an account of changes in evidence, and this begins as soon as the evidence has been found at the scene until it is produced as evidence or proof in court. The collection, handling, safe keeping, packaging and dispatch of evidence are encapsulated in the chain of custody. As mentioned above, the researcher opines that the participants’ knowledge relating to the chain of custody may be limited to the administrative processes only and this could have a negative impact on the integrity of the chain process and subsequently bring the analyst report into question or disrepute.

- The responses of the participants indicated that biological evidence from a suspect must be obtained within the legal framework of the Constitution and the CPA. Biological evidence obtained within the South African legal framework would be admissible before court.

- From the responses of the participants, it can be concluded that the linkage of the suspect to the scene of rape is a step further than individualisation. From
individualisation, the conclusion reached will be that the semen belongs to person B, while, from linkage, the conclusion reached will be that the evidence suggests that B was at place C at a specific time.

- The responses of the participants confirm that biological evidence can corroborate the testimony given by witnesses or the victims of rape cases. Their responses supported the views found in the literature, the common theme of which is that corroboration means addition to the existing evidence by other evidence, not originally coming from any of the eyewitnesses. It can thus be concluded that biological evidence plays an important role in corroborating the testimony of the witnesses or victims of incidents of rape.

- The researcher is of the belief that participants with more than two years of experience should have been selected to participate in the research. Investigators with two or more years’ experience are further developed by undergoing formal training courses. It was found that participants with less than two years’ experience struggled to answer the questions while the answers of those with over two years’ experience showed more depth possibly because practical experience had enhanced their formal training.

- From the responses of the participants and case docket analysis, it is apparent that the skills of investigators need to be improved in areas concerning the correct procedures of child rape investigation.

- The critical point highlighted in this research is the ruling made in the case of S v Huma. The ruling given in this case dispels the myth that suspects cannot be compelled to provide control or reference samples of blood for comparison purposes.

5.3 SECONDARY FINDINGS

The researcher also made certain secondary findings with regard to the research.

5.3.1 Research Question 1: What is forensic investigation?

The following secondary findings regarding Research Question 1 emerged:
• Forensic investigation is regarded as an investigation aimed at instituting court proceedings and also where some or other scientific knowledge is applied to the legal problem.

• The principles of the forensic investigation processes were not adhered in child rape investigations.

• The SAPS does not have the exclusive mandate to investigate. It is foreseen that the state will not have the capacity to investigate all crimes; especially in cases of a commercial nature, the outsourcing of criminal investigation will continue to increase.

• Private investigators have no powers to charge or subpoena suspects but they are able to investigate any criminal activity that affects the company they work for internally according to company policy.

• The research found that the participants viewed forensic investigations as a systematic process. In this process specific activities are undertaken. These include planning, organising, questioning, inquiries, and interviewing. Thus when viewed in this light it seems that the investigators work in a planned and systematic manner. The researcher however wants to postulate that understanding a principle (planning) does not necessarily mean that it is done. It is therefore likely that while they understand (theoretically) that the process is a systematic one, they are not able to put the understanding into practice.

• Since forensic investigation is a systematic process it is reasonable that persons who undertake such duties should have specific characteristics. While literature contains a plethora of these characteristics, the participants were only able to mention a few. Thus while collectively they mentioned an array, individually their understanding is lacking.

5.3.2 Research Question 2: Shortcomings identified with regard to Child rape investigations

The following secondary findings regarding Research Question 2 were made:

• Physical trace evidence in an investigation, whether associated with child rape or not, represents an important and often critical aspect of the overall investigation process.
• While the majority of the participants indicated that they would be able to identify blood at a crime scene, more than half of them warned against it. They felt this should be left up to the experts. Their reasoning is technically correct, since the investigator does not do the biological identification, only the physical (visual) identification.

• The presence and appearance of spermatozoa within semen are important to the value of the semen as a tracing clue. Semen, which has a liquid or mucous consistency, is fragile and for this reason is easily destroyed when exposed to unfavourable weather conditions. Semen, like any other body fluid, has a life expectancy of a few days outside the human body and will be deteriorated due to the various weather conditions. The presence of seminal fluid, and in particular spermatozoa, is of critical importance because it is irrefutable evidence of sexual activity. It is necessary for investigators to specify to the FSL to determine the presence of spermatozoa during the DNA process.

• The analysis of the case dockets highlighted that semen was found both in the vaginal cavity of the victim and on the clothing of the victim. In light of this important finding, it is crucial that the examination of the victim by a medical practitioner should not be unduly delayed as this will hamper the detection of semen on the victim’s body or clothing. During case docket analysis it was established that investigators at times overlooked this prudent requirement.

• During the docket analysis process it was established that at times no semen was found at the crime scene. This could be due to the fact, that the perpetrator made use of a condom. It is thus critical that during the crime scene management process a thorough search is conducted for a condom amongst other exhibits.

• Due to the fact that semen is colorless it would be difficult to locate or be seen by the naked eye, either by the investigator or the crime scene technician. It is thus imperative that the crime scene technician be adequately equipped and in possession of the required equipment in order to locate the semen deposits.

• During the docket analysis it came to the fore that there is little importance placed in locating semen and other body fluids. Semen is a primary bodily fluid which is produced during a rape encounter and is vital that investigators search specifically for this crucial type of evidence.
The docket analysis reveals that at times the perpetrators were not taken for examination also. This is despite the fact that vaginal genetic material may be found on the body or penis of the perpetrator.

Saliva can be similar to other excretions; identifying it is of importance as it is only required that the exhibit material should be identified and subsequently individualised for DNA analysis process.

It was also found that investigators place little importance to saliva when dealing with a crime scene. Saliva similar to other excretions is an important genetic material and suitable for DNA analysis process.

Oral bacteria can degrade the DNA presence in such cellular materials. This means that recovered items have to be analysed as soon as possible, as DNA on partly chewed food has different degrees of success of extraction, depending on the chemical content of the food. The docket analysis reveal that exhibits in general are not forwarded to the FSL for analysis timeously.

During docket analysis it came to the fore that investigators attending crime scenes are reliant upon the crime scene technician in identifying and locating evidence and exhibits. An effective investigator will be able to do preliminary location of exhibits and thus guide the crime scene technician.

Child witnesses are dealt with caution by the courts and some of the challenges are the age of the victim as well as a lack of corroborating evidence.

5.3.3 Research Question 3: What are the critical procedures that should be followed in Child Rape Investigations?

The following secondary findings regarding Research Question 3 were made:

- Rape is categorised as an extraordinary investigation, which is dependent on scientific or biological evidence and on the processes involved with that evidence in light of this the collection is carried out meticulously.
- During a rape investigation the search and collection of biological evidence from the suspect will complete the collection process in respect of biological evidence.
- It was established in this research that the packaging of biological evidence as well as the chain of custody processes has a direct impact on the admissibility
requirements of the exhibits.

• The guidelines with regard to the packaging of exhibits have a direct impact on the integrity of the evidence.

• Literature has indicated that processing the crime scene involves the following:
  - Collection of biological evidence
  - Observation on guideline of how to collect evidence
  - Packaging of evidence and preservation

• The viewpoints of the various authors highlighted the importance of avoiding contamination and that evidence must be kept or maintained in its original condition, particularly during the analysis process. Uncontaminated evidence is admissible at court, in this way strengthening the case against the accused.

• A suspect in a rape case may be individualised but this individualisation will not be complete until the suspect is placed at the crime scene. In rape cases it also remains a possibility that the suspect will deny that he was ever at the scene of the rape.

• Biological evidence such as blood and semen is very fragile and can be easily destroyed, therefore needs to be collected first before other physical evidence is collected.

• In rape cases the presence of biological evidence would strengthen the version of the victim over and above the absence of consent, which is a primary requirement in a rape case.

• Exhibits despatched to the FSL for analysis is generally not accompanied with a covering letter and thus the analyst would not be guided or requested on the test to be conducted.

• The procedures as summarised in the manual on management of exhibits as well as the forensic science manual in respect of packaging of exhibits was not consistently implemented.

• The maintenance of the chain of custody is an admissibility requirement; therefore maintenance of the continuity of a chain of custody is of vital importance in the evidential process. The docket analysis has revealed that investigators place little importance in obtaining all chain of custody statements.
5.4 RECOMMENDATIONS

The following recommendations are made on the basis of the findings of the research.

5.4.1 Research Question 1: What is forensic investigation?

It is suggested that the principles of forensic investigation as identified in this study are implemented as a standing operating procedure (SOP) in child rape investigation. The present standing operating procedure (SOP) does not make provision for this. The main principles that emerged from literature and the interviews with participants were the use of scientific methods and techniques with investigation procedures, specifically the collection and processing of evidence.

It is further suggested that investigators within the SAPS are exposed to a more in depth understanding of what a forensic investigation entails, how the planned and systematic process should be put into practice and how such a process is managed. To this end training must be offered to investigators who want to enhance or even develop the soft skills required to become an effective forensic investigator.

5.4.2 Research Question 2: Challenges with regard to child rape investigations

Although several challenges were identified for the sake of brevity the researcher will suggest recommendations for the most crucial challenges identified. These are highlighted below.

- Physical trace evidence is crucial in child rape investigations.
- Blood is one of the biological traces that can be found at a child rape scene.
- The presence and appearance of spermatozoa within semen are important to the value of the semen as a tracing clue.
- Certain rape can be committed by perpetrators who use condoms and it is critical that a search for the condom is done.
- An effective investigator will be able to do a preliminary location of exhibits and thus guide the crime scene technician on what is available and what can be collected.
It is suggested that an SOP be designed to deal with child rape cases – with specific reference to the actual processing of the scene. This SOP must allocate responsibility for specific actions to specific people. It is also vital that this SOP be time-bound where specific steps must be conducted with specific time frames. Thus specific steps must be dealt with within specific time frames.

It is suggested that child rape be viewed and dealt with both as a psychologically motivated and a contact crime. The child victim should also be given ongoing counselling by a forensic social worker throughout the investigation. Some victims need follow-up medical care and sometimes corrective medical procedures as a healing process. It is perhaps equally important that investigators who conduct these investigations are to undergo mandatory evaluations by a forensic social worker or similar professional counsellor.

Investigators who conduct these types of investigations must remain abreast of developments in the field and being mindful of the fragile nature of the biological evidence, these crime scenes must be processed within 24 hours of reporting of the crime.

5.4.3 Research Question 3: What are the critical procedures that should be followed in child rape investigations?

- It is suggested that the current standing operating procedure (which is too lengthy to repeat here) be amended to include the critical aspects of child rape investigation identified during this research. These aspects must include but does not have to be limited to the following:
  
  - The step-by-step processing of the child rape crime scene;
  - The search for biological evidence;
  - The identification and photographing of biological evidence *in situ*;
  - The collection, the packaging and preservation of biological evidence.
• Investigators should place more emphasis on the collection of biological evidence from the suspect as this could link the suspect to the crime.

• The guidelines provided in the manual management of exhibits as well as the forensic science manual needs to be strictly adhered to.

• The process surrounding the packaging of biological evidence as well as the chain of custody should not be compromised.

• Biological evidence needs to be handled in such a way that it reaches the FSL undamaged and uncontaminated.

• Biological evidence such as blood and semen is very fragile and must be collected with undue delay and prior to other physical evidence.

5.5 FUTURE RESEARCH

The researcher is of the view that more research is desirable in the field of child rape investigation, in particular regarding the evidentiary value of biological evidence such as blood, semen, vaginal fluids and saliva. This is in view of the fact that a child’s testimony is not reliable when subjected to cross-examinations. The notion is that, unlike adults, children are not always in a position to be competent witnesses.

The researcher is also of the view that should the attached rape matrix be used by other researchers it would be valuable to add the following elements to the matrix:

• How cases are finalised and the final outcome
• What are the specific reasons for the manner in which cases are finalised
• Which role players are responsible for the specific outcome of the case

5.6 TRAINING AND DEVELOPMENT

Through the deduction from the responses of the participants, case docket analysis and literature review, it became apparent that the skills of investigators need to be improved in areas concerning the correct procedures of child rape investigations. It is strongly recommended that investigators undergo annual refresher programmes at which time they are exposed to new and newly developed technologies and investigative techniques. It is also suggested that new recruits to the SAPS are sensitised to the challenges of dealing with a child rape investigation.
5.7 SUMMARY

Apart from being a Government concern, crimes against women and children are also a national concern, thus making this category a priority crime investigation for the SAPS. For any successful prosecution, it is necessary that policy and correct procedures are not compromised but rather strictly adhered to. The purpose of this study was to determine the shortcomings and establish correct procedures to be followed with child rape investigations, to improve the procedures and enhance the performance of investigators, to address what is forensic investigation, and to establish the correct procedures that should be followed in child rape investigations.

The Constitutional mandate of the Ministry of Police and the SAPS is reflected in section 205 of the Constitution. One of the objectives of policing in terms of section 205 is to prevent, combat and investigate crime. Therefore, the SAPS has been mandated in terms of the Constitution to address crime and to keep the nation informed of the annual crime status. The annual national crime perspective in respect of child rape cases for the period 2012/2013 indicates that 20 702 child rape cases were reported.

Forensic investigation is crucial in child rape investigation and provides the investigator with confidence when conducting an investigation. To be effective, an investigator needs to deploy scientific methods and techniques in investigating this crime. Forensic investigation is to reconstruct an incident based on evidence for prosecution purposes, thereby assisting the court. In order to achieve the aims and objectives of a successful investigation, it is imperative that investigators understand the problems associated with child rape investigations.

Physical evidence such as biological traces is crucial in child rape investigation and provides the investigator with important leads to commence the investigation. Child rape investigation needs to be approached skillfully with no margin of error. Rape victims often undergo secondary trauma, which could have a negative impact on their daily life temporarily if not permanently.

The researcher from his experience in the field of investigation is of the opinion that rape can be categorised as an extraordinary investigation, which is dependent on scientific or biological evidence, as well as the processes involved with that evidence. A
classical situation is where the version of the victim differs from that of the suspect, especially if there are no witnesses. It was evident that the basic aspects, which sometimes are regarded as routine, could if compromised place a child rape case in jeopardy. The success of a case hinges on the correct procedures regarding certain critical aspects of the investigation protocol. Among other things, the research has revealed that certain critical aspects need to be adhered to, such as the processing of the crime scene, the search for biological evidence, the collection of biological evidence, and the packaging and preservation of biological evidence, not forgetting the chain of custody of evidence and linkage of the suspect to the scene. More successes can be achieved in dealing with child rape investigations if correct methods and techniques are utilised at the preliminary stages of the investigation.
LIST OF REFERENCES


Constitution. See South Africa. 1996.


Criminal Procedure Act see South Africa. 1977.


Docket Analysis Learner Manual see South African Police Service. 2002


Police Service Act see South Africa. 1995


115
Conference: Modern Criminal Investigation Organised Crime & Human Rights,
ICC, Durban, 3-7 December 2001.
Heinemann.
information product for criminal investigators, crime analysts and crime
27(1): 144-159.
Solve.
6 November: 5.
University Press.

**CASE LAW**
S v Huma (2) 1995 2 SACR 411 (W)
S v Kaptein 1984 (3) SA 316 (CPD)
S v R and Others 2000 (1) SACR 33 (W)

**LIST OF CASES**
S. v Botha and Others (1) 1995 (2) SACR598 (W)
S. v Dube 2000 (1) SACR 53 (N)
Mentor v Union Government 1927 CPD 11
ANNEXURE A - INTERVIEW SCHEDULE

TOPIC: A critical analysis of the procedures followed in child rape cases in Mpumalanga Province

PART A

Biographical information:

Participant Number: ................................

Occupation: ........................................

Age: ........................................

Gender: ........................................

Designation: ........................................

Years of experience in the field of investigation:........

Academic qualification: ...............................

..........................................................

Relevant FCS investigation courses attended:

..........................................................

Any other investigation course attended: ............

..........................................................
1. **Forensic Investigation (Chapter 2)**
   1.1 Define the concept forensic investigation?

   …………………………………………………………………………………………………
   …………………………………………………………………………………………………
   …………………………………………………………………………………………………

   1.2 How would you define a forensic investigator?

   …………………………………………………………………………………………………
   …………………………………………………………………………………………………
   …………………………………………………………………………………………………

   1.3 What are the duties of a forensic investigator?

   …………………………………………………………………………………………………
   …………………………………………………………………………………………………
   …………………………………………………………………………………………………

   1.4 Who has the mandate to conduct forensic investigation?

   …………………………………………………………………………………………………
   …………………………………………………………………………………………………
   …………………………………………………………………………………………………

   1.5 What is the purpose of forensic investigation?

   …………………………………………………………………………………………………
   …………………………………………………………………………………………………
   …………………………………………………………………………………………………

   1.6 What are the objectives of forensic investigation?

   …………………………………………………………………………………………………
   …………………………………………………………………………………………………
   …………………………………………………………………………………………………
1.7 Do you see forensic investigation as a systematic process?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

1.8 What characteristics are needed to be an effective forensic investigator?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

2. Challenges with regard to child rape investigations (Chapter 3)

2.1 What is blood?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

2.2 How would you identify blood?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

2.3 Why should the origin of blood be established?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

2.4 What is your understanding of the term semen?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
2.5 Where is semen deposited during rape?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

2.6 Whose responsibility is it to identify semen?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

2.7 Why is it important to establish the origin of semen?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

2.8 Explain your understanding of the terms vaginal fluids and swabs?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

2.9 How would you describe saliva?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

2.10 Whose responsibility is it to identify saliva at the crime scene?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

2.11 Why is it important to identify the origin of saliva?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
2.12 Describe what a crime scene is?

2.13 Can you name one place at least where rape can be committed?

2.14 Do you consider the place where rape took place a crime scene?

2.15 Mention at least one exhibit which may be found at a place where rape took place which may be instrumental with the rape investigation?

2.16 Is the body of a victim considered a crime scene?

2.17 Do you consider the body of a perpetrator a crime scene?
2.18 What do you understand by the term Locard Principle?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

2.19 What is the relevance of Locard Principle with the investigation of rape cases?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

3. Critical procedures to be followed in child rape investigation (Chapter 4)

3.1 What is the processing of a crime scene?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

3.2 Give a brief exposition of collection of biological evidence

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

3.3 Mention at least one procedure in collecting biological evidence?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

3.4 How do you think samples should be packaged?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
3.5 Explain how biological exhibits can be preserved?

3.6 Why is it important to handle evidence correctly?

3.7 How would you maintain the chain custody of exhibits?

3.8 Why is it important to maintain the chain of custody?

3.9 Mention a legal consideration in respect of obtaining biological evidence?

3.10 What do you understand by the term linkage of the suspect to the crime scene?
3.11 What do you understand by the concept of corroborating the victim’s testimony?

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

3.12 Do you think that biological evidence can corroborate the victim’s testimony?

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
### ANNEXURE B - MATRIX: DOCKET ANALYSIS

<table>
<thead>
<tr>
<th>No</th>
<th>Matrix element looked for</th>
<th>Matrix element present</th>
<th>YES</th>
<th>%</th>
<th>NO</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Location of Scene</td>
<td></td>
<td>55</td>
<td>92</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Was the crime scene visited?</td>
<td></td>
<td>45</td>
<td>75</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>3</td>
<td>Was the crime scene searched for evidence?</td>
<td></td>
<td>45</td>
<td>75</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>Did the crime scene technician visit the crime scene?</td>
<td></td>
<td>40</td>
<td>67</td>
<td>20</td>
<td>33</td>
</tr>
<tr>
<td>5</td>
<td>Were any exhibits retrieved from the scene?</td>
<td></td>
<td>15</td>
<td>25</td>
<td>45</td>
<td>75</td>
</tr>
<tr>
<td>6</td>
<td>Was search for semen done?</td>
<td></td>
<td>25</td>
<td>42</td>
<td>35</td>
<td>58</td>
</tr>
<tr>
<td>7</td>
<td>Was search for blood done?</td>
<td></td>
<td>55</td>
<td>92</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>Was search for saliva done?</td>
<td></td>
<td>25</td>
<td>42</td>
<td>35</td>
<td>58</td>
</tr>
<tr>
<td>9</td>
<td>Were exhibits preserved correctly?</td>
<td></td>
<td>50</td>
<td>83</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>10</td>
<td>Was the correct packaging process followed in handling exhibits?</td>
<td></td>
<td>55</td>
<td>92</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>11</td>
<td>Was the crime kit (SAECK) referred to the FSL without unreasonable delay?</td>
<td></td>
<td>53</td>
<td>75</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td>12</td>
<td>Was chain of custody statements filed in respect of handling of exhibits?</td>
<td></td>
<td>40</td>
<td>67</td>
<td>20</td>
<td>33</td>
</tr>
<tr>
<td>13</td>
<td>Was precaution taken to avoid contamination?</td>
<td></td>
<td>50</td>
<td>83</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>14</td>
<td>Were the correct procedures followed in collection of biological evidence?</td>
<td></td>
<td>45</td>
<td>75</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>15</td>
<td>Was the victim taken for medical examination?</td>
<td></td>
<td>55</td>
<td>92</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>16</td>
<td>Was the suspect taken for medical examination?</td>
<td></td>
<td>56</td>
<td>93</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>17</td>
<td>Was the J88 filed in the case docket?</td>
<td></td>
<td>31</td>
<td>52</td>
<td>29</td>
<td>48</td>
</tr>
<tr>
<td>18</td>
<td>Was the J88 form completed in all respects?</td>
<td></td>
<td>60</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>Was a photo album of the crime scene filed in the docket?</td>
<td></td>
<td>0</td>
<td>0</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>20</td>
<td>Were corroborating statements taken from the witnesses?</td>
<td></td>
<td>15</td>
<td>25</td>
<td>45</td>
<td>75</td>
</tr>
<tr>
<td>21</td>
<td>Were action steps taken to link the suspect to the crime scene?</td>
<td></td>
<td>45</td>
<td>75</td>
<td>15</td>
<td>25</td>
</tr>
</tbody>
</table>
ANNEXURE C - AUTHORITY FROM THE SAPS TO CONDUCT RESEARCH

SUID-AFRIKAANSE POLISIEDIENS

THE DEPUTY PROVINCIAL COMMISSIONER
POLICING
MPUMALANGE

Reference 3342

Navrie Enquiries Captain Mafola

Telefoon (013) 759 1435

Faxnummer (013) 759 1365

PROVINCIAL INSPECTORATE
TEAM 2
KWAMHLANGA

Attention: S/Supt Boodhoo

ACCESS TO INFORMATION: 0604206-6 SENIOR SUPERINTENDENT BOODHOO:
INSPECTORATE: MPUMALANGA.


2. The application is approved.

3. Good luck with your studies.

ASSISTANT COMMISSIONER
ACTING PROVINCIAL COMMISSIONER: EMPUMALANGA
R Q MACHABI

127
ANNEXURE D - CERTIFICATE OF EDITING

I, Susan van Tonder, MA Linguistics, ID 6009160072083, hereby declare that I have edited the master's thesis "A Critical Analysis of the Procedures followed in Child Rape Cases in Mpumalanga Province" by Vinesh Boodhoo.

[Signature]

Susan van Tonder
19 January 2015