THE VALUE OF PHOTOGRAPHY IN THE INVESTIGATION OF

CRIME SCENES

by

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PREFACE

In this study, the focus of the researcher was to evaluate the value of photography in the investigation of crime scenes. The researcher highlights various ways in which this technique may be used during the investigation of crime.

It is said that "one picture is worth a thousand words". This implies that pictorial testimony has more value than ten witnesses. The witnesses may give different views on the same issue, and, furthermore, they may forget some of the facts. Due to human error, omission, and defects such as old age and sight problems, there are contributing factors for people to give different accounts of the same events.

The study entails the various roles of photography, such as recording the crime scene and that photography is considered as evidence in court. Investigators may use them for both suspects' and witnesses' interviewing. Furthermore, witnesses and victims may use them to refresh their memories, and the court uses them to prove the matter at issue. This indicates that photographs have a major role to play in the judicial and investigation processes.

The changing of technology is the challenge faced by criminal investigation to close the gap in applying photography effectively. There is a need for further research on this topic, because the researcher focused only on normal photography. The other sides of photography, such as underwater, aerial and digital photography, were not covered in this study.

Private and public entities also utilise photography for business purposes. The media and the entertainment community are the custodians of this tool. Insurance companies are also the beneficiaries of photography.
DECLARATION

I, Ralotse John Melweni (31703831), declare that this dissertation, submitted for the degree Master of Technologies in Forensic Investigation at the University of South Africa, is my own original work, and has not been submitted to any other institution, and that all the sources consulted or quoted are indicated and acknowledged by means of a comprehensive list of references (bibliography).

[Signature]

01-12-2011
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Thanks to the University of South Africa and the South African Police Services for allowing me to contribute, through this study, to my fellow students. A very special thanks to my family, my two sons Thabang and Lebogang, for their endless support. To my wife Joyce Mokwena— I would not have completed this journey without your encouragement.

The support and contribution of all participants for the success of this research, I say thank you – your experience and expertise assisted me to come up with this dissertation.

God be with you all.
Summary and key terms

It is said that "one picture is worth a thousand words". This implies that pictorial testimony has more value than ten witnesses. The witnesses may give different views on the same issue, and, furthermore, they may forget some of the facts. Due to human error, omission, and defects such as old age and sight problems, they are contributing factors for people to give different accounts of the same events.

The study entails the various roles of photography, such as recording the crime scene and that photography is considered as evidence in court. Investigators may use them for both suspects' and witnesses' interviewing. Furthermore, witnesses and victims may use them to refresh their memories, and the court uses them to prove the matter at issue. This indicates that photographs have a major role to play in the judicial and investigation processes.

Key terms

Investigation of crime, Photography, Crime scene, Crime, Forensic investigation, Physical evidence, Evidence, Locard principles, Identification, witness and chain of evidence
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CHAPTER 1
GENERAL ORIENTATION

1.1 Introduction

Gilbert (2004:594) defines a crime scene as a location at which a suspected criminal offence occurred, while Inman and Rudin (2001:197) define it as the apex of an inverted pyramid that expands to encompass the investigation of crime, the recognition, analysis, interpretation of evidence and, finally, a court trial.

The crime scene is visited, not only to protect all physical evidence, but also to record the scene while still undisturbed. Recording of the crime scene in this manner will allow the court to see the crime scene in a small and manageable size. The recording of the scene may take place in various ways, such as a plan drawn according to scale, a sketch plan, a rough sketch, the taking of notes and photographs. The focus of this study was on photography during the investigation of a crime scene.

The word “photography” derives from two Greek words: photos, meaning "light", and graphos, “pertaining to drawing or writing”. In the literal sense, photography means “to write or draw with light” (Redsicker, 2001:1). Robinson (2010:19) shares the same sentiment as Redsicker, by referring to photography as writing or drawing with light. The photographing of a crime scene is a permanent record keeping of information.

1.2 Problem statement

In 2007, the researcher interviewed investigators as part of pre-research investigation from five police stations in Pretoria area, and also evaluated murder case docket from Mamelodi Police Station, only to establish that photography was not being used effectively during the investigation of crime. It is common practice for the investigators to have photographs taken from murder crime scenes. Therefore, during pre-research informal discussions and
general perusal of dockets, the researcher came to the conclusion that photographs, as an invaluable tool for the capturing of the crime scenes, were not being taken – instead, crime scenes were not being photographed. Critical information and evidence that were supposed to be captured in the form of photographs were not taken to assist the court and the investigators during the investigation of crime. During pre-research investigation, the prosecutors further indicated that it is very difficult to prosecute in murder cases where there are no crime scene photographs to supplement the investigator’s evidence.

The other method of supporting information about what happened at the crime scene may be recorded through photographs. Photographs will give the investigators and the court clear pictures of the scene after the crime has been committed. The researcher perused twelve dockets in the office of the Public Prosecutor of the Pretoria court, which were handed in for hearing, to see if investigators in any of the cases made use of photography. Surprisingly, in none of the dockets was photography used as an investigative aid.

Photographs should be taken in order for the court to reach the correct decision (Fisher, 2004:86). The photos enhance the investigation of crime, keep records, and assist witnesses and investigators to refresh their memories in court (Bennett & Hess, 2004:527). All crime scenes should be photographed without delay (Fisher, 2004:79). This gives the court an opportunity to see how the scene was left after the crime was committed. The crime scene photographs will save court hours, as there will be no need for the court to conduct an inspection in loco. All the information will be clearly explained on the photographs. This will improve the conviction rate and make their work simple – according to the prosecutors at the Mamelodi court during pre-research investigation. Photography gives an accurate, relevant and permanent recording of the crime scene while still fresh.

The researcher also perused the detective learning programmes, where it was established that there was no photography intervention in their programme, and that the detectives rely entirely on the Criminal Record Centre (CRC) for that service.
1.3 Research aim

The research should have an aim, as a guide to enhance the outcome of the study. The research aim refers to what the researcher wants to achieve at the end of the study. The research is an examination, like an especially critical and exhaustive investigation or experimentation, having for its aim the discovery of new facts and their correct interpretation, the revision of accepted conclusions, theories or laws in the light of newly discovered facts, or the practical applications of such discoveries (De Vos, Strydom, Fouché & Delport, 2002:45).

The aim of this research was to determine the value of photography in the investigation of murder crime scenes.

1.4 Purpose of the research project

Welman and Kruger (1999:19) explain that “the purpose of conducting the research is to define, explain and consequently predict and even modify or control human behaviour, its organisations, products and/or events”. Following the guidelines by Denscombe (2002:27), the purpose of this research is formulated as follows:

- To evaluate the existing routes or ways in which investigators are using photography, with the intention to determine the strengths and weaknesses, which determine how it could be improved.
- To explore national and international literature, to see how photography is utilised elsewhere. The reason for this is to report the findings, and be able to implement the new information in a real practice scenario.
- To recommend possible solutions, which if applied in practice, will enhance the performance of individuals’ skills in the policing fraternity.
1.5 Research questions

Glesne (1999:25) highlights that researchers need to give advanced thought, at the outset of the project, to the key themes that they wish to address during the research. This reasoning is supported by Noak and Wincup (2004:122), who indicate that “the researcher should in the initial planning of the research think ahead to the areas of thematic interest that they envisage addressing”.

Huysamen (1996:2) goes further and advises that the first concrete steps in the scientific research process should be to clearly formulate a research question for a specific problem that needs to be examined. Glesne (1999:25) supports this reasoning and adds that the research question is the driver during the study and data collection.

The research questions the researcher wished to investigate in this research are as follows:
➢ What is the meaning of criminal investigation?
➢ What is the evidential value of photography in the investigation of murder crime scenes?

1.6 Definition of key theoretical concepts

To clarify some of the concepts, the researcher defined some of the key concepts used in the study. According to Welman and Kruger (2001:23), concept formulation entails the control of the study focus which regulates the content before the data is collected.

1.6.1 Investigation of crime

“What investigation of crime is a process of discovering, collecting, preparing, identifying and presenting evidence to determine what happened and who is responsible” (Bennett & Hess, 2004:4).
1.6.2 Photography
The word “photography” is derived from two Greek words: *photos*, meaning "light", and *graphos*, meaning "pertaining to drawing or writing." Thus, literally translated, “photography” means “to write or draw with light” (Redsicker, 2001:1). Robinson (2010:19) also defines photography as two Greek words: *phos*, meaning “light” and *graphia*, referring to writing or drawing. Therefore two concepts refer to “writing or drawing with light”.

1.6.3 Crime scene
“A crime scene is the apex of an inverted pyramid and expands to encompass the investigation of crime, the recognition, analysis and interpretation of evidence, and, finally, a court trial” (Inman & Rudin, 2001:197).

1.6.4 Crime
Crime is unlawful and blameworthy conduct which is punishable by the state (Gilbert, 2001:44).

1.6.5 Forensic investigation
According to Pollex (2001:93), forensic investigation is an investigation aimed at instituting court proceedings (criminal as well as civil).

1.7 Research design
Welman and Kruger (2001:46) define a research design as “the plan according to which we obtain research participants (subjects) and collect information from them”. Mouton (2001:55) defines a research design as a blueprint of how one intends conducting the research, while Huysamen (1993:10) gives the closely related definition of research design as the plan or blueprint according to which data is collected to investigate the research hypothesis or questions in the most economical manner.

In this study, the researcher employed an empirical research design, as the researcher was concerned with explaining the value of photography in the investigation of the crime scene. The empirical research design uses fewer
numbers of a sample, and structured questions are applicable (Mouton, 2001:55). Empirical research is the production of knowledge based on experience or observation. The researcher conducted studies of police officials, in which their conclusions were based on experience (Maxfield & Babbie, 1995:4). According to Denscombe (2002:27), the production of knowledge is based on experience.

In this research, the production of knowledge is very important, because of the fact that not much is written on the topic under investigation. As an approach to social research, empirical research tends to focus on the production of data based on real-world observations. The very notion of a survey suggests that the research has involved an active attempt by the researcher to go out and look, and to search. The research is purposeful, and constructed because very little literature on the topic was available. The researcher therefore intended to address the problem under investigation by exploring new ideas regarding the use of photography in the investigation of crime scenes.

1.8 Research approach

To support the empirical design and to help the researcher to create new knowledge, a researcher needs an approach that is practical, in order to improve the situation. The researcher used a qualitative approach during this research. The problem under investigation is a practical one and the researcher needed to understand why investigators do not use photography as an investigative tool. He therefore wanted to understand the phenomena from the participants' point of view (Leedy & Ormrod, 2005:94).

The researcher also used a combination of a qualitative and quantitative research approach (mixed methods). The reason for this is to test theoretical assumptions in more than one way, and to increase the reliability and validity of observations, analyses and findings. The researcher analysed case dockets to get a picture of what happened. (See paragraph 1.11.2 for a discussion on this).
1.9 Target population

Bless and Higson-Smith (2000:84) define a population as the entire set of objects or people which is the focus of the research, and about which the researcher needs some characteristics. The ideal population for this study should have been all investigators in the South African Police Services (SAPS), but because of the numbers involved, and the limited time available for this research, the researcher narrowed the population and used a target population.

A target population is the population with which the researcher would ideally like to conduct research (Welman & Kruger, 1999:122). The target population for this research was the detectives in the Pretoria Police Area. Pretoria is an area consisting of 27 police stations in the province of Gauteng. Pretoria was selected, as it was cost effective, due to the fact that it is the area where the researcher is residing, and the place where the problem was identified under different clusters.

For the selection of five police stations, the entire 27 police stations’ names were put into a single pot, and only five names were drawn as the area where the study was conducted. The police stations that were (simple) randomly selected were as follows: Mamelodi (60 detectives), Silverton (32 detectives), Pretoria Central (78 detectives), Rietgat (36 detectives) and Pretoria North (34 detectives) – a total of 240 detectives. The researcher wanted a sample of 30 detectives because only detectives investigate murder cases.

Three experts from the Pretoria Criminal Record Centre were selected purposefully and interviewed (Leedy & Ormrod, 2005:206). Purposive sampling is when the researcher selects specific units with experience and expertise, for a particular reason. In this study, the researcher’s aim was to select three experts to obtain more information on the topic (Babbie, 2010:238).
1.10 Sampling

Sampling is the technique by which a sample is drawn from the population (Singleton, Straits & McAllister, 1988:153). The researcher decided to select a sample of 30 detectives, which is sample A, and three experts, sample B (Blaikie, 2003:161).

To select a representative sample, the researcher decided to select 13% from each station: from Mamelodi he selected eight, from Silverton four, from Pretoria Central ten, four from Rietgat, and four from Pretoria North. The researcher obtained an alphabetical name list from each station and numbered each name on the list. The simple random sampling technique was used to select the required number from each station. The researcher then wrote the numbers of each list each on a piece of paper:

- From Mamelodi, 60 numbered pieces were thrown in a hat and eight were drawn.
- From Silverton, 32 numbered pieces were thrown in a hat and four were drawn.
- From Pretoria Central, 78 numbered pieces were thrown in a hat and ten were drawn.
- From Rietgat, 36 numbered pieces were thrown in a hat and four were drawn.
- From Pretoria North, 36 numbered pieces were thrown in a hat and four were drawn.

The sample of 30 was randomly selected. “In a random sample each person in the universe has an equal probability of being chosen for the sample, and every collection of persons of the same size has an equal probability of becoming the actual sample, as long as they are members of the same universe: All that is required to conduct a random sample, after an adequate sampling frame is constructed, is to select persons without showing bias for any personal characteristics” (Bailey, 1987:87).
The sampling approach involves the selection of people or events literally ‘at random’. Behind the use of random sampling lies the assumption that, if there are a sufficiently large number of samples selected, and if their selection has genuinely been ‘at random’, it is likely that it will be representative of the entire sample. For this reason the researcher believes that the sample is representative of the target population (Leedy & Ormrod, 2010:208).

Random selection means choosing a sample in such a way that each member of the population has an equal chance of being selected. When such a random sample is selected, the researcher can assume that the characteristics of the sample approximate the characteristics of the total population (Leedy & Ormrod, 2001:211).

The three experts are referred to as sample B. They were named experts A, B and C. All three experts had undergone local criminal fingerprint, photography and video-graphy courses. They were criminalistics experts because they had also completed a forensic course. Expert A had 12 years’ experience as a photographer, B had 12 years’, and C had 11 years’ experience in the field of photography.

During the research, it became important to clarify a response to a call to attend to a scene. The researcher therefore interviewed Colonel Makhafola (sample C) as part of management, to clarify aspects of the delay in attending the crime scene. He was only interviewed on the point of delay in attending the crime scene.

1.11 Data collection

For a researcher who undertakes qualitative research, it is advisable to use more than one data collection method (Leedy & Ormrod, 2010:99). Glesne (1999:158) indicates that qualitative research depends on a variety of methods for gathering data – namely, interviews, case docket analyses and literature study. According to Glesne (1999:35), triangulation is whereby the researcher applies various methods of collecting data in either qualitative or both
quantitative fusions. In the study, the researcher used literature, case dockets analysis and interview as technique to collect data.

1.11.1 Interview

In order to gather the rich data required for this research, the researcher conducted interviews with the selected research participants. The researcher made use of semi-structured questions, contained in an interview schedule. A semi-structured interview is one where the interviewer has worked out, in advance; the main areas they wish to cover, but are free to vary the exact wording of questions as well as their ordering (Leedy & Ormrod, 2001:196). If the interviewee starts to cover a new area in response to a question, then the interviewer keeps the flow going by asking relevant questions from their list. Any missing topics are returned to by the end of the interview. The set of topics is referred to as an interview schedule (Robson, 2000:90).

The interview questions were determined through the use of research questions which were divided into small questions. The researcher used a semi-structured interview, so as to give the participants enough room to provide more information on the topic. The interview schedule for the general detectives is attached as Attachment A, and the local Criminal Record Centre experts as Attachment B. The interviews were conducted with participants on a one-on-one basis and face-to-face discussion of the subject, where all the feedback was written down in detail, as explained by Goddard and Melville (2002:49).

To regulate the standard of the interviews, the researcher used the guidelines for conducting productive interviews as set by Leedy and Ormrod (2005:159-160) and Creswell (2009:183). The researcher did the following:

- Ensured that there was a suitable location for conducting interviews. The interviews were conducted at Mamelodi, Pretoria Central, Pretoria North, Silverton and Rietgat police stations’ lecture halls, and a ‘do not disturb’ notice was placed on the door to prevent interruption. The door was also locked.
- An ice-breaker exercise was done, to allow the participant to relax and not feel threatened.
The written permission obtained from the SAPS, as well as the purpose of the interview, were explained to the participants prior to the interview, and a consent form was signed by each participant.

The researcher did not interrupt the participants while they were expressing their thoughts. He wrote down their responses, and did not interrupt them while they were speaking.

The researcher did not influence or guide the participants as they were giving information.

The researcher always treated the responses as perceptions, and not as facts, until proven.

The researcher conducted pilot studies with a supervisor and four individuals from the Mamelodi police station, in order to establish the accuracy of the interview schedule – where the result was positive. Four individuals interviewed did not form part of the sample, and their responses ensured that the schedule was accurate. The interview schedule captured the information required, and the participants understood all the questions clearly. The schedule was, furthermore, forwarded to the study supervisor for comments – which were duly addressed by the researcher. The schedule was edited by a professional editor.

1.11.2 Case Docket analysis

“A case study may be defined as an empirical inquiry that investigates a contemporary phenomenon within its real-life context when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used” (Miller & Brewer, 2003:22).

A total number of 48 dockets from Mamelodi police station, for the period between 2003 and 2004, were selected randomly. For each month, two case dockets were selected, which equated to 24 cases per year, using the simple random sampling technique. Mamelodi police station was a suitable place for case docket analysis, and was next to the researcher’s residence. Despite being nearer to the researcher, all the police stations in Pretoria investigate similar types of cases, and use the Pretoria Criminal Record Centre services for photographing their crime scenes. The 2003 and 2004 case dockets were
preferred, as they were complete, and were available in the storeroom. The CAS-numbers for each month per year were written down in sequence. The researcher then closed his eyes and put a pencil on the list. The selected case dockets were then used as a sample. The researcher followed this process for each month until the number of 48 has been reached. Murder cases were analysed because it is procedure that all murder cases are photographed.

Murder case dockets were analysed to obtain answers to the following questions:

1. Were crime scene photographs taken?
2. What time was the case reported, and was the arrival time of the photographer recorded?
3. Was the exhibit removed from the crime scene due to natural causes?
4. Number of photographs in the case docket? (quantity)
5. Quality (visibility) of photographs in regard to development process and sequence.
6. Do photographs show accuracy?
7. Do the photographs compensate or correspond with the witnesses’ statements?
8. Are the sketches and plans included in the case docket?
9. Were photographers’ statements in the docket?
10. Was there an extra album in the docket?

The above questions were related to the research questions, and they assisted in addressing the research questions, the aim and the topic of this research.

1.11.3 Literature Study
The researcher traced literature which was relevant to the research title, and evaluated each item in order to answer the research questions. The traced literature is integrated in the content of the research and the research findings. Welman and Kruger (2001:33) mention a few types of literature searches as previous research, and tracing and recording of relevant literature. Then they refer to libraries as not being the only places where to search for literature. De
Vos et al. (2002:96) agree with these authors, in that various methods should be used to search for literature.

The researcher visited libraries to search for literature on the topic, “The value of photography in the investigation of crime scenes”. Furthermore, internet searches did not yield any further literature on the exact topic. The researcher therefore broke down the topic into concepts, so as to search relevant literature. The following concepts were used for the literature review: criminalistics, criminal investigation and evidence by photography, crime scene investigation, criminal investigation, introduction to criminal investigation, physical evidence in crime investigation, police photography, evidence in criminal cases, and forensic identification.

1.12 Data analysis

According to Leedy and Ormrod (2001:160), there is no single correct method of analysing data in a qualitative study. For the purposes of this research, the data analysis spiral method was used by the researcher to analyse the raw data. Data analysis is the process of bringing order, structure and meaning to the mass of collected data (De Vos et al., 2002:139). The data collected by using literature, case docket analysis and the interviews, was compared, in order for the researcher to reach the correct findings and recommendations.

To analyse the data, the researcher used the data analysis spiral (Leedy & Ormrod, 2001:159):

- Firstly, all raw information was captured and divided into smaller units.
- Secondly, all the information was perused, where primary interpretation of data was done.
- Thirdly, the data was grouped into categories, in order to give more meaning.
- Lastly, the researcher constructed the tables to explain the findings. The data analysed was grouped into similar categories, and matching was also done.
1.13 Validity

According to De Vos et al. (2002:166), the definition of validity has two parts: instrumental validity and concept validity. These actually measure the concept in question and ensure that it is measured accurately.

The researcher used internal validity reasons, as internal validity generalises from the data and content of the research study to the broader population. The researcher regards this study as valid, because the relevant instruments (interview schedule and case dockets guide) were used to collect data from the participants. The same structured interview was applicable to all participants. The results may be generalised, according to Mouton (2001:100), and the researcher should not be biased. Here, the researcher measured the value of photography in the investigation of murder crime scenes.

According to Bless and Higson-Smith (2000:126), validity is concerned with the consistency of the instrument. The researcher conducted productive interviews and case docket analyses personally, and all the records are available for viewing. All participants were able to speak and write English, because the interview was conducted in English. They were all involved in photography-related investigation, due to the fact that the general detectives attend to all murder crime scenes, as stipulated in National Instruction 2/2002 (South African Police Service, 2002). Huysamen (1994:118) states that the instrument used must be able to cover external and internal validity. Welman and Kruger (2001:139) state that, if the instrument cannot measure what it is supposed to measure, the results will not be valid. Welman and Kruger clearly show that an instrument may be reliable, but not valid, or, may be valid, but not reliable. When doing validity and reliability, issues such as external and internal validity should be considered – for example, the themes, which may change the research aim.

According to De Vos et al. (2002:121), “generally, when identifying limitations, the researcher must consider the validity and reliability of all data collection instruments, access to data, ethical problems, as well as the ability to control
extraneous factors in the environment and in participants”. De Vos et al. (2002:116) state that the instrument must measure only what is supposed to be measured and that success of the instrument is very important. Glesne (1999:153) states that the interpretation of the research results must be trustworthy. A pilot study was conducted to test the particular instrument.

1.14 Reliability

Reliability may be in various forms—for example, criteria-related reliability, predictive reliability, concurrently reliability and construct reliability (Welman & Kruger, 2001:138-141). According to Terre Blanche and Durrheim (2002:83), reliability is the process of research and the decisions that the researcher has taken to accomplish the research project. Research methodology has to comply with the principles of truth, reliability and objectivity. The concept ‘reliability’ is the ability of an instrument to measure what it is designed to measure (Welman & Kruger, 1999:189).

The reliability of an instrument refers to its ability to produce constant measurement every time. Qualitative research is used to collect descriptive data. It can be used to obtain opinions and feelings of participants, and, therefore, techniques such as structured interviews can be utilised. The researcher developed a structured interview schedule which was applied consistently to all the participants in the same sequence. The schedule was tested in a pilot study, and was scrutinised by the study supervisor for reliability purposes.

The total of 48 murder case dockets for the period between 2003 and 2004 were selected simple randomly. Here, 24 cases from each year were selected, using the simple random technique. Each month’s murder case numbers were mixed in one basket, and only two cases for that month were selected (for example, all January 2003 murder cases were put into a single basket, and only two were selected, and the same procedure was applied to all cases between 2003 and 2004). The same grid was used to collect the information from the above case dockets.
1.15 Ethical considerations

The researcher ensured ethicality by addressing the following, as mentioned by Leedy and Ormrod (2005:107):

1.15.1 Protection from harm
The researcher made sure that the participants were protected from risk or harm of any nature (De Vos et al., 2002: 62). This was done to ensure the participants’ safety. The researcher obtained permission from the SAPS (attached as Annexure A), as well as from the participants, to conduct this study.

1.15.2 Informed consent
Each research participant was informed that they had the right to withdraw at any time before, during or after the interview sessions, and they agreed (Denscombe, 2002:189). None of the participants withdrew.

1.15.3 Right to privacy
All the participants’ privacy was taken into consideration. The names and surnames of participants were not used. Instead, numbers were used to identify them in this study. The participants were called Participants 1 to 30.

1.15.4 Honesty with professional colleagues
The results were reported as a true reflection of what transpired. No manipulation of the recovered information from the participants and case dockets in this study was done. The literature sources consulted were acknowledged throughout the study, and are included in the complete list of references. All direct quotes were acknowledged accordingly.

1.16 Chapter layout

Chapter layout is the comprehensive direction of the study. The subsequent chapters of this study are arranged in the following format:
CHAPTER 2: The meaning of criminal investigation.
This chapter addresses the meaning of criminal investigation and forensic investigation. The differences of the above two concepts are covered, and the purpose, with the objectives, of criminal investigation, is the focus of this chapter. Furthermore, the crime scene, types of crime scene, the Locard principle, searching, sketching and photographing of the crime scene, is also discussed.

CHAPTER 3: The evidential value of photography in the investigation of a crime scene.
This chapter covers the after-scene processes, and integrates the linking of photographs with various statements to test for relevancy and accuracy. The meaning of photography, the purpose, value and types of photography, are covered. This chapter ensures the evidential value of photography in the investigation of a crime scene.

CHAPTER 4: Findings and recommendations.
All the findings of the research are included in this chapter, and the recommended measures to be applied to redress the situation, are proposed.
CHAPTER 2
CRIMINAL INVESTIGATION

2.1 Introduction

Photography is part of the investigation process which provides the court with real evidence. Photographs are taken to determine the nature of the scene and the clues that are found, to determine the type of crime that was committed and, ultimately, the methods used by the offender to commit the offence. Photographs are primarily taken to record important aspects of the investigation process. It is the duty of the first responder at a crime scene to summon the photographer and other role players to the crime scene, as indicated in Ogle (2004:16).

Sonne (2006:9) highlights that photography is one of the most essential tools that every investigator should bring to the crime scene. Crime scene photographs serve as evidence in a court of law. It indicates to the court how the crime was committed, and, most likely, the condition of the crime scene after the crime was committed. Photography may be used at different crime scenes at any time of the day, in any climate, and either aerial or under water. Officers specialising in the various fields of photography are utilised and different types of equipment and techniques are applied towards achieving better results (Holden, 2006:64).

The reason for photographs being taken is to record physical evidence, and also for the electronic/digital preservation of the crime scene. Preservation of the crime scene begins with recording evidence by camera, sketch and notes, among others. Preservation further involves forwarding physical evidence to the laboratory for examination and analysis, obtaining it from the laboratory, and then keeping it under lock and key, where it is safe until delivered in court.

In this chapter, the researcher gives brief explanations of the meaning of criminal investigation, forensic investigation, and the objectives and purposes of
criminal investigation. The protection, searching and preservation of the crime scene are also discussed.

2.2 Meaning of criminal investigation

Criminal investigation is the systematic search for the truth, and is aimed at the positive clearing up of the crime situation on the strength of objective and subjective traces (Gardner, 2005:2; Marais & Van Rooyen, 1990:17). Nevertheless, criminal investigation is further explained as a process of discovering, collecting, preparing, identifying and presenting evidence to determine what happened and who is responsible for the wrongful deeds (Du Preez, 1996:1). Furthermore, it is referred to as a reconstructive process that uses deductive reasoning based on exhibits and evidence at one’s disposal, to establish if a suspect has, indeed, committed an alleged offence (Bennett & Hess, 2004:4).

According to Bennett and Hess (2004:4-5), Marais (1992:3-6), Gardner (2005:23) and Prinsloo (1996:17), the meaning of ‘criminal investigation’ is collectively outlined as follows:

- Protection of physical evidence and preservation of evidence regarding an alleged offence.
- Systematically searching for the truth about the alleged crime.
- Discovering the stolen items and identifying the culprits.
- Proving the suspect’s innocence, and singling out the ‘who’, ‘why’, ‘where’, ‘which’ and ‘what’ questions.

The police have a legal obligation to identify, individualise and apprehend criminals, as prescribed in section 205 of the South African Constitution Act 108 of 1996, and outlined further in section 13 of the South African Police Act 65 of 1995. Criminal investigation is a logical, objective and legal inquiry involving a possible criminal activity (Gilbert, 2004:37). On the other hand, Bennett and Hess (2004:4) define criminal investigation as the process of discovering, collecting, preparing, identifying and presenting evidence to prove the truth or
falsity of an issue. There is no major variation on the definition of criminal investigation in literature.

To the question, “What is the meaning of criminal investigation?” the participants’ (sample A) responses were varied. The concept ‘criminal investigation’ is common, but out of 30, only six participants could not explain the concept. As they referred to it as “detecting the criminals and witnesses”, they were not in line with the meaning. Their responses were not sufficient, but also not totally wrong. Twenty participants explained criminal investigation as a process of searching for the truth about alleged offences, and gathering of evidence. Four participants related these as systematic searches for the truth, and Government being the custodian.

The literature gives several basics in defining the concept ‘criminal investigation’. Gilbert (2004:37) refers to it as a logical, objective and legal enquiry, while Bennett and Hess (2004:4) focus on discovering, identifying and presenting evidence in court, to prove the truth. Meanwhile, the 24 participants gave a nearly similar understanding by saying that it “is the process of searching the truth and gathering of evidence”.

Even though there is a minor variation in the definition of criminal investigation, the common understanding of Bennett and Hess (2004) and 24 of the participants about the searching for the truth and gathering of evidence, justifies that there was no huge difference in terms of the meaning of ‘criminal investigation’. The remaining six participants had little information, which did not link with the meaning of ‘criminal investigation’. Their approach was about dealing with criminals during the investigation process, detection of the criminals, and charging of the suspect. This is a shortcoming, as they deal with criminal investigation on a daily basis, and it is of concern to realise that some detectives have limited knowledge about this concept.

It is therefore of the utmost importance to consider both the literature and the participants’ points of view as rich additional information in the meaning of
‘criminal investigation’. From the literature and from 24 participants’ views about the meaning of criminal investigation, the researcher agrees with both views.

The researcher is of the understanding that criminal investigation is not only the systematic search for the truth, but entails how and why that truth is searched. The process of criminal investigation is also based on the collection of exhibits, identification, processing and analysing of information, to solve a crime committed or an allegation.

### 2.3 Meaning of forensic investigation

The concept ‘forensic investigation’ entails the lawful detection of objects and people, the detection of the true reflection about the incident committed, and gives information about the methods and techniques employed by the suspects, with the intention of bringing them to court (Horswell, 2004:3-4). Pollex (2001:93) indicates that forensic investigation is the investigation with the aim of instituting court proceedings (both criminal, as well as civil), and Gilbert (2004:17) refers to this concept as “criminalistics” – unlike forensic investigation, in the sense that it applies many different fields, such as chemistry, physical science, forensic auditing and mathematics. Photography also forms part of the field in criminalistics.

Eventually, Horswell (2004:4) and Weston and Wells (1990:46) outline the following basics regarding the word ‘forensic’:

- It deals with the application of science in the investigation for court purposes.
- It is the science which is concerned with criminal investigation. The term ‘forensic' refers to a science which involves criminal investigation for court purposes, unlike medicine.
- It includes forensic science, which deals with forensic laboratory analysis, as exhibits are forwarded to a forensic laboratory for examination
- Forensic investigation is the application of both scientific and matrix skills to solve a legal enquiry and criminal allegations.
This field is applied to law, in order to track down the techniques and methods criminals use to further their criminal activities (modus operandi).

These include scientific investigative methods and techniques to ensure that a proper investigation is conducted, and to present scientific evidence before a court of law.

It is the application of scientific methods and techniques required for the reconstruction of the crime scene.

The participants’ (sample A) responses in regard to the meaning of ‘forensic investigation’ were as follows:

- The association of activities and their relationship in more appropriated, logical and chronological manner (3 participants)
- The inclusion of forensic science in the investigation of crime, appropriately (2 participants)
- Application of forensic science investigation in a meaningful nature (2 participants)
- An investigation aimed at instituting court proceedings (6 participants)
- A combination of law and science to prove a case before a court of law (4 participants)
- The discovery of evidence by the application of advanced technology (3 participants)
- Application of skills related to scientific findings to solve the allegations (6 participants)
- The addition of forensic science to traditional investigation methods (1 participant)
- The three remaining participants indicated that forensic investigation is an investigation aimed at private and corporate investigations – not for government departments.

Botha (2009:111) finds that ‘forensic investigation’ refers to an investigation activity associated with ‘financial crime’ and ‘financial investigations’. Botha also finds that the concept ‘forensic investigation’ involves the following:

- Forensic investigation is undertaken for court purposes or for the purposes of law (juristic purposes).
Forensic investigation involves the application of scientific methods.

The investigation activity of ‘examination’ or ‘analysing’ appears in five of the themes presented in the answers provided by the participants.

Forensic investigation is similar to a criminal investigation.

From the above it is clear that forensic investigation partly refers to scientific investigation at the crime scene and the analysis of evidence gathered from the scene in laboratories. Still another dimension of forensic investigation refers to a form of investigation that goes along with criminal investigation and the so-called corporate investigations, with specific reference to financial investigation. This is why three of the participants referred to corporate and private investigation – which is actually not wrong.

Although three participants associated forensic investigation with private and corporate investigation, they need to acknowledge the fact that the SAPS also use science, and have the mandate to conduct investigations. Forensic science laboratory experts perform field – as well as laboratory – work. The fingerprint experts conduct both field and laboratory work to analyse the work from the field. Nevertheless, the general detectives collect physical evidence from the crime scene, and dispatch it to the forensic laboratory to be analysed scientifically.

From the above information and from various authors, ‘forensic investigation’ is an investigation aimed at court proceedings, and the use of advanced technology to investigate crime. This response is nearly similar to the discussion of Horswell (2004) and Bennett and Hess (2004), above. At least, some of the participants had a clear understanding of the concept and meaning of ‘forensic investigation’. The participants absolutely supported the ideas of Horswell (2004) and Pollex (2001), by saying that forensic investigation relates to scientific methods which are often applied to investigation aims for court. Furthermore, they agreed that it is the addition of science in investigation.

The researcher has made some deductions which clearly show that ‘forensic’ implies the application of scientific methods to investigate crime, and ‘forensic
‘investigation’ refers to investigation aimed at court purposes. For this reason, photography entails a scientific aid approach to investigate crime, although photographic technology is used to capture evidence, and physical evidence is mostly relevant to be classified as an investigative aid.

The researcher in this instance has acknowledged that “a photographer is a forensic investigator, because some forensic fieldwork is performed by a photographer” – for example, collecting of physical evidence. The conclusion was made on the facts discussed above and the participants' viewpoints. The researcher regards forensic investigation as the application of science in the investigation of crime, for court purposes.

2.4 Forensic investigation vs criminal investigation

After thoroughly analysing the meaning of forensic investigation and criminal investigation, from literature and from the twenty-seven participants' points of view, the researcher came up with the following differences between the two concepts:

Table 1: The differences between forensic and criminal investigation

<table>
<thead>
<tr>
<th>Forensic investigation</th>
<th>Criminal investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is more in the form of auditing, and figures are used to solve the angles related to specific irregularities.</td>
<td>This is an art, originally, where the pieces of evidence were put together to arrive at an appropriate decision.</td>
</tr>
<tr>
<td>Mathematics and science have a maximum influence in forensic investigation.</td>
<td>It focuses mainly both on criminal and civil matters, but, more specifically, criminal activities are the domain.</td>
</tr>
<tr>
<td>Gather information and evidence to build a chain of events and evidence that will prove or disprove the dispute.</td>
<td>It does apply modern methods of investigation, but relies mostly on traditional ways of investigation.</td>
</tr>
<tr>
<td>To discover the accountable individual by applying forensic analysis.</td>
<td>This is the custodian of state departments in most of the cases.</td>
</tr>
<tr>
<td>Analyse the physical evidence to</td>
<td>Directed to commissions and</td>
</tr>
</tbody>
</table>
identify and individualise the responsible perpetrator by using modern scientific methods.

departmental enquiries.

Give clarity about uncertain matters before the court.

Does not include more sophisticated techniques and methods of enquiry.


Basically, it entails criminal-orientated investigation.

Forensic investigation is science naturally, which is applied in the criminal investigation.

Corporate services and private entities are the common beneficiaries of forensic investigation.

Sources: Gardner (2005:2); Marais and Van Rooyen (1990:17); Bennett and Hess (2004:4-5); Marais (1992:3-6); Prinsloo (1996:17); Horswell (2004:3-4); Pollex (2001:93); Gilbert (2004:17); Weston and Wells (1990:46).

Since three participants were of the opinion that corporate services are the only ones who apply forensic investigation, they should be advised about the fact that, even the SAPS uses forensic investigation – for example, collecting blood from the crime scene and sending it to the forensic science laboratory for analysis. There are few differences between the two concepts, according to the participants’ feedback above.

Regardless of these differences, the fact of the matter is that one cannot say that one only uses forensic investigation during criminal investigations. That brings one to the conclusion that even though there are some differences, the two works together. In conclusion, one may say that forensic investigation and criminal investigation are identical. Based on this premise, from now on, in this research, only ‘investigation’ is referred to by the researcher, and, by that,
including both concepts. Due to the fact that the two concepts are identical, from now on forensic and criminal investigation are referred to as ‘investigation’.

2.5 The purpose of investigation

The basic purpose of investigation is to prevent crime (Du Preez, 1996:1). After the uniformed members were unsuccessful in the prevention of crime, the detectives took over to investigate the crimes committed. The reactive method is the result of failed proactive intervention. According to the researcher’s experience, detectives fulfil the crime prevention function as follows:

- After proper investigation is done and the suspect is arrested, it is implied that the suspect will be behind bars and will no longer commit crime
- Furthermore, successful bail opposition will also be a ‘plus’ factor in crime prevention.
- The sentencing of the accused completes the circle of crime prevention.

The following response from the participants (sample A) was received in response to the question, “What is the purpose of investigation?”

- Four participants responded positively. Participant 2 indicated that it is to minimise crime, while Participant 16 stated that it is to reduce crime. Participants 20 and 29 stated that it is to prevent crime.
- Three participants said it is to collect evidence.
- Four participants said it is to gather information and evidence, to collect a chain of events, and evidence that will represent the truth.
- Four participants said it is to search the truth.
- Four participants said it is to reveal the truth.
- One participant said it is to investigate crime in order to find the suspect.
- Two participants said it is to locate the culprits, victims, witness and stolen property.
- Two participants said it is to analyse the physical evidence for court purposes.
- Two participants said it is to maintain continuity of possession and protect the exhibits’ integrity.
- Two participants said it is to redress the wrongful act.
Two participants said it is to discover the alleged criminal.

Basically, the researcher found that the purpose of investigation is to prevent crime. The feedback from the first four participants was more equivalent to the appropriate purpose of investigation as postulated by Du Preez when he states that “the primary function of any police institution is to prevent crime”. The remaining twenty-six participants related the purpose of investigation to the objectives of investigation.

2.6 The objectives of investigation

The literature on the objectives of investigation includes, among others, Gardner (2005:2) and Fisher (2004:48), who state that the objective of investigation is to establish that a crime has actually been committed, to identify and apprehend the suspects, recover the stolen property, and to bring the culprit before the court to account for any charge. According to Du Preez (1996:4-7), the objectives of investigation include, among others, the identification of crime, gathering evidence, individualisation of the suspects, arresting of the suspect, recovery of stolen property, and involvement in the prosecution process. Swanson, Chamelin and Territo (2003:28) claim that the objective of investigation is a systematic planned process, consisting of the abovementioned processes discussed by Du Preez (1996).

Through photographs, the identification of exhibits and physical evidence will be clearly viewed, and will then make it easy for the investigator to accomplish the objectives of investigation by viewing the pictures. Photography serves as an investigative tool during the investigation process, which captures evidence and exhibits. In this regard, all participants were familiar with the objectives of investigation as stated above:

- Trace and arrest the suspect (9)
- Gather evidence for court (5)
- Recover the lost items (6)
- Discover the truth (2)
- Decrease crime (prevent crime) (1)
The objective of investigation is to detect crime, and crime is detected by thorough scrutinising. This is done by collecting all evidence relevant to the crime committed. When an allegation is made at the desk of the client service centre, the investigator must establish if there was a crime committed, but listening to the report will be of the utmost importance to determine the type of crime committed, although at this stage the investigation has not yet started.

All participants mentioned objectives of investigation as stated in the literature. The literature covered issues such as, for example, crime detection, locating and identifying the suspects, arresting the suspects, locating documents and preserving evidence, recovering stolen goods, and preparing the case for court. The literature covers the objective in broader scope, unlike the sample. It is important to expose the police to other objectives of investigation; therefore, there is a slight variation in terms of literature and the sample: whereas the sample covered the minimum of information, the literature includes additional information regarding the objectives of investigation.

The researcher regards the objectives of investigation as follows: identification of crime, gathering of evidence, individualisation of the crime, arresting of the suspect, recovery of stolen property, and involvement in the prosecution process. This is clearly stipulated in Du Preez (1996:4-7).

2.7 Crime scene

Inman and Rudin (2001:196) define the crime scene as “the apex of an inverted pyramid that expands to encompass the investigation of a crime; the recognition, analysis and interpretation of evidence and finally a court trial.” This is a very complicated definition when compared with Horswell (2004:3), who highlights that “any place could become a crime scene and it is usually a place
where a crime or an incident that may end in legal proceedings has occurred”. Gilbert (2004:91) agrees with Horswell (2004), as a crime scene being the place where direct or indirect evidence of a crime, or of an alleged crime, can be found.

Adams, Caddell and Krutsinger (2004:3) state that it is not only where to get witness and victim information, but also where visible or invisible physical evidence that could assist in solving a crime, can be found. The information in the form of physical evidence needs to be clearly photographed, in order to keep the record.

According to literature, it is clear that the crime scene is the place where the crime was committed, and where physical evidence associated with the crime may be tracked down (Fisher, 2004:29; Horswell, 2004:2). It is very important to be aware, as an investigator, of taking several points into consideration when dealing with the crime scene. Genge (2004:3) indicates that a “crime scene” is not only the actual location of the crime, but also the staging and planning area. It may, in fact, be the initial place where the crime was planned or ended.

All 30 participants (sample A) gave clear definitions of a crime scene:
- 6 participants said it is the place of an incident, where the physical evidence may be traced.
- 11 participants said it is where an alleged crime took place.
- 4 participants said it is where physical evidence may be found.
- 3 participants said it is where witnesses and victims may be traced.
- 3 participants said it is where some valuable information may be found.
- 3 participants said it is where criminal activities took place.

The participants covered the question of the crime scene very satisfactorily, as discussed in the literature. Apart from the literature-based explanation above, which covers, extensively, the meaning of a crime scene, the participants were more direct. Based on the above points, the researcher believes that the participants understood the meaning of ‘crime scene’ adequately.
2.7.1 Types of crime scenes

There are two types of crime scenes: the primary and secondary scenes (Gardner, 2005:67). To illustrate: the primary crime scene in a murder case will be the exact place where a person was murdered; therefore, the secondary crime scene could be where the corpse was eventually dumped, after having being removed from the original place of the killing. When these two types of scenes are compared, they must correlate. This means that the investigator must be able to make a factual connection between the elements of crime found at both scenes. Horswell (2004:3) agrees with this connection, and further asserts that all elements of crime which ended at the primary scene must relate or overlap with elements that are present at the secondary scene.

2.7.1.1 Primary crime scene

These will differ from one crime to another. The primary crime scene is the area or place where the incident (or where the major crime) took place or started (Horswell, 2004:3). Gardner (2005:67) agrees with Horswell, but says further that it is also the exit from – or entry point to – the crime scene, by the suspect. Based on experience, the researcher identified another feature of the primary crime scene – namely, that the elements of crime are usually found at the primary crime scene.

According to the researcher, when photographing the crime scene, one will easily determine whether it is a primary or secondary scene. When the crime scene is thoroughly examined, there is more chance of determining the proper elements of the crime. Then, the original crime definition might change, depending on the findings at the secondary crime scene. The photographs of the crime scene will indicate what has transpired; therefore, photographs from both crime scenes should be compared, to clearly verify the elements of the crime committed. Physical clues will also play a major role in determining the elements of the crime.
2.7.1.2 Secondary crime scene

Gardner (2005:68) and Horswell (2004:3) state that the secondary crime scene could be seen as a place or area where physical evidence relating to the incidence may be found. It is sometimes misleading if one only discovers the secondary crime scene. There will be more questions and facts unanswered on what transpired, if the primary crime scene is not yet located. Horswell (2004:3) is of the opinion that potential evidence is transported away from the primary scene to the secondary scene.

Through his experience, the researcher has discovered that crime scene photographs will clearly indicate to the investigator what took place, and the situation will be analysed through looking at the photographs. This indicates clearly that it is very important to take pictures of the crime scene. When taking the orientation photographs, it is also important to make sure that the bystanders appear on the photographs, as there might be witnesses and suspects among them. This will assist the investigator, during the investigation process, to analyse the pictures and relate to available information gathered. Photographs will indicate where exactly specific evidence was found and collected. One may compare the different crime scenes pictures, to determine the modus operandi of the culprits. By merely looking at the pictures, one might conclude that it is the same suspect’s operations (Weston & Wells, 1990:46). One mistake at the crime scene will never be rectified (Inman & Rudin, 2001:196). This omission and commission at the crime scene might then seriously affect the outcome of the case in a court of law.

An inexperienced investigator may conclude by saying that the crime committed is suicide, while, in fact, it is murder. After properly documenting the crime scene on photographs, a clear picture will then emerge. In other words, there is no obvious case without proper analysis. The observation and the final outcome of the investigation might differ (Inman & Rudin, 2001:198).
2.8 **Locard Principle**

The Locard principle (contact theory) is the central point where each contact is analysed, as the transfer of mutual traces takes place when two or more objects come into contact with one another. Practically, there is always clear contact at each crime scene, and the investigator therefore needs to know which methods need to be applied in detecting such contact. The Locard principle, also known as the contact theory, states that there is a reciprocal transfer of traces whenever two objects or persons come into contact with one another (Van Heerden, 1986:187; White, 2004:56). “Locard principle” means that criminals leave traces of themselves at a crime scene and on the victim, and they take away evidence that was present (Holden, 2006:42). At the crime scene there is always some clue left, or taken along by the suspect (contact theory) (Lyman, 1999:41; Gilbert, 2004:27; Siegel, Knupfer & Saukko, 2000:54). Furthermore, Lyman (1999:41) states that one hallmark of investigation is the ‘transfer of evidence’ theory. The theory holds that whenever two objects meet, some evidence, however microscopic, may remain behind.

Initially, the Locard principle implies that the traces are left behind by dual or more items in contact, and the theory is basically identified as transfer of evidence. The Locard principle usually gives leads for the investigators (Fish, Miller & Braswell, 2011:110). This is to confirm that each crime is out of contact, and not necessarily all crime is of a contact nature – for example, defamation of character – although there is indirect contact with words and actions. There should be no edition or deduction on crime scene photography. When light captures the shadow of an object and contact each other, the traces are left behind and should be maintained as such.

2.9 **Searching the crime scene**

The searching of the crime scene is vital, because the information which is valuable to the solution of crime committed maybe detected there. There is a
need to conduct a thorough crime scene search, using appropriate search methods which will not contaminate the crime scene.


- Take full control of the scene.
- Remove all persons that have no interest at the scene of crime.
- Remove the complainant and witness to a secure place for questioning.
- Request the complainant and witness not to discuss anything, because this can lead to suggestion and misrepresentation of the facts.
- To prevent this (discussing the case), place them under the control of a member of the services.
- Cordon off the scene, if necessary, with rope or another physical contribution.
- If the suspect is found at the scene, and circumstances are such, he must be arrested, searched and removed from the scene.
- Write down all observations and the time they were made.
- Obtain a signed receipt from the person accepting the evidence.
- When the evidence is returned, check for one’s identification mark and ensure that it is the same item.
- Any change in the physical appearance of the evidence should be brought to the attention of the court.

Evidence discovered in an unlawful manner is not acceptable in court (Joubert, 2001:321). Violation of the rights of the individual should be taken into account when searching his person, or a container, or premises, under his control. The purpose of a search must not only be to achieve the goal of investigation, but also adherence to the Constitution, as stipulated in chapter 2 of the Bill of Rights – that is, the right to privacy.

Although the police are empowered to conduct lawful searches in certain circumstances, the law gives clear directives on how these powers may be
executed. Police officials are not legally compelled to execute these powers, but are permitted to use their discretion in certain circumstances (Joubert, 2001:299). A search must always be conducted in a manner that promotes the maintenance of law and order, without violating the individual’s rights – as is outlined in chapter 2 of the Bill of Rights. The Bill covers those rights which all human beings are entitled to – for example, the right to remain silent.

The investigator must document a comprehensive report, with regard to the crime scene, which covers all the activities carried out, and the findings (Ogle, 2004:21). During the case docket analysis, it was found that there were only four case doockets in which the crime scene photographs had not been taken, but reasons for that were not indicated. In the remaining case doockets, the exhibits were not removed from the crime scene. The investigators’ and photographers’ statements did not indicate whether there were any items removed due to natural causes. If physical evidence is removed before the crime scene is photographed, those photographs will not be admitted as evidence in court (Gilbert, 2004:95).

2.9.1 The importance of searching the crime scene
The searching of the crime scene should be done in an organised and effective fusion, due to the fact that no two crime scenes are exactly the same, and no single method of searching can be applied to all scenes of crime (Gilbert, 2004:104). The crime scene manager, or the detective in charge, will organise the team, in order to conduct the searching of the crime scene. The crime scene manager is the one who will determine the suitable search method (Gilbert, 2004:103).

Most commonly, the people who contaminate the crime scene are fellow law enforcement officers. The crime scene investigator must be very strict and consistent when in control of the crime scene and that should be done irrespective of seniority. The member in charge should treat each member equally and fairly at the crime scene (Gardner, 2005:91; Ogle, 2004:14; Gilbert, 2004:94).
Some police officials who invade the crime scene should be allocated tasks – for example, they may be utilised as guards if it is a major scene. Others may take statements from witnesses, and, furthermore, they may guard the suspects and escort the injured to hospital.

Each crime scene is important and unique. There are various search methods to be used to search a crime scene. According to Marais and Van Rooyen (1990:53), care must be taken, when walking around at the crime scene, not to disturb – and tamper with – physical evidence. Some evidence is small and fragile, and therefore easily destroyed. It is impossible to completely prevent contamination, but it can be minimised through proper planning, when approaching the crime scene. Use protective clothes when searching the crime scene (for an example, hand gloves and other protective clothes). Thereafter, the disposal of used gloves at the crime scene must be limited. The used gloves must be put into plastic, and, when collecting other exhibits, a new set should always be used. Never re-use gloves at the crime scene, as this will contaminate the exhibits and the transfer of clues (Marais & Van Rooyen, 1990:53).

The primary motive for searching the crime scene is to detect evidence and physical clues. The investigator must have full confidence that the suspect has left something behind, and has also taken something along from the crime scene (Locard principle). The contact theory is a very useful instrument for the investigator. A small item, such as soil, might help to connect the suspect(s) with the crime scene. Teamwork also plays a very important part in the searching of the crime scene, and it also depends on the size of the scene, in determining the suitable search method. This is where the investigator has to take complete control and give clear instructions to the team members, and explain the objectives of the search and procedure to be followed (Marais & Van Rooyen, 1990:53).

There is no strict rule regarding the searching of the crime scene. One should decide to use the suitable search method when searching the crime scene.
When the crime scene is searched, all important information will be captured on photographs (Gilbert, 2004:104).

The role of photography is to capture the information recovered at the crime scene. Photography assists in ensuring that the discovered items are linked to the crime scene. The investigator is captured on photographs while conducting the search, and this serves as proof if any civil allegation is made against the police (Gilbert, 2004:105).

According to Gilbert (2004:104), the primary motive for searching the crime scene is to detect evidence and physical clues, and the appropriate search method should be applied. The suspect should be arrested if found at the crime scene, and all bystanders should be removed so that the police are able to execute their function properly.

To the question, “What is the importance of searching the crime scene?”, the participants (sample A) all outlined similar ideas: all 30 participants referred to the importance of searching the crime scene as being to discover physical evidence and exhibits, and arrest the suspects –if available. Furthermore, the appropriate search method is determined by each situation. The researcher regards the importance of searching the crime scene as being in discovering physical evidence which will assist during the investigation process.

2.10 The importance of marking the exhibits at the crime scene

At the crime scene there is a lot of work to be done. It is therefore most important for the investigator to mark all points identified. This is done in order not to forget where the exhibits are placed. The marking may be done with various objects such as cones or police flash cones. The first member on the crime scene will identify all physical evidence on arrival, and the witnesses or the complainants will assist in this regard (Gilbert, 2004:95; Holden, 2006:64).

On the arrival of the investigating officer at the crime scene, the first member must conduct a proper handing over of the crime scene to the investigator, and
that includes all identified exhibits. The final walkthrough will determine any omission. The marking of exhibits at the crime scene will ensure the protection and complete recording of all exhibits (Gilbert, 2004:107).

To the question, “Explain the importance of marking the exhibits at the crime scene”, the responses were as follows:

- According to 18 participants (sample A), the idea of marking the exhibits and physical evidence at the crime scene is done to protect them, and not to forget where each item was located.
- The other 12 participants only highlighted the point of marking as a means of identifying any discovered points at the crime scene.

Based on experience, the researcher emphasises that after marking all points at the crime scene, the entire crime scene should then be photographed. The purpose of marking exhibits and physical evidence at the crime scene is for the photographer to capture everything, and to ensure collection of all exhibits and physical evidence thereafter. By marking all visible exhibits and physical evidence at the crime scene, it ensures that all identified items appear on photographs.

### 2.11 Pointing out of the crime scene to photographer

The proper and sound relationship between the first member and the photographer will make the investigating officer’s duty very simple. First responders have first-hand, accurate information pertaining to the condition of the crime scene; therefore, it is essential for them to brief the photographer properly. These officers have all the facts about exhibits and physical evidence, including the victims and the witnesses, at the crime scene. The photographer will be able to function properly, and record a complete reflection of the crime scene after being briefed by an informed first responder. There will be no evidence left out at the crime scene if the two work hand in hand (Petraco & Sherman, 2006:161). The importance of pointing out physical evidence to the photographer for capturing is crucial to the evidential value of such evidence.
To the question, “Explain the reasons why the first responder of the crime scene should point out the crime scene to the photographer”, the responses were as follows:

- All 30 participants of sample A agreed that the importance of pointing out the crime scene to the photographer is to ensure that the photographer has complete information about the crime scene, how it was found, what happened, and to show them already identified physical evidence.

Sample B, expert A’s response was to say that the reason is that the first member has first-hand information about the crime scene; therefore, it is important to point out the crime scene to the photographer. Experts B and C said the same, and further, that it is for the photographer to know if the crime scene was disturbed, and ensure that all physical evidence is intact. It was determined, in this research, through interviews and literature, that the good working relationship between the first responders to the crime scene and the photographer is essential. The orientation is necessary, as the photographer arrives later at the crime scene, for the purpose of having complete information about the crime scene. Finally, the reason for pointing out the crime scene to the photographer is to give the photographer first-hand information about the crime scene, and indicate all physical evidence identified.

2.12 Photographing the crime scene

An investigator should not disturb the scene, or any objects at the scene, prior to photographing (Weston & Wells, 1990:44). Unless there are injured parties involved, objects must not be moved until photographed from all necessary angles. If objects are removed, positions changed, or items added, the photographs may not be admissible as evidence in court of law, and their intended value may be questioned (Saferstein, 1990:33). Phillips and Bowen (1989:21) state that the advantage of photography is based on the fact that the crime scene or incident can be recorded, while it is fresh and undisturbed, from all relevant angles. It also gives objectivity and accuracy.
The photographs should clearly and accurately depict the scene as it was found, the path taken by the criminal to the scene, the point of entry, the exit and the escape route. Detailed photographs should be taken to show the items of physical evidence in the condition in which they were found by the investigator prior to their removal (Fisher, 2004:82).

The role of photography in investigation is to present a logical story visually. A series of poorly planned and executed photographs may result in a weak and unsuccessful prosecution. To adequately present the crime scene visually, the photographs must form an organised sequence and show all relevant locations and objects. One guideline for taking crime scene photographs is to progress from the general to the specific. This involves using three major types of vantage point: long-range, mid-range and close-up (Berg & Horgan, 1979:42; Adams et al., 2004:194; Fisher, 2004:82).

There is no specific rule for documenting the crime scene, according to Inman and Rudin (2001:196), due to the uniqueness of each crime scene. The investigators have to rely on their previous experience and training background, to document the crime scene. Each crime scene should be photographed as completely as possible. This means that the crime scene should include the area in which the crime actually took place, and all adjacent areas where important acts occurred immediately before or after the commission of the crime. Overview photographs of the entire scene and surrounding area, including points of exits and entry, must be taken from various angles. If the crime has taken place indoors, the entire room should be photographed to show each wall area. Rooms adjacent to the actual crime site must be similarly photographed. If a crime scene includes a body, a photo must be taken to show the body’s position and location relative to the entire scene. Close-up photos depicting injuries and weapons lying near the body are also necessary (Marais & Van Rooyen, 1990:41-43).

According to Horswell (2004:143) and Bennett and Hess (2004:48), it is important to be aware of the problem of photographic distortion. The photograph must not misrepresent the scene, person or object that it purports
to depict. If the photographer selects a proper point of view with natural perspective, the probabilities of distortion-free photographs increase. The type of camera selected by the investigator also has a bearing on the quality of photographs. The most expensive cameras tend to produce a better quality photo than those less expensive cameras that develop prints shortly after exposure (Gilbert, 2001:95).

As items of physical evidence are discovered, they are photographed to show their position and location relative to the entire scene. After the capturing of an overview picture, the mid- and close-up photograph should follow. When the size of the item is of significance, a ruler or other measuring scale may be inserted near the object and be included in the photograph as a point of reference (Saferstein, 1990:34). The following should be considered when visiting the crime scene (Gilbert, 2001:84; Marais & Van Rooyen, 1990:44):

- The photographic record should be comprehensive, and should include the general layout of premises or features of the area. This will depend on the seriousness and circumstances of the crime.
- The photographic records should illustrate the relative position of the room, the state of those rooms and the position of the house in the street, in relation to the crime scene.
- Footprints, tyre tracks and tool marks should be photographed with a scale, before casting.
- A close-up and positioning photograph must be taken.
- Photographs should be taken from a number of angles and positions, including those described by witnesses.
- A series of photographs should be taken of potential evidentiary material such as bodily injuries, weapons, trace material, cartridge cases, damage, and other relevant items.
- As the scene examination progresses, further photographs should include new potential evidentiary material found, or areas of importance which were previously concealed.

During the case docket analysis, the number of photographs in each case docket was calculated, and the following was discovered (quantity): Upon
analysing 48 case dockets, it was found that there was an average of 6 to 30 photographs in each case docket. The literature is very general about this issue, but it is recommended to take as many photographs as possible (Fisher, 2004:82). This should be done with the consideration of economic factors in mind, as well as the nature and seriousness of the crime. Between 6 and 30 photographs is sufficient, but, once more, this depends on the number of points to be photographed. There is no specific number of photographs needed for each crime scene. Out of 48 case dockets, four case dockets were without photographs, and, therefore, 44 dockets had crime scene photographs. This proves that most of the crime scenes were photographed. There may be various reasons why the crime scenes were not photographed – such as, if the victim had already been taken to hospital, or late reporting of the case to the police, where the crime scene had already been tampered with.

The arrival time of photographers at the crime scene was recorded in the investigation diary. In 48 case dockets analysed, it was found that only in six case dockets, was the time of the photographer arriving at the crime scene less than 45 minutes, and the average time of arrival in the remaining 42 case dockets was between one and two hours – which is not a good response to a murder crime scene. The time factor is determined by many aspects. One of the reasons is the distance between the police station and the office of the photographer. At some stations – for example, Hammanskraal – the distance is more or less 100 kilometres to reach the crime scene, and there is only one photographer for more than four police stations. One may consider Silverton, Cullinan and Bochskop, which are on the same schedule of the photographer, where it takes about one hour to travel between those stations. The other aspect is the time of day: if it is rush hour, and there is a traffic jam, it takes time for a photographer to arrive at the crime scene.

The researcher is therefore of the opinion that the service of photography should be decentralised, in order to serve its purpose. The time factor is very important, as this will offer photographers the opportunity to take crime scene photographs while the scene is still undisturbed. It is of great concern to find out
that out of 48 case dockets; only six had a better time response. This indicates that there are problems which need serious attention.

To clarify the dispute on the reaction time, the researcher interviewed Colonel Makhafola of the Criminal Record Centre (CRC), in order to get clarity regarding the responding time to the crime scene by the photographer, as he is part of management at the CRC. Colonel Makhafola highlighted the issue of under staffing, and also the centralisation of the CRC, as major concerns which play a role in the delay of the photographer in arriving at the crime scene in time. He said that the station services at their office are separated from one another by many kilometres. Photographers spend much of their time travelling between police stations, rather than executing their duties. At some stage, one photographer was allocated to more than four police stations which were a great distance from one another. According to Colonel Makhafola, this is one factor which causes a delay for the photographer to arrive in time at the crime scene. He shares the same sentiment as the researcher, in that the services of photographers should be decentralised. According to Marais and Van Rooyen (1990:42), the crime scene should be photographed as soon as possible, in case there are perishable items.

To the question, “What are the procedures of photographing the crime scene?”, the participants answered as follows: (sample B) expert A, said that the photographer should clearly and accurately depict the scene as it was found, and the path taken by the criminal to the scene, as well as the escape route, should be viewed on photographs. The response of expert ‘B’ was that three dimension procedures are to be followed; these are long-, medium- and close-range pictures, and expert C shared B’s sentiment. The researcher is of the opinion that each item should be photographed in three phases: long-range, medium-shot, and close-range pictures, where the object’s identity is very clearly viewed. This is also outlined in Marais and Van Rooyen (1990:44).
2.13 The criteria of sketching the crime scene

Gilbert (2001:98) mentions that after a scene has been photographed and searched, a crime scene sketch is made. The crime scene sketch is a measured drawing of a scene, showing the location of all important items – particularly, physical evidence. He further states that the sketch is highly significant, in that it can be even more revealing than a photograph (Adams et al., 2004:183). Unnecessary detail can be eliminated in a sketch, whereas everything in the range of the camera is recorded. Furthermore, a sketch will not distort the true location of objects, as many photographs tend to do (Fisher, 1993:81).

Sketches are useful in the questioning of witnesses and suspects, or the writing of investigative reports. Sketches are also excellent companions to photographs: where photographs provide exact details, sketches offer accurate information about the placement of objects, and they show relationships and distances between things (Berg & Horgan, 1979:46; Adams et al., 2004:182-183). According to Gilbert (2004:98), all objects which are included in the sketch, must be accurately measured. Careful measurements are critical, as during a trial the position of a certain item of physical evidence may indicate innocence or guilt. Objects should be measured with a device that will indicate feet and inches, while in South Africa the metric system is applicable (Marais & Van Rooyen, 1990:43; 48).

Sketches can be used to refresh the investigator’s memory, to reflect the relationship of objects to the surrounding area, to help the prosecutor, judge and magistrate to understand conditions at the crime scene, and supplement photographs of the scene (Marais & Van Rooyen, 1990:46).

When the sketch is completed it must reflect the information contained within the rough sketch, in order to be admissible in court (Saferstein, 1990:35). There should be a correlation relationship between the sketch plan, plan and photographs. The sketch plan must meet certain criteria in order to be admitted as evidence: for example, completeness, clarity, cleanliness and accuracy. The
measurements must reflect the true reflection of the pictures. According to Holden (2006:69) and Petraco and Sherman (2006:417), the sketch must be clean, neat and complete.

Literally, the basic purpose of sketch plans, according to Fisher (2004:86), Horswell (2004:14), Marais and Van Rooyen (1990:46) and Gardner (2005:165), is as follows:

- It indicates the basic essentials of the crime scene.
- It indicates any misrepresentations on the photographs.
- It supports notes, photographs and final sketch plans drawn up by draughtsmen and photographers.
- It places distances and dimensions mentioned in statements, on record.
- It accurately reflects the physical facts.
- It indicates the connection between different events at the crime scene.
- It shows the precise location and relationship between objects and physical evidence at the crime scene.
- It provides an imaginary conception or picture for persons who were not at the crime scene.
- It is a permanent record of the crime scene, and is usually admissible as evidence in court.

A sketch plan is admissible as evidence, if the investigators compiled it themselves or were present when it was drawn and are able to testify that it portrays the actual crime scene (Fisher, 2004:88; Marais & Van Rooyen, 1990:52).

Weston and Lushbaugh (2003:71) outline the criteria/requirements of a complete sketch plan as follows:

- The sketch must be clean.
- The sketch must be complete.
- The sketch must be accurate.
- The sketch must be neat.
- The sketch must be simple, not complicated.
To the question, “Which criteria should the crime scene sketch meet?”, the participants responded as follows: all participants of sample A agreed on the rule that a crime scene sketch should be clean, accurate, complete, neat, relevant and simple. This point was elaborated on in more detail by the literature, where all procedures to be followed are clearly discussed.

All three experts of sample B said that the criteria of sketching refer to cleanness, completeness, accuracy, neatness, and not being complicated. The sample and literature support this issue of sketching the crime scene. There was no contradiction on the issue of sketch drawings.

The sketch must be accurate, and correspond with the witnesses’ statements and plans (Marais & Van Rooyen, 1990:44). The photographs from 44 analysed case dockets were accurate, and they corresponded with the witnesses’ statements. Thirty-two of the case dockets did not have crime scene plans, while 21 did not have sketches. It is of great concern to find out that the majority of case dockets were without crime scene plans, as they would assist to supplement the photographs. Although photographs were accurate, and corresponded with the witnesses’ statements, there was a need for them to complement the crime scene plans and sketches. The 44 case dockets with photographs had photographers’ statements in them. All the points were elaborated on clearly in the photographer’s statements.

2.14 Summary

In this chapter, the researcher discussed the meaning of criminal investigation. The concepts discussed were criminal investigation, forensic investigation, and also their differences, in order for the investigator to understand the field of study very well.

The purpose and objectives of investigation were addressed, to give a clear understanding on why an investigation should be conducted. The crime scene and types of crime scene were also points covered, and also the importance of
searching the crime scene. Lastly, the photographing and sketching of the crime scene as methods of recording the crime scene were discussed.

In the next chapter, the researcher deals with photography and its evidential value in the investigation of crime scenes.
CHAPTER 3
THE EVIDENTIAL VALUE OF PHOTOGRAPHY IN THE INVESTIGATION OF CRIME SCENES

3.1 Introduction

The role played by crime scene photography is of significant value. Investigators should be aware of the way photography can assist them during an investigation. A photograph tells more than many witnesses, and it also assists the court to have a clearer understanding of the crime scene.

Photography is used in everyday life, in the form of electronic and print media, private use by people, and medical health. Newspapers, magazines, weddings, parties and sonar at hospitals are the beneficiaries of photography. Photography in the investigation of crime scenes is of great value. Some of its values are as follows: it may assist in the investigation of crime scenes by keeping records, reconstruction of the crime scene, recording of physical evidence at the crime scene, and also being submitted in a court of law as real evidence. The above information indicates that photography plays an important role in the investigation of the crime scene. Photographs are regarded as silent witnesses, and also provide a detailed record of the condition of the crime scene, illustrating the items present and their relative location (Weston & Wells, 1990:44). According to O'Hara and Osterburg (1949:143), photography is a type of witness in itself. Warlen (1995:262) and Fricke (1962:201) state that it is truly unfortunate that the subject of legal photography has been so sadly neglected.

In this chapter, the researcher discussed the evidential value of photography in court, and looked at the linkage between witness statements and photography. Furthermore, the discussion was based on the meaning, purpose, value and types of photography.
3.2 Meaning of Photography

According to the *Longman dictionary of contemporary English* (1995:1059), photography is art—the profession of producing photographs or scene films. The concept means ‘the taking of pictures of events or objects with a camera’. According to Fisher (2004:79), photography entails the recording of items of physical evidence at the crime scene, with a camera, in the condition in which they were discovered by the investigator. Besides Redsicker (2001), there is no other source which gives the definition of photography. All other sources cover the basic crime scene photography, without mentioning the meaning of photography.

To the question, “What is the meaning of photography?”, 25 participants from sample A explained photography as the taking of pictures, the reproduction of images through light, and the taking of photographs. According to the researcher, this is sufficient to explain the meaning of photography in laymen’s terms. Only five participants did not give a relevant explanation, and it clearly shows that they did not know the meaning of ‘photography’.

To the same question (sample B), expert A gave nearly the same definition as the 25 participants of sample A, saying that it is the taking of any picture, using a camera. Experts B and C said it is the process by which images are reproduced on light-sensitive surfaces by the reaction of light, and subsequent development by means of chemicals.

The meaning of photography was not covered in most of the literature consulted. There is a need to cover the meaning of photography in the literature. The researcher is of the view that photography is given little attention, and most of the authors did not cover its meaning. The word ‘photography’ means ‘the capturing of images by means of a camera’. This is a straightforward definition which does not need further explanation, according to the researcher.
3.3 Meaning of evidence

Lyman (1999:555) describes evidence as a statement, object or other item bearing on, or establishing, the point in question in a court of law. Siegel et al. (2000:28), in more or less the same vein, defines evidence as information, whether personal testimony, documents or material objects, that is given in a legal investigation, to make a fact or proposition more or less likely. Holden (2006:39) defines evidence as anything that has been used, left, removed, altered or contaminated, during the commission of the crime.

Furthermore, evidence is something that can be used to identify people, places and things involved in an event, to prove or disprove an element of an offence, and to reconstruct the crime or offence (Petraco & Sherman, 2006:456). Lyman (1999:40) states that physical evidence is anything having shape, size and character. Adams et al. (2004:77) offer that evidence can usually be measured, photographed, analysed and presented in court as a physical object. To this dialogue, Fisher (2004:1) and Gardner (2005:348) add that evidence could be divided into two types – namely, testimonial evidence and physical evidence. Testimonial evidence refers to the statements made by witnesses, while physical evidence is any type of evidence which is objects, naturally, and may take various shapes, types and size.

While it may seem that Lyman (1999) and Siegel et al. (2000) differ in their meaning of evidence, they actually have a common understanding about evidence as being an object and statement that either establishes a fact or makes a point likely. The definition from Holden (2006:39) is clearer, and provides a straightforward investigation-related meaning. In the researcher’s opinion, Holden’s’ definition is the most suitable one for this study. Again, Lyman (1999:40) describes physical evidence is anything having shape, size or dimension, while Gilbert (2004:601) maintains that it is something which is tangible in nature, and that may be important during an investigation or subsequent judicial proceedings.
Furthermore, ‘evidence’ means a statement, object or other item bearing on, or establishing point in question in a court of law (Lyman, 1999:555). It may also be defined as information, whether personal testimony, or documents of material objects, that are given in a legal investigation to make a fact or proposition more or less likely (Houck & Siegel, 2006:28). Holden (2006:59) defines evidence as anything that has been used, left, removed, altered or contained in the commission of the crime.

Evidence is something that can be used to identify the people, places and things involved in an event, to prove or disprove the element of an event, and to reconstruct the crime or events (Petraco & Sherman, 2006:456). The various definitions given above are nearly identical, but Petraco and Sherman’s definition is more likely to be relevant, as they include both proving and disproving the crime. One should not base and focus an investigation on the collection of only positive evidence, while leaving negative evidence deliberately or by omission. Testimonial evidence is oral evidence from people such as witnesses, suspects, victims and investigators (Gardner, 2005:7).

To the question, “What is the meaning of evidence?”, the following answers were received from the participants of sample A:

- 20 participants differed slightly from that of the literature, as they only referred to evidence as anything that is found at the crime scene and may connect the suspect with the crime.
- 10 participants collectively agreed with Holden, who defines evidence as anything that has been used, left, removed, altered or contaminated during the commission of the crime.

In the above discussion, the researcher’s focus was on the meaning of evidence. The researcher also agrees with Holden in this regard.

The participants from sample “A” had a complete understanding of the meaning of evidence. Evidence is anything that may be used to solve the alleged crime. Any piece of information that may be found at the crime scene or removed from
anybody, which may assist in solving the alleged crime, is classified as evidence.

3.4 Purpose of photography

Marais (1992:41) explains the basic purpose, among others, of photography at the crime scene, as being to record the crime scene permanently, and this record may assist the investigating officer during the investigation process and refreshing of memory. It is also valuable, as it serves as evidence before a court of law. Ogle (2004:35) argues that the purpose of photography is to record the condition of the scene before alterations occur.

According to Lee and Harris (2000:80) and Robinson (2010:594), the purpose of photography is to

- provide a visual record of the scene and related areas.
- record the initial appearance of the crime scene and physical evidence.
- provide investigators and others with a permanent record and subsequent analysis of the crime scene.
- provide permanent record of the scene to the court.
- establish a visual recording of the scene and physical evidence.
- provide a permanent record of objects and evidence, for future use.

Photographs may also clarify disputes or uncertainties concerning the crime scene and related matters. It provides visible evidence. O'Hara and Osterburg (1949:143) stress the importance of photography as an investigation aid. Furthermore, it is not a pre-requisite for a photographer to be an expert when taking crime scene photographs. This implies that any person may take photographs which may still be accepted by the court as evidence.

To the question, “What is the purpose of photography?”, sample “A” responded as follows:

- 16 participants said that the purpose of photography is a method of recording the crime scene and objects.
- 10 participants were of the opinion that it is used to collect information.
4 participants regarded the purpose of photography as being to keep the pictures of dangerous suspects for future use.

The participants from sample “A” differ from the literature; because four participants said the purpose of photography is to keep the pictures of dangerous suspects, while 26 participants said it is to record the crime scene and to collect information. On the other hand, literature states that it is to record the crime scene and physical evidence.

All three experts (sample B) were of the opinion that the purpose of photography is to record the scene, the incident, physical evidence and objects, for both investigation and court purposes.

There are many purposes of photography, and even if there are differing opinions from the literature and from four of the participants, the only thing which will determine the purpose is the aim of the photographer. This begs the question: Why are photographs taken? For investigation purposes, it will be for further investigation and for reasons of court submission. Then, the reason for keeping pictures of dangerous suspects is not really out of proportion.

Finally, the researcher accepts the purpose of photography as being to record the crime scene and physical evidence for investigation and court purposes.

3.5 Value of photography

Where photographs have sufficient information, it will eliminate the need for the court to conduct an inspection in loco, and furthermore, there will be no need for the witness to elaborate on the issue demonstrated in the photographs (Ogle, 2004:2). It follows that photographs can not only assist comprehension, but can also be important in saving valuable court time (Phillips & Bowen, 1989:21). When speaking of something of value, one sometimes thinks about the cost in terms of money. Here, one is considering the role played by photography in the investigation of crime scenes.
The photographs should be both accurate and authentic, in order to have value in court. Nothing should be removed or added to the crime scene before it is photographed. If there are inaccuracies or irregularities on the photograph that do not destroy the evidential value of the photograph completely, they should be explained in detail to show that it was done in good faith, and the photographs will still be accepted as evidence (Marais & Van Rooyen, 1990:45).

Photographs intended to be produced in court should possess the characteristics of objectivity and accuracy (Marais & Van Rooyen, 1990:43). The photographer should produce photographs which are fair and accurate representations of the matters they depict. When photographs are being prepared to be produced in court, no part of the image reproduced on the film emulsion should be omitted from the print (Fisher, 2004:85). Photographs must be developed in the original positions they were captured. There should be neither additional decoration nor some deduction of information during the development process.

The investigator often shows a victim or a witness a series of photographs, in an attempt to identify the perpetrator. This type of procedure is typically carried out when a specific offender is suspected, but is not in custody. Photographic displays can be conducted at the police agency or at the home of the victim or witness. A photograph of the suspect is displayed along with photographs of other individuals. All photographs must be similar in shape, colour and subject matter (Bennett & Hess, 2004:47).

There should be at least ten photographs, including the suspect’s photo. The witness should be shown the photos when they are not in the presence of other witnesses. When a witness identifies someone, the witness should mark the photo in some manner. All photographs should then be retained for possible court examination. At no time during the photo viewing should the officer make any suggestion, through speech or action, that the picture of the suspect will be seen. After the arrest of the suspect, a formal line-up should be held to confirm the photo identification (Bennett & Hess, 2001:538).
Section 232 of the Criminal Procedure Act 51 of 1977 allows evidence recorded by photographs to be produced in court as evidence. Photographs capture the scene both for court and for further investigation, record physical evidence; portray the crime scene as it was found, and its original condition (Bennett & Hess, 2004:40). Again, witnesses are collaborating with photographs of the crime scene (Fisher, 2004:82). The photographs must be accurate and correspond with witness statements and sketches.

The photographs from 44 analysed case dockets were accurate, because they corresponded with witnesses’ statements; 32 case dockets did not have crime scene plans, while 21 did not have sketches. This is of great concern, to find out that the majority of case dockets were without crime scene plans, as they would assist by supplementing the photographs. Although photographs were accurate, and corresponded with witnesses’ statements, there was a need for them to complement the crime scene plans and sketches.

The above discussed literature indicates that photographs have various values, such as recording events or objects, and placing the suspect at the crime scene.

To the question, “What is the value of photography in the investigation of the crime scene?”, the following answers were captured: 23 participants (sample A) said they didn’t know, and seven participants viewed the value of photographs as being able to prove the crime in court and to support the evidence given to the court.

To the question, “Does photography have value in the investigation of crime?”, all three participants of sample B said “yes”.

Photography has value, as it records the crime scene for the court to see how the crime scene was after the crime was committed, and furthermore, assist during the investigation process.
The literature and seven of the participants mentioned the value of photographs as follows:

- Keep records of the scene
- Keep information about the victims
- Relate points at the crime scene
- Show the injuries
- Indicate measurements
- Place the scene at the court
- Identify the situation
- Identify the victim
- Identify the witness
- Refresh witness memory
- Refresh the victim's memory.
- Are useful for suspect interviews
- Are useful for witness interviews
- Are used to corroborate evidence
- Are useful to crime scene reconstruction

### 3.6 Value of physical evidence

The prosecutor cannot prove the case if there is no evidence to support the allegation, so it is essential to have physical evidence to substantiate the allegation under investigation. That particular physical evidence should either prove or disprove the allegation.

The investigation process revolves entirely around the collection of valuable information, whether subjective or objective, by means of which the whole truth might be determined (Prinsloo, 1996:20). The investigator is responsible for collecting evidence after a crime has been committed (Genge, 2004:18). The investigator must be able to detect clues, interpret them correctly, place their relative association on record, submit them to an expert for analysis, and handle them in such a way as to enhance examination results to the maximum (Adams et al., 2004:1). The gathering of evidence begins at the crime scene, because the crime scene contains macro- and micro-information. Each piece of
evidence should be identified, collected and preserved as a separate entity (Fisher, 2004:53).

Before physical evidence can be collected, it must obviously be recognised and photographed. When collecting evidence, investigators must follow correct procedure, due to the fact that the particular evidence may be used in court. The scene and surroundings must be protected to ensure that valuable physical evidence is not destroyed or damaged by vehicles, people or animals (Petraco & Sherman, 2006:231; Marais, 1992:9). Before any physical evidence may be collected, it must be photographed from various angles to ensure its evidential value (Ogle, 2004:35).

Physical evidence at the crime scene should be collected and kept in such a way that its identity and legal integrity is maintained (Fisher, 2004:53; Genge, 2004:8; Gilbert, 2004:105; Lyman, 1999:413; Ogle, 2004:2). The role and the purpose of physical evidence are explained by Fisher (2004:53), Genge (2004:8), Gilbert (2004:105), Lyman (1999:413) and Ogle (2004:2), as follows:

- **To prove the elements of crime or reveal that a crime has been committed** – The elements of crime are essential during the investigation process. In order to determine if, indeed, a crime has been committed, and the type of crime committed, there should be a clear linkage between the crime committed and the physical evidence recovered from the crime scene.

- **To place the perpetrator at the crime scene** – The evidence located at the crime scene will prove the fact beyond reasonable doubt that the suspect was at the crime scene. It will therefore assist in linking the suspect to the crime scene.

- **To relate the suspect to the crime** – After proper analysis of the physical evidence from the crime scene, the court will come to the conclusion to connect the suspect with the crime. Physical evidence plays a crucial role here.

- **To eliminate innocent individuals** – After thorough investigation of physical evidence, the elimination process will begin. That will indicate whose evidence is whose – for example, the fingerprints from a crime scene,
where the owner of the user will be excluded through an elimination process.

- To assist the investigator to confront the suspect with sufficient physical evidence – The investigator will have sufficient evidence to confront the perpetrator with confidence. Physical evidence eliminates doubts when confronting the suspect.

In some instances physical evidence are perishable goods which decompose at a certain stage. Then, section 30 of the Criminal Procedure Act gives the police the authority to make the photographs of such goods available as evidence.

To the question, “What is the value of physical evidence in the investigation of the crime scene?”, sample A replied as follows:

- 12 participants regarded the value of physical evidence as the information, in the form of exhibits found at the crime scene that assists with identification of the suspect, and is, furthermore, crucial for court.
- The remaining 18 participants said the value is to prove that crime has been committed, to identify suspects and victims, and support the point at issue before a court of law.

Both literature and the participants from sample “A” had a common understanding on the value of physical evidence in the investigation of the crime scene. They agreed that physical evidence helps in the identification of the suspect. Furthermore, they state that it is to prove that a crime has been committed. The literature again indicates that physical evidence assists the investigator to confront the suspect, place the suspect at the crime scene, eliminate the innocent party, and prove the elements of crime committed.

3.7 The importance of the chain of evidence

The chain of evidence entails the track record of all individuals who handle the evidence and exhibits. Continuity of possession and record keeping is of the utmost importance in this process (Gardner, 2005:55). The reason for this is to ensure that the exhibits collected at the crime scene are, in fact, the same
exhibits presented to the court as evidence. This chain of safekeeping of the exhibits is called the chain of custody. As there could be a transfer of clues between the accused and the exhibits, which could link the accused with the crime, the importance of the collection of evidence becomes a priority. ‘Chain of evidence’ means the continuous safekeeping of physical evidence from one place or person to another (Horswell, 2004:223). The photographs indicate the original condition of each item seized at the crime scene, and the maintenance of its chain to the next level, until it is produced in court if the need arises.

Great care must be taken to collect all physical evidence intact, in an uncontaminated manner. Each item must be identified, collected and preserved as a separate entity. All instruments used to collect them, and all containers holding the samples, should be clean (Siegel et al., 2000:362).

Physical evidence should be preserved by careful handling and preventing the occurrence of any changes from the time of collection up to receipt by the laboratory for analysis. The adherence to correct packaging techniques is essential. Faulty packaging can result in contamination, evaporation, scratching, damaging and general loss of the physical evidence (Holden, 2006:61). Continuous safekeeping and identification of physical evidence is an essentially important requirement.

To preserve the integrity of physical evidence, the following basic guidelines are a prerequisite (Adams et al., 2004:181; Holden, 2006:63):

- Maintain chain of custody by limiting the number of individuals who handle the evidence from the time it is found to the time it is presented in court.
- Make sure that the detail of every person who handles the exhibits is clearly recorded, and proper entry is made.
- Make sure that the persons handling the evidence affix their names, service number and their signature on the package.
- Obtain signed receipt from the person accepting the evidence, or any method of acknowledgement.
- The original evidence must prevail at all times. This may be done by taking pictures before and on return.
Furthermore, take the weight of such evidence, if possible.

Any change in the physical appearance of the evidence should be brought to the attention of the court.

The complete description of all physical evidence must be recorded in the investigator’s notebook.

To the question, “What is the importance of the chain of evidence?”, sample A reacted as follows:

- 20 participants agreed that the quality and quantity of each item of physical evidence should be maintained, and be recorded by means of photography.
- 10 participants regarded only the signature of acknowledgement as a method of maintaining the chain of evidence.

The participants from sample “A” did not cover the importance of the chain of evidence in their responses. This shows that there is a need to train them in the importance of the chain of evidence. They only indicated that it should be maintained, and a signature issued, without stating its importance. The importance of the chain of evidence lies in protecting the evidence from contamination and maintaining its evidential value until it is produced in court (Gilbert, 2004:593).

3.8 The types of photography

Bennett and Hess (2004:45) and Redsicker (2001:137) mention various types of photographs: one may think of aerial and underwater photographs, to name a few, and this needs specific skills for one to be capable of performing the task effectively. For the purposes of this research, the main focus is only on the normal crime scene in a residential area or open field, and street murders. The following are types of photography, as mentioned by Marais and Van Rooyen (1990:45): infra-red, thermography, ultra-violet, fluorescent, micro-photography, video film and X-ray photography, and three-dimension photography.
Bennett and Hess (2004:45-47) discuss aerial, night, laboratory and line-up photography. These types of photography are discussed in the following paragraphs:

### 3.8.1 Aerial photography
Aerial photography is the taking of pictures from the air, and is usually used to capture the fatal crime scene of a big incident from the air, or an accident where a railway train or motor bus is involved, or the scene where an aeroplane has crashed in a mountainous area. This can give the total image of the scene in a single picture, and is usually used in plans, drawing and mapping (Marais & Van Rooyen, 1990:45).

### 3.8.2 Three-dimension photography
Three-dimension photography is common, as it is applicable to close-up, mid-shot and distance shot (Marais & Van Rooyen, 1990:44; Fisher, 2004:82). In a nutshell, close-up refers to detail of the object in focus, mid-photo is the same object from the middle distance, and long range is the general photograph of the object in question.

### 3.8.3 Laboratory photography
Micro-photography or laboratory photography is the photographing of very small objects. It means the picture that is seen through a microscope, and which can assist in capturing evidence such as hair or fibres (Bennett & Hess, 2004:46; Marais & Van Rooyen, 1990:45).

### 3.8.4 Infra-red, ultraviolet and fluorescent photography
Infra-red is usually applicable in the investigation of disputed documents, while ultraviolet and fluorescent photography is applied in the investigation of latent fingerprints. This is done by powdering the print with a chemical or reagent, and thereafter taking pictures (Marais & Van Rooyen, 1990:45). The researcher has previous experience of photographing latent fingerprints and their development, using various powders and reagents. Usually, it is not simple to lift wet, fatty and dust prints, as experienced by the researcher – that needs negative photography.
To the question, “What are the types of photography?”, participants of sample A responded as follow:

- 20 participants from sample A did not have information regarding types of photography.
- 10 participants from sample A in their response stated they only knew ordinary methods of taking pictures.

The reason why sample A had limited knowledge with the types of photography is due to the fact that they were not trained as photographers. The answers of sample B, experts A and C were similar, as they mentioned the types of photography as aerial, micro-, three-dimension and infra-red photography. They both said that aerial is used to photograph large crime scenes, and three-dimension is used for small crime scenes, while micro-photography is mainly used for laboratory. Expert A said that infra-red is for capturing latent prints, and gave the example of fluorescent powder being used to develop latent prints. Expert B mentioned the types of photography as primary, secondary, tertiary, and diverse function. The answer was not relevant to the question, and the researcher thinks that expert B did not understand the question.

The types of photography are well known to the two experts, and their explanation is covered clearly in the literature.

3.9 Video as a means of capturing the crime scene

Although photography is the most commonly used medium at a crime scene, the use of video to augment (not replace) reproduction of the crime scene is also becoming commonplace (Sonne, 2006:9). There are many benefits to the use of video cameras at the crime scene (Lyman, 1999:59; Palmiotto, 2004:129). They are easy to use, relatively inexpensive, faster than cameras, and in many ways offer jurors a more complete reproduction of the crime scene. Several distinct advantages exist in using video at a crime scene. For example, officers have the ability to begin recording at the extreme perimeters of the crime scene, and literally walk closer and closer to the specific objects in
question. Such evidence gives great continuity to photographs that can depict minute details of the same objects.

Although video is not popularly applied in crime scene investigation, it also serves a critical supplementary role. In this research the main focus is on photography.

3.10 Identification

According to Lee and Harris (2006:12), identification is a comparison process which uses the class characteristics of a standard object (or known substance) to compare with the evidential item collected from the crime scene. Identification starts when the facts relating to the crime are being evaluated, in terms of the required elements of crime, to determine its unlawfulness. Identification plays an important role during the investigation process. Various identification methods will lead to individualisation. The two concepts are very close to each other and they compensate each other (Fisher, 2004:5).

Identity is based on the theory that everything in the universe is unique, in the sense that it has distinctive individual and class characteristics. An object can be identical only with itself, never with anything else. Identification is merely a pre-requisite of individualisation (Lee & Harris, 2006:2; Gardner, 2005:24).

This means that one cannot only identify an object for what it is, without comparing it with other samples of known origin to determine individuality. To identify a latent print found at a scene of crime simply as a latent print is meaningless. Only when it is compared with the fingerprint of a specific person, can its value be established.

Identification is based on the theory of probability, or, as Lee and Harris (2000:12) put it: “The point often overlooked is that the positive identification rests merely on a very large probability”. Although it cannot be said that a fingerprint or fibre found at a crime scene is identical to the fingerprint of a suspect or the fibre of his jacket, the probability is so large that it can be said
with sufficient certainty that the fingerprint is that of the suspect, or the fibre originates from his jacket. The theory is therefore completed only after comparison of the object with the original.

To the question, “What is the meaning of identification?”, sample “A” answered as follows:

- 26 participants regarded identification as the starting point of an investigation, and said it refers to singling out something to a certain group— for an example, identifying blood as blood, before individualising it.
- 4 participants related this concept to the identification parade, and they viewed it as being relevant to parades only.

Identification is the starting point of investigation of crime, which will lead to individualisation. Everything in the universe is unique – for an example, the fingerprints of a person. Only the four participants, who related the concept with the identification parade and were not in line with the literature reviewed.

### 3.11 Identification categories

The role of identification is to assist the investigator to identify the crime, how that crime was committed, and who committed that crime (Gardner, 2005:24). The photographer must take photographs from three different angles. The first picture will be long distance, where the entire object is taken in a picture. However, this is not a clear picture, and it only serves to establish the overall scene of crime. The second will be the middle-range picture, which identifies the specific object; also on this photo the identity of the object is not definitely clear. Lastly, there is the close-up picture, where the object is clear and its identity is guaranteed. All serial numbers and other marks are clearly visible (Petraco & Sherman, 2006:232; Palmiotto, 2004:130).

The resolving of crime programme (South African Police Training Manual, 2008) also gives various types of identification categories, such as witness identification, victim identification, situation identification, perpetrator identification and cumulative identification. According to international authors,
there are different identification categories. Van Heerden (1986:195) and Du Preez (1996:7) indicate the different identification categories that could be used in the investigation of crime, as follows:

- situation identification
- witness identification
- victim identification
- imprint identification
- origin identification
- action identification
- culprit identification

Van Heerden (1986:188) postulates the aim of the various types of identification categories as being to identify and individualise the subject. One of the purposes of visiting the crime scene is to fulfil the action of identification. According to Van Heerden (1986:188), there are different categories of identification that could be used in investigation of crime.

To the question, “Name the types of identification categories you know”, four participants from sample A named only the identification parade as the type of identification category they knew of. The other 26 participants were in line with the literature, although they did not use the same wording as the literature, and mentioned the crime scene, the victim, the suspect and the physical evidence. Despite this fact, the detective learning programme does have types of identification categories, but they did not mention them during the interviews. The reason might be that it was not part of their assessment, or they ignored them.

The researcher focused on four identification categories which frequently use photography, in this research:

3.11.1 Situation identification
After the commission of the crime, the crime scene should be photographed for proper situation identification purposes. Situation identification is used to establish whether a crime has been committed, and, if so, what type of
crime (Van Heerden, 1986:188). When an investigator arrives at an alleged crime scene, it is not always obvious as to which type of crime has been committed, or whether a crime has, in fact, been committed. The investigator should therefore not assume what type of crime has been committed (Gardner, 2005:71).

Horswell (2004:8) states that before attending the crime scene, it is important to obtain the best possible information about the circumstances relating to the incident. Van Heerden (1986:189) and Gardner (2005:19) explain that investigators should keep an open mind, to ensure that they do not make a mistake by being subjective. For example, uncertainty can sometimes arise as to whether a building has burned down as a result of arson, or whether it was set alight accidentally (Marais, 1992:2).

The investigator should not be judgemental and make any suggestions regarding the situation identification, as this may lead to directing the investigation in the wrong direction. Adams et al. (2004:12) state that the investigator should know the elements of each crime which they are going to investigate.

If this identification category is applied correctly during the analysis of crime scene photographs, the investigator will be able to identify whether a crime has been committed, and, if so, what type of crime is committed? In the case of drunken driving, the photographs will illustrate very clearly the condition of the driver at the crime scene. There was an allegation that Judge Motata was drunk during the accident he allegedly caused, and the pictures brought before the court also illustrated the situation, and helped the court to take its decision (Motata v Nair 2009 (2) SA 575 (T)).

The crime scene should be photographed while still fresh, in order to keep accurate and informative information. The removal of any item from the crime scene should be recorded, and there needs to be a valid reason for doing so.
3.11.2 Imprint identification

Lee and Harris (2000:14) indicate that imprint identification is based on the Locard principle, as discussed in Chapter 2. The fundamental principle of imprint identification is that the distinctive characteristics of objects are transferred to the surface with which they come into contact. This imprint should first be identified for what it is (for example, a latent print), and thereafter compared with those of a suspected person (Lee & Harris, 2000:20). Should there be sufficient corresponding (characteristic) fingerprints, the allegations can be substantiated, and that the specific imprint at the scene was made by a specific person (Gardner, 2005:49).

In some cases, the connection of a person to a crime by means of an imprint is sufficient evidence that they are responsible for the identified crime (Lee & Harris, 2000:14). In other cases, this connection is merely a contributing factor. Whatever the case may be, the value of imprint identification should never be underestimated (James & Nordby, 2005:173), as it attempts to achieve individualisation by comparing a disputed imprint with a controlled imprint of the alleged object (Gardner, 2005:53). The photographing of imprints should be done carefully. This type of print does not mean only fingerprints, as is common in investigation of crime; among others are tyre marks, paintings, shoe prints and handwriting.

Imprint identification is the common one, in the sense that at the crime scene the latent prints are photographed. Besides the latent prints there are also other types of marks which are also photographed – for an example, footprints, tyre marks and teeth bite marks. Imprint identification utilises photography extensively at the crime scene.

3.11.3 Action identification

Lee and Harris (2000:13) explain that action identification refers to the identification of human acts directly related to the crime – for example, fingerprints, modus operandi, etc.
Many involuntary habits enter into these human actions, and eventually develop into personal characteristics unique to each individual (Lee & Harris, 2000:29). Consequently, characteristics such as invariability, uniqueness, etc. are developed during the commission of crime. That uniqueness and those characteristics will assist the investigator during the modus operandi profiling. The action will be associated with the deed of a specific group of people or individual trade. That makes action identification a useful identification process. The photographs of various crimes will play a role when identifying common methods or trades used to commit crime.

3.11.4 Culprit identification
One of the requirements of conducting an identification parade is that it must be photographed in order to limit uncertainty (Palmiotto, 2004:39). Although section 37 of the Criminal Procedure Act authorises the collection of data in the form of photographs and an identification parade, the court has laid down extensive guidelines (Bekker, Geldenhuys, Joubert, Swanepoel, Terreblanche & Van der Merwe, 2007:126). In this research, the identifications category which frequently uses photography was discussed.

The identification categories discussed uses photography more frequently.

3.12. The role of the photographer at the crime scene
Gilbert (2004:97) and Siegel et al. (2000:445) state that on arrival at the scene of crime, the photographer must note the following:

- Date and time of arrival
- Names of persons at the scene, on arrival
- Weather conditions
- Lighting conditions at night
- What has happened in the incident
- What has taken place – activity since incident
- Officer in charge of the case
- Scene guard
- Assistance provided at the scene
Other resources already requested

The role of the photographer at the crime scene is to record the crime scene and ensure that it is done in a proper and appropriate manner. The photographing of the crime scene should meet the set criteria and standards determined by the policy. The photographer must ensure that independent witnesses are available to confirm the crime scene recording as a true reflection. That witness must also sign the acknowledgment form which serves as evidence that the photographer took photographs in the presence of that witness. All other people found at the crime scene should be able to explain their role. The photographer should record the time and date of arrival at the crime scene, on his scene report. The scene report must have the name of the witness who was found at the crime scene and who must also sign the scene report. From the researcher’s experience, the photographer’s role is to photograph the crime scene and all the physical evidence at the crime scene, and that the conditions of the crime scene, including the weather situation, should also appear on the scene report as prescribed in standard operation procedure.

The experts (sample B) explained their role as being to photograph the crime scene, and to record the crime scene. They also highlighted the issue of all aspects to be recorded on the scene report, which are the date and time of arrival, scene condition, and all other role players found at the crime scene. The three experts gave their role as being to photograph the scene of crime, and they all applied the same procedures– that of recording their arrival time, the condition of the scene, and doing a scene report with a date.

3.13 Suspect’s statements and photographs

Interviewing the suspect, while in possession of crime scene photographs, will be a ‘plus’ factor to the investigator, as these will enhance and lead the investigator during the preparations for the interview. The mere viewing and analysing of crime scene photographs will assist the investigator to have a clear vision of what transpired, as an investigator uses the photographs to interview
the suspect, in order to test the reliability of that suspect (Palmiotto, 2004:63). After the clear viewing of the crime scene photographs, the investigating officer will have an idea about what transpired at the crime scene, and be able to compare the suspect’s information, in order to make a sound decision.

To the question to sample A, “How can photographs assist the investigator during suspect interviewing?”,

- 23 participants gave feedback by saying that the investigator will relate what the suspect is saying to what appears on the photographs.
- 3 participants said they will assist when preparing for the interview of the suspects.
- 4 participants said they will assist the investigator to prepare the case and to verify the suspect’s explanation with the crime scene photographs.

According to the researcher’s experience, the crime scene photograph will assist the investigator in evaluating the suspect’s information and its reliability.

### 3.14 Witness statements and photographs

The witness’s statement should include data including the location of the witness at the time of the observation, light conditions, and any relationship of the witness to the victim or suspect (Weston & Wells, 1990:43; Fisher, 2004:84). Van Heerden (1986:185) states that if a crime scene is to be photographed, it is worthwhile to have one or more of the eyewitnesses accompany the investigator and the photographer, as their suggestions and comments while at the scene are likely to be of real value.

Witnesses are sometimes at the crime scene, and when taking the general crime scene photographs (orientation pictures), they will also appear on those photographs. They (photographs) depict the scene as observed by a witness. In the case of a murder crime scene in a house, such photographs might depict the victim lying on the floor, as viewed from a number of locations in the room. These photographs are designed to tell a story, and to relate what the location looked like to someone who was not present. To accomplish this task, several
overlapping photographs should be taken. In addition, long-range and intermediate-range photographs should be taken to show both perspectives and the relative positions found at the scene (Fisher, 1993:77).

If a witness claims to have observed the occurrence of a crime from a certain position, photographs should be taken, if feasible, depicting the scene of the crime and the witness’s vantage point. This may assist a court greatly to evaluate a witness’s evidence (Phillips & Bowen, 1989:22). The investigator may use the photographs to interview the witness, in order to test the reliability of that witness. This will assist the investigator to carry out the investigation, and to see if the witness is reliable, by comparing their statements with the photographs. This will also assist them to ask the witnesses questions from the information on the photographs. In Mdlongwa v The State (99/10) [2010] ZASCA 82, the court accept the testimony of the witness, which supported the photographs of the crime scene and video footage.

To the question to sample A, “How can an investigator use photographs during witness interviewing?”,

- 21 participants said the investigator should relate the witnesses’ information to the photographs from the crime scene, in order to verify any uncertainty.
- 9 participants were of the opinion that the investigator would be able to confirm facts relevant to the docket under investigation, and also the reliability of the witness’s character. The photographs of the crime scene assist the investigator to question the witness and confirm the reliability of information given during the investigation process.

### 3.15 Preparing photographs for the court

According to Garland and Stuckey (2000:493) and Adams et al. (2004:196), before going to court, the officer who is going to testify should review the photographs, videos, recordings and computer-generated evidence that the prosecution plans to introduce. The officer should make certain that all the evidence needed is available, that photographs have been properly printed,
other recordings properly edited, and computer output accurately portrayed. It is permissible for the officer who will be asked to introduce photographs or a video tape in evidence, to initial the video tape or the back of the prints before introduction. In the case of prints, no marks should be placed on the face of the photograph before it is shown to a witness on the stand (Garland & Stuckey, 2000:493).

Investigators must be able to testify about the work they have done (Lyman, 2002:23; Swanson et al., 2003:71). This is in order to

- identify each piece of evidence, even years after it was collected.
- describe the location and condition of the item at the time it was collected.
- assist in establishing that from the time of its collection until presented in court, the evidence was continuously in proper custody.
- assist in describing any changes which may have occurred in the evidence between the time of collection and the subsequent introduction as evidence in court.

### 3.16 Authentication of photographs

A photograph may be admitted as evidence upon proof by some person other than the photographer, that it is a fair and accurate representation of the scene or object depicted, provided that the witness was present and saw what the photographer saw (Lyman, 2002:57; Adams et al., 2004:196). In more important criminal proceedings, however, it is normal practice for the photographer to establish the authenticity of his photographs and to describe the matters depicted therein. It is particularly important for the photographer to give evidence in a case where his photographs will be relied upon to convey information about heights, distances, and the relationship of objects to one another and to fixed features of a scene (Phillips & Bowen, 1989:22).

Usually, poor or unidentified photographs are admissible if they are relevant. The quality and origin of the photographs merely affects the weight attached to the evidential value of the photograph. It is important to distinguish between the evidential value of the photograph and its admissibility. In $S \ v \ W$ 1975 (3) SA
841 (T), the court decided that the photograph need not be in perfect condition in order to be admissible. The quality of the photograph, without any distortion, only influences the evidential value.

From the dockets analysed, it was clear that the quality (visibility) of the development process and sequence was very good, because all items on the scene can clearly be identified.

Since photographic evidence is designed to assist the court to understand the scene or objects depicted, it is desirable that photographic evidence be furnished to the court in a manner that best assists comprehension. Apart from technically accurate reproduction of the scene, photographs should be taken in a logical sequence and in such a way as to illustrate every facet of a scene or object that is likely to be relevant to the issues before the court (Adams et al., 2004:183).

Photographs of a crime scene or vehicle accident scene should apply the classification of general orientation view, medium view and close-up view. This is done to ensure that the entire object is clearly viewed from different angles and associated with the surroundings. The entirety or general view is intended to set features of the scene in context, and assist the viewer’s comprehension and orientation as the camera moves closer to points of particular interest. A frequently recurring fault with photographic evidence is the failure to assist the viewer’s orientation and comprehension by ensuring that some common feature or object is visible in succeeding photographs in a sequence. This is frequently not done, and, consequently, oral description and plans may have to be used to supplement photographic evidence. If possible, it is always desirable for juries to study photographs in conjunction with a plan of the crime scene (Philips & Bowen, 1989:24).

3.17 Legal requirements for photography

In terms of section 37(1) (d) of the Criminal Procedure Act 51 of 1977, any police official may take a photograph (or may cause a photograph to be taken)
of a person who has been arrested or released on bail or warning. The photograph of a person who has been convicted might, for example, be used in the compilation of a photographic identification parade. As a result of this section, the taking of photographs at an identification parade is also authorised.

A court which has convicted a person, or any magistrate, may order the taking of the convicted person’s fingerprints or photographs in terms of section 37(4) of the Criminal Procedure Act. Where a person has not been found guilty because no criminal proceedings were instituted against them, or they were acquitted in court, section 37(5) of the Criminal Procedure Act provides for the obligatory destruction of any of the following aspects (fingerprints, palm or footprints, or photographs), and records of steps taken under section 37 of the Act.

Section 37 should also be read together with section 225(2) of the Criminal Procedure Act, which provides that the evidence of prints, or the bodily appearance of an accused, will not be inadmissible only because it was obtained against the will of the accused concerned. Take the suspect and victim’s rights into consideration, with regard to Chapter 2 of the Constitution, even though there is a limitation clause on those particular rights. The South African Police Service Act 68 of 1995, section 16, on the other hand, authorises the police to investigate any matter, with the acknowledgement of the application of the principle of Batho Pele (“People First”).

According to the SAPS Act, section 16, covering national crime prevention and investigation of crime, the required skills in the investigation of crime should be utilised in full. The investigation of crime in a proper and professional manner is aimed at ensuring quality service delivery. The investigation officers must use the photography section to avoid any irregularities, and to prove their facts beyond reasonable doubt.

The 2009/2010 Annual Performance Plan of the SAPS (South Africa, 2009:2.3) outlines police performance in solving crime: “The ability to solve cases is the first criterion, second is the successful conviction in a criminal case which
includes criminal justice debt.” By using photography as a method of gathering information, it will improve the first and second aims of the SAPS.

The South African Police Code of Conduct, contained in the SAPS Annual Performance Plan (South Africa, 2010:iv), states that in order to achieve a safe and secure environment, they undertake to utilise all the available resources responsibly, efficiently and cost-effectively, to maximise their use, and also to develop their skills.

The problem of crime scene contamination by fellow law enforcement officers is of great concern, according to Gilbert (2001:95). Simpson (1976:29) explains that the use of photography in forensic science falls into two main sections: a means to record a phenomenon and to reveal that which cannot normally be seen. Crime scene photography is very important, irrespective of the case being taken to court or not.

3.18 Admissibility of photography in court

After a crime scene has been visited, photographs are taken and developed to be presented in court as evidence (Swanson et al., 2003:71). Physical evidence is also photographed, collected and sent to laboratories to be examined, so that they can be used as evidence in court. Photographs need to be taken accurately and properly in such a way that they can be linked with the victim statements, witness statements, investigator’s notes and physical evidence collected. Photographs need to satisfy all legal requirements in order to be admissible in court as evidence (Lyman, 2002:56).

In *Mpumlo* 1986 (3) SA 485 (EC), the court ruled that if the videotape or film is relevant, it will be admissible. The court's opinion was that it should be admissible, even though it contained possible imperfections. According to Schwikkard and Van der Merwe (2002:368), the admissibility is determined by relevance. Imperfections affect the evidential value, and not the admissibility of the film or videotape.
Photographs are presented to prove that which has been photographed. For instance, in *S v W* 1975 (3) SA 841 (T), the accused was convicted of unlawfully exposing herself. Among others, the State relied on photographs taken of the accused while she was performing her show. Thus, the photographs captured something that could not be produced in court in any way other than by means of a photograph.

Schwikkard and Van der Merwe (2002:369) argue that the production of photographs does not have to be placed in strict categories, and should be dealt with individually. They also contend that when photographs are produced as evidence, it must be determined what supporting evidence is required in each particular case. Usually, the photograph is produced with supporting evidence as to where the photograph was taken, by whom it was taken and the contents of the photograph also identified and explained.

A photograph can be used as real evidence – for instance, where the photograph contains pornography, or as supporting evidence to clarify the oral testimony of a witness (Joubert, 2001:356). A photograph of an article, other than a document, can also be used in terms of section 232 of the Criminal Procedure Act.

Photographs are usually produced with supporting evidence. Generally, there must be evidence indicating where and by whom the photograph was taken (Zeffertt, Paizes& Skeen, 2003:149). The contents of the photograph are identified, and often, the circumstances under which the photograph was taken must be explained.

Based on the researcher's experience as a photographer, there are no fixed rules for producing photographs as evidence in court. It is, however, important that the photograph presented as evidence is

- identified
- explained
Photographs ensure that the court is presented with the full evidential value of the photograph. If possession of a photograph constitutes an offence – for example, the possession of pornography, the photograph itself is produced as real evidence. It is sufficient to produce a photograph of the object, even though the original object is unavailable. The photograph then simplifies the production of real evidence, as it is not the evidence, but provides an image of the real evidence (Weston & Lushbaugh, 2003:13). In *S v Fuhri* 1994 2 SACR 829 (A) 400, the court accepted photographs as real evidence.

The private person, with regard to taking crime scene photographs, is not covered by law. It is, however, likely that the court will consider the evidence as admissible. In *Motata v Nair* the complainant took the photo of the crime scene, and the judge admitted that as evidence, after considering all precautions to its authenticity (*Motata v Nair* 2009 (2) SA 575 (T) and *S v Mpumlo* 1986 (3) SA 485 (EC)).

For a photograph to be admissible in court, the investigator must be able to testify that the photograph accurately depicts the area shown (Bennett & Hess, 2004:48; Fisher, 2004:85). For it to be accurate, it must represent the subject matter properly in terms of colour, scale and form. Further, the photograph must be in focus, and so should the relationship and distances between objects (Fisher, 2004:85). Crime scene sketches also assist in depicting the crime scene. The negatives of all photographs should be retained for court purposes, if required. They will be used to prove that the pictures were not tampered with. The ruler scale will indicate how big the crime scene and the objects are (Fisher, 1993:80; Adams et al., 2004:196).

Provided that a photograph is a fair and substantially accurate representation of the matter it depicts, conflicting testimony about the identity of the objects depicted, or accuracy of the reproduction, does not necessarily preclude the reception of the photograph into evidence. The latter factors affect the weight to be attached to a photograph, rather than its admissibility. A judge or magistrate may, however, be asked to reject photographic evidence in the exercise of their discretion on the grounds that any probative value is far outweighed by the
prejudice a photograph is likely to create. Most commonly, this objection is raised in cases of personal injuries, where a defence counsel fears that gruesome photographs of injuries may prejudice the tribunal of fact against a client. As long as the photographs are relevant and have reasonable probative value, such objections should not succeed (Phillips & Bowen, 1989:22).

May (1990:16) mentions that before a photograph may be admitted, its authenticity must be proven. The photographer must prove that he took the photographs, and when and where he did so. He or another person must prove that the prints were taken from untouched negatives. It is unusual for there to be a dispute about these matters, which are normally proved by the service of a statement made by an appropriate witness.

To be admissible, the photograph must be relevant to the issue in the case and must not be subject to any of the general exclusionary rules. The judge has the discretion to exclude a photograph if it would be unfair to admit it under section 252 of the Criminal Procedure Act, or else, in the exercise of the court’s discretion retained by the Act. For instance, a photograph of the defendant produced from police files (indicating he was known to the police) might be excluded if, in the circumstances of the particular case, the effect of producing it would be more prejudicial than probative.

From the dockets analysed, it was clear that the quality of photographs with regard to the development process and sequence were of a good standard. The development process showed no signs of low quality, and all photographs were clear. In the 44 case dockets analysed, the photographs did not show any signs of a low quality development process. The court may request an extra photograph album for the defence party. When perusing the case dockets, no extra album was traced in any of the dockets, and that might be because they had been given to the defence party.

To the question, “What are the admissibility requirements of photographs in court?”, all three experts from sample “B” reply in the following manner:
The photograph must be accurate and authentic before it can be accepted in court.

They need to be accurately and properly taken in such a way that they can be linked with victim, witness statement and investigator’s notes.

They should support the statements of witnesses in court.

They all agreed that photographs must be relevant to the issue before the court.

The admissibility requirements of photographs in court are clearly outlined as accuracy and relevancy. They must also be authenticated prior to being presented as evidence in court. They should also support the testimony of witnesses and the investigator. They must support the investigator’s notes and sketch plan of the crime scene. The participants of sample “A” did not respond to the above question. None of the 30 participants answered the question. As the investigators had not had exposure to photography, they did not respond to this question.

From his experience, the researcher recalled that the following is important for the admissibility of photographs in court:

- They must be clear and accurate.
- They must be relevant.
- The original negative must be available.
- Their authenticity must be proven.
- The photographs must not be detrimental to the court.

3.19 Summary

The meaning of ‘photography’ is seldom defined in literature. The ordinary definition of photography is the taking of pictures by camera, while in the scientific definition it is the capturing of images with light in the sensitive film, with the camera.

The purpose of crime scene photography is to record the crime scene in an undisturbed way. The recording should be done while the scene is still fresh, if
possible, with no item having been removed or added at the crime scene, in order for the photo to be of great value. The recording of physical evidence by means of photography is to assist the court in taking just decisions, and represents another method of capturing the crime scene and witnesses.

Photographs play an important role in the identification process, the collection of information, and the interviewing of subjects and witnesses. The investigating officer might rely on this piece of paper for court and for linking of various aspects of the crime under investigation. This evidence is also admissible in court if properly and constitutionally related. All identification categories have a clear linkage with photography. It is imperative for the investigator to know that photography plays various roles during the investigation process.

For photographs to be admissible in court, they must accurately depict the scene of crime. Authenticity must be ensured before photographs are presented in court. The photographer needs to prove the authenticity of photographs. The issue of relevancy and accuracy plays a very important role for the sketch and photographs to admissible as evidence in court. The two should “speak the same language” and correspond with each other, in order for the court to value their importance. In some instances, the photographs might be produced before the court as real evidence, once the object in its originality is not available. Then, only, are the photographs presented in court as real evidence. The measurements on the sketch plan, or plan, should match the photographs, in order to compensate each other. During testimony, the weather conditions, clothes, position of exhibits and interrelation of activities are questioned in court. The sequence of events must not bring confusion to court. The developer must be able to explain each development process followed during the photograph development process, without leaving out any steps.
4.1 Introduction

The value of photography was chosen as a topic, in order for the investigator to have precise knowledge and a clear understanding of the role played by photographs in the investigation of crime scenes. Further, it was to demonstrate the value of photography in various ways. The researcher formulated two research questions in addressing “the value of photography in the investigation of crime scenes”.

The following research questions were researched:

- What is the meaning of criminal investigation?
- What is the evidential value of photography in the investigation of crime scenes?

The researcher contemplated doing this study in order to guide investigators to acknowledge the value of photography during the investigation of crime scenes. Although investigators are not photographers, they should have extensive knowledge on how photography may enhance their investigation. The findings and recommendations of this study aimed to determine the value of photography in the investigation of crime scenes.

Outlining the value of photography in the investigation of crime scenes, will increase the quality of service in the SAPS.

4.2 Findings

Based on the literature, interviews with two samples, docket analysis and personal experience, the researcher came to the following findings:
4.2.1 Findings related to research question 1
What is the meaning of criminal investigation? The finding in this research is as follows:

4.2.1.1 From the literature, criminal investigation means systematically searching for the truth, protection of physical evidence, discovering stolen items, identifying culprits and singling out the ‘who’, ‘why’, ‘where’, ‘which’ and ‘what’ questions. The participants said it means the detecting of criminals and witnesses, and 24 participants said it is the systematic search for the truth and gathering of evidence. However, the researcher concludes that it is based on the collection of exhibits, identification, processing and analysing of information, in order to solve crime. In this research it was found that criminal investigation means a ‘systematic search for the truth’.

4.2.1.2 From the literature, forensic investigation refers to investigation aimed at court proceedings, and also the analysis of information, objects and people, in order to identify the techniques and methods applied by culprits when committing crime. The application of science in the investigation of crime is the identity of forensic investigation. Participants once more view forensic investigation as the use of science and technology in the investigation of crime. Only three participants did not give meaningful feedback, by referring to forensic investigation as private and corporate investigation. The findings of this research indicate that forensic investigation refers to the application of science in law for court purposes.

4.2.1.3 With regard to the differences between forensic investigation and criminal investigation, it was found that there is a slight variation. Both the literature and the participants have a common understanding – also with minor differences. In this research, both forensic and criminal investigation was referred to as ‘investigation’.

4.2.1.4 In this research it was found that the purpose of investigation is to prevent crime. Generally, the participants did not do well. Only four participants knew the purpose of investigation.

4.2.1.5 The objective of investigation is to establish if a crime has been committed, to identify and arrest the suspect, recover stolen property, and, finally, court proceedings. The majority of the participants did not know the
objectives of investigation. They did not clearly understand the objectives of investigation. They confused the objectives with the purpose of investigation.

4.2.1.6 It was found in this research that the crime scene is the place where the crime was committed and where physical evidence may be found. Both the literature and the participants covered the meaning of 'crime scene' very well.

4.2.1.7 From the literature, the Locard principle refers to the theory which states that when two objects meet, some evidence, however microscopic, is left behind. In short, this is contact theory.

4.2.1.8 The literature and the participants regard the importance of searching the crime scene in being to discover physical evidence, exhibits, and to arrest the suspect. The case docket analysis showed that the exhibits were not removed from the crime scene.

4.2.1.9 From the literature, the importance of marking exhibits at the crime scene is to ensure that exhibits are identified and protected. The participants shared the same sentiment.

4.2.1.10 The literature emphasises that a good relationship between the first responder and photographer is essential. This will ensure the entire crime scene being photographed. All physical evidence and exhibits will be identified and captured. The participants emphasised the fact that pointing out the crime scene to the photographer will give the photographer a clear idea of how the crime scene was, what happened, and also to show them exhibits and physical evidence. This was also the same with the experts.

4.2.1.11 The finding in relation to the time factor and delay on arrival at the crime scene, is due to insufficient staff and the centralisation of criminal records centres, as explained by Colonel Makhafola.

4.2.1.12 The court may request an extra photograph album for the defence party. When perusing the case dockets, no extra album was traced in any dockets, and this might be because it was given to the defence party.

4.2.1.13 The three-phase system of photography was found to be suitable: distance (long-range), mid-range and close-up pictures. Each item should be captured three times. Case docket analysis showed that there was an average of 6 to 30 photographs in each case docket, and this indicates that three-dimensional photography was not applied.
4.2.1.14 The 44 case dockets with photographs, had photographers’ statements in them.

4.2.1.15 According to the literature and the experts, the crime scene sketch should meet the following criteria:
- be clean
- be complete
- be accurate
- be neat
- not be complicated

4.2.1.16 It is revealed that 23 case dockets had a sketch plan.

4.2.2 Findings related to research question 2

“What is the evidential value of photography in the investigation of crime scenes?” The findings in this research were as follows:

4.2.2.1 Photography is an art, and means ‘writing or drawing with light’, according to the literature. The experts said it is the reproduction of images with a camera on light-sensitive surfaces, and developed with chemicals. The findings from all participants are also relevant, because they said it is the taking of pictures or reproduction of images. The experts did not report differently. The participants and the literature agree on the meaning of photography. Very little literature covers the meaning of ‘photography’.

4.2.2.2 In this research it was found that ‘evidence’ means a statement, object and physical evidence which establishes a point in a court of law. Furthermore, it is anything which can be used to identify people, places and things involved in an event, which proves or disproves an element of offence. Participants referred to the meaning of ‘evidence’ as anything that is found at the crime scene, but they did not differ much from the literature.

4.2.2.3 The purpose of photography is to record the scene, the incident, physical evidence and objects, for investigation and court purposes, while the participants said it is to keep a record, collect information and keep pictures of dangerous suspects.

4.2.2.4 The photographs play a role in the photo identification parade.
4.2.2.5 Photographs also assist the investigators and the courts with information. The witnesses’ statements and other information can be compared. They may also be used to refresh the memory.

4.2.2.6 Twenty-three participants did not know the evidential value of photography. The findings from literature, and the seven remaining participants, mentioned the value of photographs as the following:

- Keep records of the scene
- Keep information about the victims
- Relate points at the crime scene
- Show the injuries
- Indicate measurements
- Place the scene at the court
- Identify the situation
- Identify the victim
- Identify the witness
- Refresh witness memory
- Refresh the victim’s memory.
- Are useful for suspect interviews
- Are useful for witness interviews
- Are used to corroborate evidence
- Are useful to crime scene reconstruction

4.2.2.7 The experts were familiar with the purpose of photography, as explained above.

4.2.2.8 Physical evidence may assist the investigator and the prosecutor to prove or disprove allegations; therefore, it is essential from the onset to protect physical evidence, and correctly photograph it from different angles. Furthermore, the integrity of physical evidence should be maintained at all times. It was also found that physical evidence places the perpetrator at the crime scene, and also proves the elements of alleged crime. It constitutes very important information which may connect the suspect with crime, and again, is used to eliminate innocent individuals. The participants’ viewpoints once more did not differ from the literature on the value of physical evidence.

4.2.2.9 From the literature, the chain of evidence entails the continuous safekeeping of physical evidence from one place or person to another, while
the basic guideline to preserve that particular physical evidence is to limit its handling and to keep record of all who handle it, take pictures of physical evidence and weight, clarify any change to the court, and finally, give a clear description of each item of physical evidence. Only ten participants did not cover the broader scope, as they only elaborated on a signature as a method of acknowledgement. Another 20 participants showed the importance of the chain of evidence, in accordance with literature. The importance of the chain of possession is that of protecting physical evidence from any contamination, and maintaining its evidential value until it is produced in court.

4.2.2.10 The literature gives several types of photography, such as infrared, thermography, ultraviolet, fluorescent, micro, video film x-ray, three-dimension photography, aerial, night, laboratory, and line-up. The participants did not have information about the types of photography available, and they only mentioned ordinary photography. Only two experts gave similar types as are mentioned in the literature, and only one expert did not understand the question clearly.

4.2.2.11 Although video is not popularly applied in crime scene investigation, it also serves a critical supplementary role. In this research, the main focus is on photography.

4.2.2.12 According to the literature, ‘identification’ refers to a comparison process which uses classes of objects or known substances that are compared, for identity. ‘Identification’ means comparing objects with others of the same class, in order to individualise them. There were 26 participants who had similar explanations to that of the literature, and four did not know the meaning of ‘identification’. They associated the concept with ‘identification parade’.

4.2.2.13 Both the literature and the participants mentioned the following types of identification categories:
   - situation
   - witness
   - victim
   - origin
   - action
   - cumulative
   - culprit
4.2.2.14 As discussed in the literature, the role of the photographer at the crime scene is to record the crime scene in a proper and appropriate manner. This also correlates with the experts’ feedback.

4.2.2.15 Photography may assist the investigator when interviewing the suspect, and test the reliability of the suspect’s statement; 23 participants also shared the same understanding, while seven participants did not respond to the question.

4.2.2.16 There should be a link between the witnesses’ statements and photographs. What the witness says should also be explained by the photographs. There is no variation between the participants’ viewpoints and the literature, on this question.

4.2.2.17 The literature requires the officer to review photographs, videos, recordings and computer-related/generated evidence before going to court.

4.2.2.18 The findings on authentication, in the literature, are that even if the quality is poor or unclear, the most important aspect is relevancy. The photographs should not be tampered with.

4.2.2.19 Legal requirements of photography: section 37(1) (d) of the Criminal Procedure Act authorises the police to take photographs of any person arrested upon any charge, or any person released on bail or on warning under section 72.

4.2.2.20 To be admissible in court, the photograph must be accurate and authentic. Before it can be accepted in court, it needs to be accurately and properly produced, in such a way that it can be linked with the victim, the witness’s statement and the investigator’s notes. Photographs should support the statements of witnesses in court. All three experts agreed that photographs must be relevant to the issue before the court.

4.3 Recommendations

The recommendations made from the findings of this research are as follows:

Research Question 1:

4.3.1 Based on the research findings, it is recommended that both forensic and criminal investigation be called ‘investigation’, because there is slight variation in the two concepts.
4.3.2 It is therefore recommended to take as many photographs as possible (quantity) at a crime scene. The time reaction delay is caused by understaffing, and also centralisation of the local criminal record centre. This causes a delay in photographing the crime scene while it is still fresh; photographs should be clear and accurate. To solve the issue of the time factor, two points mentioned by Colonel Makhafola should be addressed: the local Criminal Record Centre should be decentralised, and human capital should also be increased.

4.3.3 The participants need further workshops on the purpose of investigation, and further training in the objectives of investigation. This will enhance their skills in investigation.

4.3.4 As some of the case dockets did not have sketch plans, it is therefore recommended that all murder case dockets should have plans or sketch plans.

Research Question 2:

4.3.5 There is a need for more research on photography, in literature, and the inclusion of basic photography in the Resolving of Crime programme is recommended.

4.3.6 It is recommended that the participants be trained in terms of the valuable role played by photography in investigation of the crime scene. If they are empowered in the field of photography, they will know the value of photography. Training in basic photography is recommended for general detectives.

4.3.7 Further training is therefore recommended, so that the investigators know the importance of the chain of evidence during an investigation. Again, this should be covered in the syllabus for Resolving of Crime. The importance of chain evidence is to protect physical evidence from contamination, and to maintain its evidential value until it is produced in court. This point is critical, as are the deciding points for court purposes and the outcome of the case docket.

The researcher would like further research on the other types of photography, such as underwater and digital photography. Again, the general detectives should be trained in basic photography at the police stations and various police units.
4.4 Conclusion

The research on the value of photography in the investigation of crime scene was chosen to determine the value thereof. If the recommendations of this research can be applied properly, it will enhance investigation in the SAPS. Furthermore, the introduction of basic photography into the training programme of general detectives will also be of significant value. It will give the general detectives some basic knowledge of the value of photography.

Regardless of the above discussion, the objectives and purpose of investigation are also vital aspects to be considered when conducting an investigation. The objectives and purpose of investigation were clearly defined in this research. Therefore, the investigators will definitely know why they are doing an investigation. The information in this study will enhance effective and efficient functioning of the general detectives and photographers. The decentralisation and increased capacity of the photography section, as recommended, will also be of the utmost importance, although that comes at a cost. However, it is good for effective service delivery. The SAPS is a major beneficiary in this research, and should consider some of the findings for implementation.
List of References


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ATTACHMENT A: INTERVIEW SCHEDULE FOR DETECTIVES (SAMPLE A)

Interview schedule no. 1 – General Detectives

TOPIC
The value of photography in the investigation of crime scenes

Part. A
Personal information
The purpose of this is to determine police officials’ opinions on the above topic. Your contribution will be of significant value and is highly appreciated. Your name and identity are not required; all information will be treated as confidential.

a. Are you a police official? Y/N
b. Are you involved in crime investigation? Y/N
c. For how long? 1-5, 5-15 or +15 years?
d. How many years of service do you have in the SAPS?
e. Did you receive basic detective training? Y/N
f. Did you receive any training in the use of photography? Y/N

Part B
1. What is the meaning of criminal investigation?
2. What is the meaning of forensic investigation?
3. Discuss the difference between forensic investigation and crime investigation.
4. According to your understanding, what is the purpose of investigation?
5. According to your understanding, what are the objectives of investigation?
6. What is the meaning of the crime scene?
7. What is the importance of searching the crime scene?
8. Explain the importance of marking the exhibits at the crime scene.
9. Give reasons why the first responder to the crime scene should point out the crime scene to the photographer.
10. Which criteria should the crime scene sketch meet?
11. What is the meaning of photography?
12. What is the meaning of evidence?
13. What is the purpose of photography?
14. Discuss the value of photography in the investigation of the crime scene.
15. What is the value of physical evidence in the investigation of a crime scene?
16. What is the importance of the chain of evidence?
17. What are the types of photography?
18. What is the meaning of identification?
19. Name types of identification categories that you know.
20. Explain how photographs may assist the investigator during suspect interviewing.
21. Explain how the investigator may use photographs during witness interviewing.
22. Discuss the role of the photographer at the crime scene.
23. What is the admissibility of photography in court?
ATTACHMENT B: INTERVIEW SCHEDULE FOR CRIMINAL RECORD CENTRE EXPERTS (SAMPLE B)

Interview schedule no. 2– Experts from the Criminal Record Centre

TOPIC
The value of photography in the investigation of the crime scenes

Part A
Personal information
The purpose of this is to determine police officials' opinions on the above topic. Your contribution will be of significant value and is highly appreciated. Your name and identity are not required; all information will be treated as confidential.

a. Are you a police official? Y/N
b. Are you involved in the photographing of the crime? Y/N
c. For how long? 1- 5, 5-15 or +15 years?
d. How many years of service do you have in the SAPS?
e. Did you receive photography training? Y/N
f. Did you receive any training in the use of photography? Y/N

1. Give reasons why the first responder to the crime scene should point out the crime scene to the photographer.
2. What are the procedures of photographing the crime scene?
3. Which criteria should the crime scene sketch meet?
4. What is the meaning of photography?
5. What is the purpose of photography?
6. Does photography have value in the investigation of crime? Y/N
7. What is your reason(s) for the answer to Question 6?
8. Name the different types of photography.
9. Discuss the role of the photographer at the crime scene.
10. What are the admissibility requirements of photographs in court?
11. What, according to your understanding, is the evidential value of photography in the investigation of crime scenes?
ANNEXURE A: LETTER OF PERMISSION TO CONDUCT THE RESEARCH

SUID-AFRIKAANSE POLISIEDIENS

South African Police Service

KANTOOR VAN DIE AREAKOMMISSARIS
OFFICE OF THE AREA COMMISSIONER
PRETORIA (GAUTENG)
0001

2004-04-01

Local Criminal Record Centre
Pretoria North
0118

APPLICATION FOR CONDUCTING THE STUDY ON THE VALUE OF PHOTOGRAPHY IN FORENSIC INVESTIGATION: INSPECTOR R J MOKWENA 0633755-4

1. Attached herewith approval for conducting studies.

DIRECTOR
AREA HEAD: LEGAL SERVICES: AREA PRETORIA
R MULDER