THE NATURE AND EXTENT OF PROBLEMS EXPERIENCED BY DETECTIVES IN THE COLLECTION, PROCESSING AND UTILISATION OF CRIME INFORMATION AT THE RUSTENBURG DETECTIVE SERVICE

by

DORAVAL GOVENDER

submitted in part fulfilment of the requirements for the

degree of

MAGISTER TECHNOLOGIAE

in the subject

FORENSIC INVESTIGATION

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: DR NJC OLIVIER

May 2008

DECLARATION

I herby declare that the dissertation submitted for the degree MTech:Forensic Investigation, at the University of South Africa, represents my own original work both in conception and execution, and that all sources that I have consulted and quoted, have been acknowledged by means of a comprehensive list of reference.

DORAVAL GOVENDER

ACKNOWLEDGMENTS

My honour goes to God the Almighty, who showed me the way and never let go of my hand.

I also want to acknowledge and thank the following people for their contribution towards this research project:

- My supervisor, Dr NJC Olivier, for his devoted guidance and support in this study. His experience, knowledge and insight into this topic have made it possible for me to complete this dissertation.
- Mrs Marlette van der Merwe for her guidance and support in editing this dissertation.
- My mother Parvathi, wife Chumpa and children Anusha, Kreesen and Kieron for their neverending love, support, patience and for being there for me during difficult times.
- The South African Police Service for authorising and giving me written permission to conduct this research.
- Director Pretorius Station Commissioner Rustenburg, Senior Superintendent Trytsman Crime intelligence Rustenburg, Senior Superintendent Madoda , Senior Superintendent Ramela, and Snr Superintendent van der Walt from the Detective Service for their experience, knowledge and support.
- Superintendent Ntsabelle, Superintendent Lephogolo, Captain van der Merwe and Captain Augustides for conducting interviews with the detectives at the Rustenburg Detective Service.
- All participants from the South African Police Service for taking the time to participate in this research project in a positive manner.
- UNISA for affording me the opportunity to develop in knowledge and experience through this research.

ABSTRACT

This research is concerned with the nature and extent of problems experienced by detectives in the collection, processing and utilisation of crime information for the investigation of crime. The problems gave rise to poor detective performance.

The development of information-led policing offers an alternative to the traditional "reactive" model of investigation of crime. Information-led policing advocates the targeting, gathering, analysis and dissemination of information which is used to inform decisions about the prioritisation of problems and allocation of resources to address the problems (Cope, as quoted by Alison, 2005:93).

The purpose of this study is to determine the strengths and weaknesses in the collection, processing and utilisation of crime information at the Rustenburg Detective Service, to find new knowledge that can improve the situation, and to apply the found knowledge to enhance the performance of detectives.

THE NATURE AND EXTENT OF PROBLEMS EXPERIENCED BY DETECTIVES IN THE COLLECTION, PROCESSING AND UTILISATION OF CRIME INFORMATION AT THE RUSTENBURG DETECTIVE SERVICE

Key terms:

Policing; Investigation of crime; Forensic evidence; Information-led policing; Crime information management; Crime information collection; Crime information sources; Crime information processing; Crime information products; Crime information utilisation.

LIST OF ABBREVIATIONS

ANAC	-	Association Network Analysis Chart
CAD	-	Crime Analysis Division
CAS	-	Crime Administration System
CAU	-	Crime Analysis Unit
CCTV	-	Closed Circuit Television
CFS	-	Calls for Service
CIAC	-	Crime Information Analysis Centre
CIAM	-	Crime Information Analysis Manager
CIAU	-	Crime Information Analysis Unit
CIG	-	Crime Intelligence Gathering
CIM	-	Crime Information Manager
CIMC	-	Crime Information Management Centre
COMPSTAT	-	Computerised Statistics
CPF	-	Community Police Forum
CRC	-	Criminal Record Centre
DM	-	Detective Manager
DSO	-	Directorate Special Operations
FBI	-	Federal Bureau of Investigation
FSL	-	Forensic Science Laboratory
GIS	-	Geographic Information System
ICC	-	Inter-departmental Intelligence Coordination
LCRC	-	Local Criminal Record Centre
MO	-	Modus Operandi

OCU	-	Organised Crime Unit
SAPS	-	South African Police Service
SARS	-	South African Revenue Service
SIU	-	Scorpions Investigation Unit
TSU	-	Technical Support Unit
USA	-	United States of America
UK	-	United Kingdom

TABLE OF CONTENTS

CHAPTER 1: GENERAL ORIENTATION

1.1 INTRODUCTION

One of the most recently adopted methodologies in policing is the use of information management and crime analysis as an aid in the investigation of crime. It allows the limited law enforcement resources to be more accurately and effectively utilised in solving crimes. Information is the greatest tool for use by investigators in the investigation of crime. It helps them in making arrests and solving crimes. It is useful for an investigator to know if a specific crime is on the increase, in which part of the policing precinct is it occurring, who is most likely to be committing it and where the offender(s) can be found. Obtaining answers to these questions can be the foundation of a successful criminal investigation. Often these answers are difficult to come by, so the investigator must constantly be on the lookout for new information sources (Lyman, 1988:147).

During inspections and personal communication with detectives at the Rustenburg Detective Service, problems were identified in the collection, processing and utilisation of crime information, as the cause for poor detective performance. It would seem that the essence of the problem is the absence of an "information culture", which underlies the problems of how information is collected, processed and utilised at station level. To investigate crime successfully, it has become necessary for effective and efficient collection, processing and utilisation of crime information. While detectives at the Rustenburg Detective Service have been doing collection, processing and utilisation of crime information since their careers began, the existing practices regarding collection, processing and utilisation of crime information in the investigation of crime need to be fully explored. It is therefore important that research be conducted within the detective environment to identify the nature and extent of the problems being experienced in the collection, processing and utilisation of crime information.

For subsequent investigations to be successful, detectives ought to know that a policing precinct has its own criminal environment, which they need to understand. This criminal environment needs to be interpreted by investigation analysts, who will have to rely on a range of information sources both within and external to the police service. This information needs to be enriched and passed on to investigating officers for utilisation in the investigation of their cases (Ratcliffe, 2003:248).

According to Reuland (1997:7), there are five stages in information management, namely, information collection, information collation, analysis, dissemination, and feedback. Upon using the five stages of information management, crime analysts should be able to provide crime information products to assist detectives in the investigation of crime.

1.2 AIM OF THE RESEARCH

The aim of this research is to establish the nature and extent of problems experienced by detectives in the collection, processing and utilisation of crime information at the Rustenburg Detective Service.

1.3 PURPOSE OF THE RESEARCH

According to Denscombe (2002:25), the purpose gives the reason for doing the research; otherwise there would be no point in spending time, money and effort undertaking the investigation.

The purpose of this research is to:

- determine the strengths and weaknesses in the collection, processing and utilisation of crime information at the Rustenburg Detective Service and to consider how it may be improved;

- find new knowledge that can be used to improve the situation;
- apply the found knowledge by recommending steps for good practice which will enhance the performance of investigators; and
- empower detectives through on-the-job training, workshops and seminars to enhance their performance in the investigation of crime.

1.4 RESEARCH QUESTIONS UNDER INVESTIGATION

According to Denscombe (2002:31), research questions specify exactly what is to be investigated. Research questions should be there to give a full, precisely detailed account of the nature of the work that is to be undertaken. The research questions under investigation are the following:

1.4.1 What does the collection, processing and utilisation of crime information for the investigation of crime entail?

1.4.2 What problems do detectives at the Rustenburg Detective Service experience in the collection, processing and utilisation of crime information?

1.4.3 What steps should be implemented to address the problems experienced by detectives in the collection, processing and utilisation of crime information at the Rustenburg Detective Service?

1.5 KEY THEORETICAL CONCEPTS

In exploring a complex operational phenomenon, like crime information management and analysis, it is important to begin by developing an understanding of its various relevant concepts.

1.5.1 Crime information collection

Crime information collection is the act of gathering information that will be used to produce a crime analysis product for use by law enforcement (Peterson, 1994:270).

1.5.2 Information collation

Information collation is a process of carefully comparing texts to clarify or give meaning to information (Lyman, 1988:153).

1.5.3 Crime Investigation analysis

Crime investigation analysis is the systematic gathering, evaluation and analysis of information on individuals and/or activities suspected of being, or known to be, criminal in nature (Gottlieb, Arenberg & Singh, 1994:3).

1.5.4 Investigation analyst

An investigation analyst is a person who reads crime and intelligence reports, in order to track and link patterns in the information to identify persistent problems or offenders and link series of crimes (Cope, as quoted by Alison, 2005:91).

1.5.5 Dissemination

Dissemination is the release of information or a crime analysis product to a client under certain conditions and protocols (Peterson, 1994:269).

1.5.6 Feedback

Feedback is the informing of the crime analyst of the outcome of the information or crime analysis product (Reuland, 1997:36).

1.6 RESEARCH DESIGN AND APPROACH

The empirical research design was used to investigate the nature and extent of the problems experienced by detectives in the collection, processing and utilisation of crime information. According to Maxfield and Babbie (1995:4), the empirical research design produces knowledge based on experience or observation. Social science is said to be empirical when knowledge is based on what we experience. The empirical research design worked well in this study, as the researcher collected data in the form of written and spoken language, and analysed the data by identifying and categorising themes. This also allowed the researcher to study selected issues in depth, openness and detail, as he identified and attempted to understand the categories of information that emerged from the data. Further, the research was flexible, data collection was less structured and easier, the researcher was able to make adjustments, and the whole study was naturalistic, participatory and interpretive.

The researcher used the qualitative approach, because, according to Creswell (1998:15), the qualitative approach involves the study, use and collection of a variety of empirical material through case study, personal experience, and interviews, that describe the problem and meaning in practice. This research had to involve these practical ways of gathering information, due to limited literature on the topic.

Mouton and Marais (1996:155-156) state that the qualitative approach is that approach in which the procedures are not so strictly formalised, while the scope is more likely to be undefined, and a more philosophical mode of operation is adopted. The qualitative approach worked well in this study, because verbal, non-numerical data was collected through naturalistic interaction with people in everyday situations. The process was open, to make it possible to record unexpected events and practices. The Rustenburg Detective Service was contextualised for study, and the qualitative approach, involving a multi-method

research process, combining case study, literature, interviews and experience, was used for this research.

1.7 POPULATION AND SAMPLING PROCEDURES

According to Bailey (1987:81-82), population includes all individuals or cases of a certain type. The entire number of detectives in the South African Police Service (SAPS) is the population or universe of this study. Ideally, the researcher would like to study the entire population or universe, to give more weight to his findings. Due to financial, time and other constraints, the researcher was not able to study the entire population. The researcher decided to choose the detectives at the Rustenburg Detective Service as the study population for the research, because it was the largest detective unit in Area Marico and the unit where the problem was identified. Further, it had the greatest number of detectives in the area, totalling seventy three (73) detectives.

Maxfield and Babbie (1995:82) define study population as that aggregate of elements from which the target population is actually selected. According to Bailey (1987:82), a target population may be defined as a subset or portion of the study population. It was decided to limit the study population for interviews to a sample of thirty (30) detectives. Written permission to interview the detectives was obtained from the SAPS Head Office in Pretoria. This is attached as Appendix “A”. The researcher considered this target population to be representative of the total population, because all detectives have been appointed in terms of the same policy requirements, underwent the same training, follow the same career paths and promotion systems, and function according to the same policy and standards nationally. The simple random sampling technique was used to select thirty (30) detectives from the seventy three (73) detectives at the Rustenburg Detective Service. This technique was used so that each of the seventy three (73) detectives was given an equal chance of being selected. There was to be no distinction between performing and

non-performing detectives. The names of all seventy three (73) detectives were individually written on a piece of blank paper, folded up and placed in a non-transparent black bag. Each name picked up was recorded as one of the thirty (30) detectives selected to be in the target population (Bouma & Atkinson, 1995:144). According to Mouton and Marais (1988:50), the aim of the researcher is to study a representative number of people, with a view to generalising the results of the study to a defined population. In this research the results can be easily generalised, since the sample group of 30 was valid, representative and selected without any bias.

1.8 DATA COLLECTION

According to Leedy and Ormrod (2001:158), qualitative researchers may use multiple forms of data collection methods in any single study. Due to the influences of biases and values, four different kinds of data collection methods - a case study, a literature study, interviews and experience - were used in this research. All biases have been acknowledged in the final research report, so that readers can also take them into account when reading the report. The researcher recorded potentially useful data thoroughly, accurately and systematically, by using notes. As the data was collected, the researcher began jotting down notes about his initial interpretations of what he was seeing and hearing.

1.8.1 Literature

During the preliminary literature review the researcher visited the Goldfields Library at Unisa, Florida Campus. The researcher looked for literature on the same topic as the research, in the library catalogue, by searching fields of study such as law, criminology, sociology, psychology, policing and investigation of crime, and also by searching the Internet via the library web page on Unisa's website at http://www.unisa.co.za. When none of these sources revealed any literature on the same topic as the research, the researcher then broke the

research topic down into concepts and repeated the above processes. In doing this, the researcher found literature relevant to the study. The researcher studied this literature to explore the international arena for best practices.The researcher also consulted the Crime Information Management Centre (CIMC) and the Training department of the SAPS for literature on the same topic as the research. When none could be found, he broke the topic down into concepts, and found literature relevant to the study. The researcher studied this literature to determine current practices in the SAPS. The relevant literature that was found was studied to find answers to the research questions.

1.8.2 Case Study

The study was done on case dockets, in Rustenburg, which had been investigated by the target group. In this study, a sample of hundred (100) case dockets were selected from a population of about thousand (1000) general crime case dockets closed between July 2005 and December 2005 (six (6) months). The systematic sampling technique was used by choosing every tenth (10) case docket for the case study. In this way, every case docket closed during the period in question had an equal chance of being selected. The purpose was to explore how information relating to a specific criminal case was collected, processed and utilised for investigation purposes, and to determine the nature and extent of problems related thereto. The following questions relevant to the research were used to obtain information from the case dockets:

Q1. How was information collected to investigate the case?

Q2. From what sources was the information collected to investigate this case?

Q3. Was the information recorded manually or entered into a computer?

Q4. Was the information processed by crime analysts?

Q5. What types of analysis did the analyst undertake to assist the detective?

Q6. How well did the analysts transform data into useful crime information products to assist in the investigation of the case?

Q7. What type of crime information products was provided to the detective to successfully finalise the investigation?

Q8. How was the crime information utilised?

Q9. Did the information lead to a successful conclusion of the criminal case?

Q10. Was there continuous communication between the detective and the responsible analyst until the investigation was finalised?

Q11. Was the analyst informed of the outcome of the processed information?

Time was spent interacting on site with people investigating case dockets. Extensive data was collected in this case study. The researcher looked at the convergence of the data, as many separate pieces of the information should point to the same conclusion. All data was analysed during the data collection process.

1.8.3 Interviews

Since interviews are one of the most commonly recognised forms of the qualitative research method (Mason, 2002:62), the researcher used interviews as one of his data collecting methods. Face-to-face interviews between the interviewers and interviewees took place, using an interview schedule. The interview schedule is attached as Appendix “B”. All thirty (30) detectives were individually interviewed by an interviewer.

According to Robson (2000:90), an interview has the advantage of being in a social situation where someone who is good at interviewing can build up empathy between himself and the interviewee, leading to greater involvement and better quality data. Even if this does not occur, the interviewer will be in the

position of being able to assess the degree of the interviewee's interest and involvement. Data obtained under these circumstances can be more easily compared, with less risk of bias occurring, as different people are not asked different questions.

The purpose of the interview was to determine how information relating to the investigation of crime was collected, processed and utilised for investigation purposes, and the nature and extent of problems relating thereto. Due to the length of the interview schedule and the official capacity of the researcher as Area Commissioner, four interviewers with information management and crime analysis experience were chosen to carry out the interviews. The researcher was afraid that the respondents would not communicate freely with him because of his rank and the fact that he was the Area Commissioner, so the decision was made to use field workers. The researcher gave the appointed interviewers specific guidelines on how to conduct the interviews.

The interviewers were given a full description of what the study was all about. General guidelines and procedures were discussed. Each question on the interview schedule was handled separately, with the interviewer. A set of specifications was prepared and demonstration interviews were carried out with persons other than the sample group, so that ambiguous interpretations could be cleared up. The interviewers' efforts were carefully controlled by the researcher. They were also given training and were supervised by the researcher (Babbie, 2001:261-262).

1.8.3.1 Purposive Interviewing

The researcher used his own judgment and chose to personally interview the following individuals: Director Pretorius, the Station Commissioner: SAPS Rustenburg, because of her experience as Station Commissioner and the fact

that the Crime Information Analysis Centre (CIAC) at the Rustenburg police station resorts under her administrative control; Senior Superintendent Trytsman because of his command position as Area Head: Crime Intelligence at Area Marico and experience in the information management and crime analysis environment; Senior Superintendent Van der Walt, Senior Superintendent Madoda and Senior Superintendent Ramela because of their command positions within the detective environment and their experience in the investigation of crime. The purpose of the interviews was to determine how information relating to the investigation of crime was collected, processed and utilised for investigation purposes, and the nature and extent of problems relating thereto.

1.8.4 Experience

The researcher has thirty-five years' policing experience, including twenty-eight years' functional experience in the investigation of crime. He has worked at different police stations both as investigating officer and detective commander. On 1 November 1997 the researcher was appointed Head:Interdepartmental Intelligence Coordination (ICC), and later, Head:Crime Information Management Centre (CIMC) in the SAPS, which occupations exposed him to participant observation, literature, and documentary studies relating to the collection, processing and utilisation of crime information, both nationally and internationally (Bailey, 1987:238,289). The acquired knowledge, skills and experience were used in this research.

In 1999 the researcher was a student at the Federal Bureau of Investigation (FBI) Academy in Quantico, United States of America (USA), where he underwent an extensive course in the practice and evaluation of crime analysis. He was exposed to different forms of crime analysis products, crime analysis centres, and the manner in which crime information is managed on a daily basis by international policing agencies.

The researcher was also the Area Commissioner for Area Marico, North West Province, where he was accountable for thirty-six (36) police stations, including the local detective units at these police stations. Rustenburg Detective Service was the largest detective unit among the thirty-six (36) detective units.

1.9 DATA ANALYSIS

The researcher used the Data Analysis Spiral to organise and analyse the collected data. Leedy and Ormrod (2001:161) describe the Data Analysis Spiral as equally applicable to a wide variety of qualitative studies. Using this approach, the researcher analysed the data by using the following steps:

Step 1. Coding and categorising the data

The words ‘collection’, ‘processing’ and ‘utilisation’ served as units for use in the analysis process. The researcher started by breaking down the data into units for analysis, and categorising the units.

Step 2. Reflections on the early coding and categories

The entire data was perused several times to get a sense of what it contained as a whole. Notes, transcripts and texts had been continuously reflected upon, comments and reflections having been added in the margins alongside the raw data. This process helped with possible categories or interpretations. Reflections helped enrich the data with new thinking, as the analysis progressed.

Step 3. Identification of themes and relationships

Reflections were used to identify the nature and extent of the problems being experienced by detectives in the collection, processing and utilisation of crime information. The researcher looked out for recurring themes and interconnections between the units and categories that were emerging. General explanations and

themes emerged, which were classified accordingly. The researcher managed to obtain a general sense of the nature and extent of the problems.

Step 4. Check out emerging explanations

The researcher returned to the field with all emerging explanations and themes, to check their validity against reality.

Step 5. Develop a set of generalisations

After reflecting on the data and checking out the themes and explanations in the field, the researcher then integrated and summarised the data pertaining to the nature and extent of the problems experienced by detectives in the collection, processing and utilisation of crime information, to develop a set of generalisations that explain the themes and relationships identified in the data. This step includes findings.

Step 6. Use the new generalisations

The new generalisations were used to make recommendations to improve the collection, processing and utilisation of crime information by detectives.

1.10 MEASURES TAKEN TO ENSURE VALIDITY

Validity means that the data and the methods must be right. The research data must reflect the truth and reality, and cover crucial matters (Denscombe, 2002:301). Content validity (Leedy & Ormrod, 2005:92) of the questions on the interview schedule was tested by checking to see if the questions reflected on collection, processing and utilisation of crime information in appropriate proportions, and if it still required particular behaviours and skills that were central to that domain. Respondent validation was obtained from the participants in the interviews by simply asking if they agreed with the conclusions. Opinions of

experienced and skilled colleagues from the detective environment were also obtained, to determine whether they agreed or disagreed with the interpretations and conclusions drawn from the data. The researcher remained as objective as possible throughout the research.

Four methods were used to provide evidence of validity on the data collected (Leedy & Ormrod, 2005:92). To ensure validity, the researcher made sure that the methods were administered in a consistent fashion and that the methods used to collect the data were accurate, honest and on target. Criterion validity was used in this regard to test whether the results of the interviews and case study correlated with the literature study, presumably a related measure (the latter measure served as the criterion) (Leedy & Ormrod, 2005:92).

1.11 MEASURES TAKEN TO ENSURE RELIABILITY

Bless and Higson-Smith (1995:129) state that reliability is the extent to which the observable measures that represent a theoretical concept are accurate and stable when used for the concept in several studies. According to Leedy and Ormrod (2005:92), reliability of data is influenced by four variables: the researcher, the participant, the measuring instrument, the research context and the circumstances under which the research is conducted. The researcher, in this study, did everything possible to enhance the reliability of the measuring methods, so that the same methods used by other researchers and/or at different times would produce the same results. To achieve reliability, the researcher ensured that the methods were administered in a consistent manner, in that the method was standardised from one situation or person to the next. All the items in the interview schedule yielded similar results. The researcher ensured that the interviewers were well trained, to obtain similar results. Opinions of experienced and skilled detectives were obtained whenever subjective judgments were made on the data. Specific criteria were established to dictate the kinds of judgments the researcher made. One can measure something accurately only when one

can also measure it consistently. In other words, in order to have validity one must also have reliability. The researcher of this study ensured that each of the methods used was carefully monitored to prevent bias, and steps were taken to make sure that reliability became the central consideration of validity during the process of data collection.

According to Noak and Wincup (2004:171), “the process of data collection, analysis and writing are intricately bound”. In line with the qualitative elements of the research, notes were kept from the beginning of the research. They were written actively and reflexively to include a description of the event, the researcher’s own feelings and responses to it, and linkages to potential research themes. They also contained the researcher’s thoughts regarding connections to the literature and prompts for future research and investigation. Regular face-to-face meetings were maintained to keep day-to-day contact with the activities of the detectives. According to Denscombe (2002:274), this is sometimes called an audit trail, to test reliability.

1.12 ETHICAL CONSIDERATIONS

Participants were not exposed to undue physical or psychological harm. They were informed of the nature of the study to be conducted, and given the choice of either participating or not participating. Participants had the right to withdraw from the study at any time. Participation in the study was strictly voluntary. Each participant’s right to privacy was respected. All findings were done in a complete and honest fashion, without misrepresenting what had been done or intentionally misleading others as to the nature of the findings (Leedy & Ormrod, 2001:107-108).

During the case study, interviews and literature study, confidential information was not inadvertently disclosed by anyone. No information was revealed, owing

to the trust and rapport that existed between the researcher and those being studied. The ethical problem was whether to use such material, and how to use it. The following guidelines were used in this regard:

a) Any use of the material should ensure that no one suffers as a result; and

b) Any use of the material should avoid disclosing the identities of those involved.

Any departure from these guidelines would need very special consideration and justification (Denscombe, 2002:205). All sources in the literature study had to be acknowledged by the researcher.

According to Leedy and Ormrod (2005:101-102) and Babbie (2001:38), ethical issues, such as protection from harm, informed consent, and right to privacy and honesty, must be considered. The following was done to ensure that the above-mentioned ethical issues were considered by the researcher:

- Protection from harm: to protect them from harm, interviewees were not singled out to be interviewed.

-Informed consent: their identity was handled with anonymity and their responses were never discussed with another person. Informed consent of the supervisor and the interviewees was obtained prior to the interviewees being interviewed, so as to promote voluntary participation.

- Right to privacy and honesty: the interview was done one-on-one in private by an interviewer, with a prearranged appointment, to ensure right of privacy, and the interviewers were trained to be transparent, neutral and honest with all the interviewees.

1.13 RESEARCH PLANNING (CHAPTERS AND LAYOUT)

Chapter 2: Collection of crime information. This section discusses the manner in which detectives are presently collecting crime information for the investigation of

crime, the nature and extent of problems experienced, and the steps taken to address the problems.

Chapter 3: Processing of crime information. This section discusses the processing of crime information for the investigation of crime, the nature and extent of problems experienced, and the steps taken to address the problems.

Chapter 4: Utilization of crime information. This section discusses the utilisation of crime information for the investigation of crime, the nature and extent of problems experienced, and the steps taken to address the problems.

Chapter 5: Findings and recommendations. This section discusses the findings and recommendations, to enhance the collection, processing and utilisation of crime information, for the investigation of crime.

List of References

Appendices

CHAPTER 2: COLLECTION OF CRIME INFORMATION

2.1 INTRODUCTION

Du Preez (1996:1) defines investigation of crime as “a systematised search for the truth, with the primary purpose of finding a positive solution to the crime with the help of objective and subjective clues”. Gardner (2005:352) mentions that the objectives of investigation of crime are a six-step process. The steps include: defining the crime problem or question to be resolved, collecting crime information to resolve the problem, developing a hypothesis, classifying and organising the information, testing the predictions of the hypothesis, and defining a conclusion. The changing face of investigation of crime has seen a number of techniques and methodologies being adopted and developed to assist in the solving of cases (Jordaan, 2003a:56). One of the most recently adopted methodologies used in the investigation of crime is information management and crime analysis (Reuland, 1997:1). Information management and crime analysis begins with the collection of a wide variety of information. According to Lyman (1988:147) and Gottlieb et al. (1994:1), the collection process entails the collection of information on people and places thought to be associated with criminal activity, but, before there is sufficient probable cause for an arrest. Since the collection of crime information is one of the primary objectives of the investigation of crime, the researcher considers it important to develop a broad understanding of all the relevant aspects related to the collection of crime information for the investigation of crime.

2.2 COLLECTION OF CRIME INFORMATION

The collection of crime information for the investigation of crime is simply an act of gathering information that will be used to produce crime information products for the investigation of crime (Peterson, 1994:270). Goldsmith, McGuire, Mollenkopf and Ross (2000:4) state that “crime analysis for the investigation of crime involves the collection of crime information pertaining to a criminal incident,

offender and target". Reuland (1997:7) describes crime information as "crime-specific elements that distinguish both one criminal incident from another and one group of offences, related in one or more ways, from a larger group of similar offences". Ainsworth (2001:108) says that crime information gathering involves the collection of as much information about the crime as possible. This would include the police report, details from the post-mortem examination, photographs from the crime scene, etc. Van Heerden (1986:202) states that information is collected by talking to people and asking them questions.

Police agencies in the USA rely on the electronic transfer of data, laptop computers transmitting data through radio frequencies, or scan forms to ensure receipt of timely crime data (Goldsmith et al., 2000:4). According to Redpath (2004:37), the Scorpions Investigation Unit (SIU) in South Africa uses data capturers to reduce data to an electronic form. The data capturers either enter the data directly into automated systems, or, where technically feasible, scan the information with optical scanners before analysts can use the appropriate software to analyse the data. According to Director S. Pretorius (2006), Station Commissioner of SAPS Rustenburg, data typists are used in the SAPS to reduce data to an electronic form. The data typists enter the data directly into computer systems for use by analysts and other decision makers.

According to Gardner (2005:7), crime information presents itself as either testimonial evidence or forensic evidence. Each is important, and each plays a role in helping the jury to come to a decision of guilt or innocence. According to Van Heerden (1986:216), crime information entails solid or liquid material which could establish an associative relationship between a person, weapon or vehicle and the crime or the victim. Ribaux, Girod, Walsh, Margot, Mizrahi and Clivaz (2003:58) state that there is considerable potential to combine forensic data within geographical information. They highlight the potential for applying analytical techniques to forensic data, noting that forensic case data is still poorly integrated into crime analysis and the investigative process.

Van Heerden (1986:187) states that the collection of information for the investigation of crime must be conducted in a lawful way, so that the evidence being presented will indeed be admissible as evidence. The evidence must also be of such a nature that the unlawful act of the accused is demonstrated beyond any reasonable doubt. For this reason, systematic and planned action is an essential part of criminal investigation.

According to Peterson (1994:36) and Bozza (1978:1), a systematic plan of action for the collection of information forms the basis of criminal investigation. A collection plan shows what needs to be collected, how it is going to be collected and by what date. Peterson (1994:36), states that it can also include a survey instrument, a chronological table and possible hypotheses which one intends to prove or disprove. A collection plan is usually approved by the Crime Information Analysis Manager (CIAM) or the Detective Manager (DM).

Fischer (2004:1) states that investigating officers should have the ability to recognise, collect and use crime information in criminal investigations. Crime information collected in the investigation of crime will assist the investigating officer to reconstruct the incident, ascertain the sequence of events, determine the mode of operation, uncover a motive, discover what property was stolen, find out all that the criminal may have done, and recover physical evidence of the crime (Fischer, 2004: 48).

To the question “What is your understanding of the concept ‘collection of crime information’ for the investigation of crime?” the sample responded as follows:

- collection or gathering of information for the purpose of evidence (twelve (12) of thirty (30) respondents);
- to ensure that all exhibits are secure at crime scene for evidence (seven (7) of thirty (30) respondents);
- witness statements and forensic reports

(three (3) of thirty (30) respondents);

- to help investigator to solve case easily and to show the possible suspect (two (2) of thirty (30) respondents);
- do not know (two (2) of thirty (30) respondents);
- making sure that the chain of evidence is complete (one (1) of thirty (30) respondents);
- collection of crime information from sources like radios, television, informers, etc., which can be utilised to assist (one (1) of thirty (30) respondents);
- obtaining and documenting information for the investigation of crime (one (1) of thirty (30) respondents);
- no response (one (1) of thirty (30) respondents).

All the positive responses related to the concept 'collection of crime information', are in line with the mentioned literature study. The negative responses are as a result of the members not being trained, as indicated on their interview schedules.

2.2.1 Crime information collection methods

According to Lyman (1988:147), the methods used to collect crime information for the investigation of crime typically include the overt crime information collection method - which can be generally defined as personal interaction with people, and the covert crime information collection method - which is commonly defined as intelligence gathering.

2.2.1.1 Overt crime information collection method

The overt crime information collection method is used to collect crime information through open means (Lyman, 1988:147). The researcher has also experienced that the overt crime information collection method is publicly used to collect information, which is always readily available in public, often at little or no cost. However, some information providers are expensive. According to Lyman

(1988:147), open means of crime information collection takes place by means of personal interaction with people, many of whom are complainants, witnesses to crimes, victims of crimes, suspects, the mass media and other agencies/ institutions. It includes the television, radio, scientific journals, news bureau, current affairs, grey literature, databases, images, maps, government public information, libraries, literature, academic public reports, private companies and people. Marais and Van Rooyen (1990:19) state that open means also includes scenes of crime, as this is the location of observable crime information which is gathered before it can be processed, for the purpose of criminalistic interpretation, application and individualisation.

The case study done by the researcher indicated that the detectives at Rustenburg collected information through open means:

- people (hundred (100) of hundred (100) cases);
- scenes of crime (hundred (100) of hundred (100) cases).

2.2.1.2 Covert crime information collection method

The covert crime information collection method is used to collect crime information in a clandestine or closed means (Botha, as quoted by Van der Westhuizen, 1996:88). The researcher has also experienced that the covert crime information collection method is used to collect information for a specific purpose, which has limited access of distribution and is commonly referred to as classified information.

Closed means of collecting crime information refers to actions of people who are generally known as informants or agent provocateurs. These informants or agent provocateurs carry out clandestine operations to obtain crime information for the investigation of crime (Matthews, 1986:189). According to Lyman (1988:147), closed means includes, inter alia, the use of physical surveillance, electronic surveillance, informants and undercover officers, for the purpose of investigation

of crime. The case study done by the researcher indicates that the detectives at Rustenburg collected information through closed means:

- informers (two (2) of hundred (100) cases).

According to Altbeker (1998:34), in order to move against the leader of a criminal group or syndicate, it is necessary to have information and evidence. Information can be obtained through closed means, namely, electronic interception of communication, from informers and agents. If recordings of conversations or intercepted mail are to be used as evidence, permission must be obtained for these procedures, and information supplied by an informer or agent can only be used in court if the person is prepared to testify. For that reason the police tend to use agents, because, as paid police officials, they are certain to testify. Informers, on the other hand, who are associates of the subjects, usually refuse to testify, or may be discredited when they do.

To the question "Which crime information collection methods do you use in the investigation of crime?" the sample responded as follows:

- informers, internal and external sources, witnesses and experts (ten (10) of thirty (30) respondents);
- Crime Information Manager (CIM), CIAC, Local Criminal Record Centre (LCRC) (three (3) of thirty (30) respondents);
- evidence is marked and sealed and dispatched to experts in bags (three (3) of thirty (30) respondents);
- interviews, visits to scenes of crime (three (3) of thirty (30) respondents);
- computers (two (2) of thirty (30) respondents);
- to collect forensic evidence at the scene, e.g. blood, semen, etc. (two (2) of thirty (30) respondents);
- Association Network Analysis Chart (ANAC), profiles (one (1) of thirty (30) respondents);
- obtain statements and seize exhibits (one (1) of thirty (30) respondents);
- investigation of dockets (one (1) of thirty (30) respondents);

- television and radios (one (1) of thirty (30) respondents);
- depending on the type of crime (one (1) of thirty (30) respondents);
- no response (two (2) of thirty (30) respondents).

Four (4) of the respondents provided incorrect responses three (3) respondents stated that “evidence is marked and sealed and dispatched to experts in bags” and one (1) respondent stated “depending on the type of crime” . These responses are not relevant to the question. According to the interview schedules, these respondents did not receive training in the collection of crime information.

2.2.2 Internal sources used to collect crime information

Internal sources refer to databases used by an organisation to collect and store data for utilisation by decision makers (Reuland, 1997:9). According to Reuland (1997:10), the American policing system has complete control over internal sources of crime information, specifically on how information is collected, stored, and used. In South Africa, investigation of crime is not the exclusive preserve of the SAPS; therefore, the SAPS does not hold complete control over internal sources of crime information, specifically how it is collected, stored and used (Redpath, 2004:26). Hirschfield and Bowers (2001:239) state that two of the most widely used internal data sources from police information systems in the United Kingdom (UK) and the USA include recorded crime information and telephone calls for service.

According to Vellani and Nahoun (2001:28), the primary internal source used by international policing agencies is Calls for Service (CFS) which serves as a crime analysis basis and provides for the most accurate portrayal of criminal and other activity at a given place within a police precinct. CFS consists of every report of crime, suspected crime and activity called in to the police from a specific geographic location. These are all calls made by a victim, witness or other person, to a local police station, via the emergency system or other channels. Reliability of CFS is tested by crime analysts and detective management, to meet

the demands of forecasting crime and other activities that might be of interest to an investigator.

In most of the police agencies in the USA, all the internal source crime information is collected either manually by police officials in person and/or automatically by means of computer systems and/or specific stand-alone computer systems, which are thereafter processed by analysts into investigation analysis products (Hirschfield & Bowers, 2001:33-36).

According to Block, Dabdoub and Fregly (1995:15), there are sometimes so many pieces of information, that it is often impossible for the human mind to manually assimilate them, sort them out and use them for tactical or investigation purposes, before the window of opportunity has passed. Mainframe computer systems and collection software have now become the “order of the day” in policing circles.

At SAPS Rustenburg, crime reports and forensic information are first obtained manually and thereafter entered into the relevant automated systems for use by analysts and relevant decision-makers (Pretorius, 2006).

The case study done by the researcher indicates that the detectives at Rustenburg collected crime information, using the following internal sources:

- Crime reports (hundred (100) of hundred (100) cases);
- Fingerprint reports (two (2) of hundred (100) cases).

Reuland (1997:10), Vellani and Nahoun (2001:27), Ainsworth (2001:63-65) and Hirschfield and Bowers (2001:11) identify and discuss the different internal sources of crime information used by policing agencies internationally. Table 1 shows the manner in which some of the internal sources may be used to assist in the investigation of crime.

2.2.2.1 **Table 1**: Collection of crime information from internal sources

Internal sources	**Uses**
Offences/ Crime incident reports	Provide information on the crime-specific elements of a particular offence and serve as the basis of crime analysis.
Field interview cards	Become the primary source of field intelligence about suspicious persons interviewed at specific locations and times, and about the activities of known offenders.
Evidence technicians reports	Determine availability of latent fingerprints.
Selected calls for service	Identify times during which alarms were triggered in areas.
Investigative supplements	Provide additional crime-specific elements that result from follow-up investigations and interviews.
Arrest reports	Describe known offenders and the details of how crime was committed.
Traffic citations	Provide information about vehicle movements in key areas.
Teletypes from local agencies	Track crimes across jurisdictional boundaries.
Confessions from arrestees	Confirm exact modus operandi of offenders.
Intelligence files	Provide information on drug abusers, and organised crime groups.

To the question “What internal sources do you use to collect crime information to investigate crime?” the sample responded as follows:

- LCRC, CIG, CIAC, Crime Administration System (CAS), dog unit, photographers, Technical Support Unit (TSU), ballistics, forensics (seventeen (17) of thirty (30) respondents);
- telephone and informers (five (5) of thirty (30) respondents);
- personnel, vehicle reports, firearm reports, crime reports, modus operandi and people (four (4) of thirty (30) respondents);
- Home Affairs, prisons, hospitals and municipalities (one (1) of thirty (30) respondents);
- docket and informer (one 1 of thirty (30) respondents);
- crime statistics (one (1) of thirty (30) respondents);
- no response (one (1) of thirty (30) respondents).

All the respondents gave correct responses, with the exception of one (1) respondent who mentioned Home Affairs, prisons, hospitals and municipalities as internal sources, which in practice are known as external sources of information. The interview schedule indicated that this respondent did not undergo training in the collection of crime information. All the mentioned internal sources are used by law enforcement agencies internationally.

2.2.3 External sources used to collect crime information

External sources refers to databases under the control of other institutions and agencies used to collect and store information that may be relevant to the decision makers of another institution or agency (Reuland, 1997:9). External sources can provide valuable information on adult career criminals and known offenders (Reuland, 1997:8). According to Block et al. (1995:87), external data sources or data banks are often geographically based, and information from parole and probation officers, mental health outpatient clinics, social services offices and similar agencies located in the most probable areas, can also prove to be of value. For example, a serial rapist in New York City emerged as a

suspect after the investigator checked parolee records for sex offenders. Reuland (1997:9) and Block et al. (1995:87) identify and discuss the different external sources of crime information used by policing agencies internationally. Table 2 shows the manner in which some of the external sources may be used to assist in the investigation of crime.

2.2.3.1 **Table 2**: Collection of crime information from external sources

External sources	**Uses**
School records	Identify and track problem children, identify potential serious habitual offenders.
Bail information	Identify suspects committing crimes while on bail.
Parole information	Provide information to officers about the release of known offenders into the community.
Probation information	Provide information to officers about conditions of probation related to associates, places, alcohol use, etc.
Furloughed prisoners	Track appearance of old modus operandi over a series of weekends.
Other police agencies	Identify and track crimes and offenders across jurisdictional boundaries.
Census data	Understand the demographics of a given area.

According to Reuland (1997:9), an inter-agency database was created along with the juvenile courts, probation officers and social service agencies, to share offender-oriented information. In a short time, information about truancy, referral rates for absences, tardiness, behaviour problems, student conduct violations

and academic history was made available for the purpose of creating a multi-agency supervision and intervention plan. A clear picture of disruptive incidents and trends emerged, along with additional knowledge of how youths interact with other students. From such an analysis, troubled youths could be identified more quickly, and appropriate interventions applied more broadly. Such efforts were not possible previously, because the participating agencies had long believed that information could not or should not be shared. The result was the maintenance of separate and usually incomplete files. Today, most jurisdictions allow inter-agency sharing of juvenile information.

The Chicago Police Department is supported by a Geographic information system (GIS) called a Geoarchive. Characteristics of the Geoarchive are address-based data, information on both law enforcement and the community, and analysis that is used at community level (Block et al., 1995:222). The Geoarchive acts as an institutionalised memory for law enforcement, holding not only law enforcement information, but also community information that is not always readily available to the local law enforcement official. The community data comes from a variety of city, state and federal agencies. The law enforcement data and the community data can be used together for decision-making and problem-solving (Block et al., 1995:223-226).

The case study done by the researcher indicates that the detectives at Rustenburg collected information through the following external sources:

- informers (two (2) of hundred (100) cases);
- hospitals (two (2) of hundred (100) cases).

To the question “What external sources do you use to collect crime information to investigate crime?” the sample responded as follows:

- informers, public and Community Police Forum (CPF), media, South African Revenue Service (SARS), embassies, banks, district surgeons (nineteen (19) of thirty (30) respondents);

- LCRC, Home Affairs and Forensics (three (3) of thirty (30) respondents);
- garages and hospitals (two (2) of thirty (30) respondents);
- Internet (one (1) of thirty (30) respondents);
- Closed Circuit Television (CCTV), cameras, ballistics (one (1) of thirty (30) respondents);
- municipality and prisons (one (1) of thirty (30) respondents);
- insurance companies (one (1) of thirty (30) respondents);
- post office (one (1) of thirty (30) respondents);
- cellphone providers (one (1) of thirty (30) respondents).

The majority of the responses are correct; however, there are two (2) respondents that referred to the LCRC, Forensics and Ballistics as external sources, which in reality are internal sources in the SAPS. These incorrect responses are due to the said respondents not being trained in the collection of crime information, as indicated on their interview schedules. The responses are similar to external sources used nationally and internationally.

2.3 PROBLEMS EXPERIENCED BY DETECTIVES IN THE COLLECTION OF CRIME INFORMATION

Recorded crimes suffer from problems of under-reporting and are also highly variable in their accuracy and quality, particularly in the way addresses and locations are geographically referenced (Hirschfield & Bowers, 2001:239). Reuland (1997:9), mentions that most agencies probably have few options for obtaining external information, since they have little control over external data sources. Cope, as quoted by Alison (2005:108), states that forensic case data is still poorly integrated into crime analysis and the investigative process.

According to Block et al. (1995:3), the absence of a close working relationship with the community, incorporating an effective and mutual exchange of information, seems to be a problem in the community.

According to Gardner (2005:352), the quality of the processed information depends largely on how well a police service can store and access data. Paulsen (2004:234) states that traditionally the field of policing has had an uneasy relationship with technology, often being slow to adopt new technologies despite their potential benefits to policing.

The following problems were discovered in the SAPS, pertaining to the collection of crime information at station level (Louw, 2001:4):

- the recording of exactly where crimes happened;
- the classification of certain crimes, e.g. aggravated versus common robbery, serious assault versus attempted murder;
- updating the SAPS data sheet that provides information on the outcome of a case once it has been to court (i.e. whether a conviction was achieved, whether the case was withdrawn, etc.).

Deductive or inductive arguments and rational reconstruction are not applied in solving cases. Most detectives work in a routine and repetitive fashion (Altbeker, 1998:28). This trend is also evident in the case study carried out by the researcher (ninety (95) out of hundred (100) cases were investigated, with only statements from complainants and witnesses).

Despite the potential for the use of closed means, there are resource constraints when using these means, as they are costly, require high levels of commitment and skill, and most importantly, require visionary and innovative managers. For these reasons, closed means are mainly used to guide investigations into syndicate crime. The difficulty, however, is ensuring that the information gathered can eventually be used as evidence in court (Altbeker, 1998:34).

To the question “What problems do you experience in the use of open means to collect crime information in the investigation of crime?” the sample responded as follows:

- witnesses reluctant to assist the police or give evidence, because of fear of criminals (eight (8) of thirty (30) respondents);
- non-availability of newspapers (four (4) of thirty (30) respondents);
- seldom get cooperation from the public (four (4) of thirty (30) respondents);
- information not spread or published immediately (three (3) of thirty (30) respondents);
- it is time-consuming as all information needs to be followed up to determine if information is true or false (three (3) of thirty (30) respondents);
- communication officers reluctant to react quickly to assist detectives (two (2) of thirty (30) respondents);
- some of the open means are not reliable, e.g. newspapers, informers etc. (one (1) of thirty (30) respondents);
- struggle to get hold of doctors after hours - especially in rape cases (one (1) of thirty (30) respondents);
- information not captured immediately (one (1) of thirty (30) respondents);
- none (two (2) of thirty (30) respondents);
- no response (one (1) of thirty (30) respondents).

The majority of the respondents indicated that witnesses are reluctant to give crime information or make statements, due to fear of criminals.

To the question “What problems do you experience in the use of closed means to collect crime information in the investigation of crime?” the sample responded as follows:

- criminals and syndicates are difficult to penetrate, because they will kill you (ten (10) of thirty (30) respondents);
- communication officer reluctant to assist detectives with information (two (2) of thirty (30) respondents);
- time delay (two (2) of thirty (30) respondents);

- huge workload, not enough time (two (2) of thirty (30) respondents);
- court does not always want to give warrants (two (2) of thirty (30) respondents);
- informers do not always provide correct information (two (2) of thirty (30) respondents);
- never used closed means (two (2) of thirty (30) respondents);
- informers expect huge payments for information, and in most cases if they do not get the expected money, they do not cooperate again (one (1) of thirty (30) respondents);
- not enough personnel (one (1) of thirty (30) respondents);
- members not well trained in the use of closed means (one (1) of thirty (30) respondents);
- not enough budget (one (1) of thirty (30) respondents);
- none (four (4) of thirty (30) respondents).

The majority of respondents stated that they cannot obtain crime information on criminal syndicates due to fear of being killed.

2.4 STEPS TO BE IMPLEMENTED TO ADDRESS THE PROBLEMS EXPERIENCED IN THE COLLECTION OF CRIME INFORMATION

Information for the investigation of crime must come from the community, problem-oriented policing literature, and as many different sources as possible (Reuland, 1997:8). According to Block et al. (1995:3), a close working relationship with the community, incorporating an effective and mutual exchange of information, must be established. The shift towards community-based policing, seen in many American and Canadian police agencies, can assist in the efforts to open up such lines of dialogue.

To the question “What solutions do you have to overcome problems of data integrity?” the sample responded as follows:

- in-service training (eleven (11) of thirty (30) respondents);

- data typists and administration officials needed for information management (six (6) of thirty (30) respondents);
- awareness workshops for personnel (four (4) of thirty (30) respondents);
- enter correct information into system (four (4) of thirty (30) respondents);
- certifying data on the system (three (3) of thirty (30) respondents);
- proper maintenance service to be done to systems (one (1) of thirty (30) respondents);
- systems should not to be off-line for long hours (one (1) of thirty (30) respondents).

Supervisors ought to monitor data integrity by checking on the maintenance of the systems, personnel utilisation, and whether the crime information is correctly entered, stored and utilised on the system.

To the question “What solutions do you suggest to overcome the problems in the use of open means to collect crime information?” the sample responded as follows:

- crime analysis products to be provided by CIM (five (5) of thirty (30) respondents);
- better rewards to informers for information (four (4) of thirty (30) respondents);
- community involvement to be encouraged (four (4) of thirty (30) respondents);
- media officers to provide information from media (two (2) of thirty (30) respondents);
- integrated computer systems between government departments (two (2) of thirty (30) respondents);
- district surgeons to be appointed to assist investigators (two (2) of thirty (30) respondents);
- members should be trained to handle information (two (2) of thirty (30) respondents);

- CIM and CIAC to be given Internet access, and provided with books and daily newspapers (one (1) of thirty (30) respondents);
- CIAC to monitor information (one (1) of thirty (30) respondents);
- investigators to act speedily on information (one (1) of thirty (30) respondents);
- television to be used to collect information (one (1) of thirty (30) respondents);
- increase personnel and computer resources (one (1) of thirty (30) respondents);
- witnesses to be protected (one (1) of thirty (30) respondents);
- no response (three (3) of thirty (30) respondents).

Community partnerships should be established to encourage community participation and involvement in crime investigation initiatives (Reuland, 1997:77)

To the question "What solutions do you suggest to overcome the problems in the use of closed means to collect crime information?" the sample responded as follows:

- establishing special investigation teams to investigate specific crimes (six (6) of thirty (30) respondents);
- relevant training and resources must be given to detectives to carry out their tasks (six (6) of thirty (30) respondents);
- to befriend someone working with the criminal group with the aim to infiltrate the syndicate (three (3) of thirty (30) respondents);
- CCTV to be improved (two (2) of thirty (30) respondents);
- recruit someone who can infiltrate the criminal group (one (1) of thirty (30) respondents);
- recruit reliable informers (one (1) of thirty (30) respondents);
- police to control CCTV cameras, not private companies (one (1) of thirty (30) respondents);

- informers should be paid speedily (one (1) of thirty (30) respondents);
- organised crime units to handle this task (one (1) of thirty (30) respondents);
- informers to be properly handled (one (1) of thirty (30) respondents);
- special prosecutors to be assigned to investigators (one (1) of thirty (30) respondents);
- financial officer to be appointed to handle informers' monies in the detective service (one (1) of thirty (30) respondents);
- media officer to be appointed at detective service (one (1) of thirty (30) respondents);
- none (four (4) of thirty (30) respondents).

Simpler ways of handling and remunerating informers and sources should be implemented. Detective commanders should be given the responsibility to remunerate informers and sources at station level (Botha, as quoted by Van der Westhuizen, 1996:93) .

2.5 SUMMARY

The collection of crime information is important, to assess the nature and distribution of crime, in order to efficiently allocate resources and personnel. It is clear, from this chapter, that there are many ways in which information available to an analyst may be biased and inaccurate. Even where crimes are reported and recorded by the police, the official record may contain a number of vague or inaccurate pieces of information. In some instances the inaccuracies may be as a result of the interpretation put on the information by the recording official (Ainsworth, 2001:78-79).

CHAPTER 3: PROCESSING OF CRIME INFORMATION

3.1 INTRODUCTION

According to Reuland (1997:11-12), once the crime information is collected, the next concern is to process it; this means creating databases capable of automated searches and comparison. Fundamentally, processing in policing is not simply analysing information about crime, but rather, the term 'processing' is used more generically to refer to the process of researching, sorting, reviewing, presenting and interpreting information about a range of policing problems (Cope, as quoted by Alison, 2005:90). Processing crime information products on crime patterns and offences is reliant upon good information being available. If information is incomplete or inaccurate, then any subsequent analysis will be unreliable (Ainsworth, 2001:59).

3.2 PROCESSING OF CRIME INFORMATION

The quality of the processed crime information products depends largely on how well a police service can store and access crime information. Crime information products are the charts, graphs, tables, summaries and other analytical compilations, which are produced in the course of an analytical review of materials (Peterson, 1994:6).

3.2.1 Definition of processing

Peterson, as quoted by Jordaan (2003a:59) defines processing, in the context of crime information management, as "the reviewing of crime information data and the comparison of it to other data to determine its meaning or relation to other data, with reference to a criminal investigation". According to Vellani and Nahoun (2001:73), processing is especially important, since it requires that certain steps be reached and built on before crime investigation strategies can be accomplished.

3.2.2 Steps in processing

Processing in the investigation of crime entails analysing the exact nature of the problem and the characteristics of the incidents. Important factors to consider include where the incidents are occurring, at what times, who is involved, how and why the problem is occurring, and what solutions have been tried in the past. By determining the underlying causes of the problem through the gathering of detailed information, more effective investigative strategies can be developed. Such information can come from the police, outside agencies, experts, and from the community itself, and even from those offenders involved in the problem (Block et al., 1995:3).

3.2.3 Purpose of processing

According to Goldsmith et al. (2000:4), one of the most important purposes of crime information processing in the investigation of crime is to identify and generate crime information products needed to assist in the investigation of crime. Reactive processing refers to analysis that supports police activity after an incident has occurred. This includes from analysis through to profiling, which is developed to support the investigation of crime (Cope, as quoted by Alison, 2005:91).

3.2.4 Role of analysts in processing

Personnel responsible for processing crime information products are called crime analysts. Police managers recognise that competent crime analysts provide important crime information products to decision makers (Goldsmith et al., 2000:4). A crime analyst's role depends on the organisation's structure. There are two basic approaches to processing: centralised and decentralised. In areas with decentralised units, the analyst conducts analysis based on his/her areas of responsibility (precinct or district). This makes the identification of a perpetrator whose activities cross boundary delineations, difficult, since the analyst is often accessing information about his/her area only, and not the entire jurisdiction. In

centralised situations the analyst conducts analysis based on a global overview of the jurisdiction, with the ability to focus on smaller areas of concern as the need is identified. In the centralised approach, the analyst can bring a broad-based perspective to the table, backed up by knowledge not only from a single area or another analyst's report, but from personal knowledge, experience, and recall of previous reports and analyses (Reuland, 1997:28).

Hall, as quoted by Jordaan (2003a:59) and Atkin (2000:3), an analyst is responsible for turning the raw crime information into timely and actionable crime information products, which can be used by an investigator for the investigation of crime. The timely and actionable crime information product is enriched into court-directed evidence by the investigator, who adds value to the crime information product (Jordaan, 2003b:59). Du Preez (1996:16-17) states that the continued possession of information, from the time it is first collected until it is presented in court as evidence, must be assured - as well as its control, coordination and cumulative use. Gardner (2005:vii) states that it is important to ensure the integrity of information collected, in order to avoid legal restrictions that may prevent the introduction of such information as evidence at a trial, or the development of a solid case for prosecution.

3.2.5 Manual processing

Processing can be done manually or through the use of computer systems, though many agencies prefer the automated approach. Reuland (1997:12), however, argues that expensive computer applications are not the answer, as they are no substitute for analytical creativity. It is usually the analyst's skill, experience and creativity that determine what to look for - computers only expedite the process. Manual processing of crime information products can be traced back to the early 1900s, when August Vollmer introduced the English technique of systematic classification of known offender modus operandi (MO). Manual processing entails the systematic manual analysis of daily reports of serious crimes, in order to determine the location, time, special characteristics,

similarities to other criminal events, and various significant facts that may help to identify either a criminal or the existence of a pattern of criminal activity (Block et al.,1995:221-222). Ainsworth (2001:82) states that crime mapping and geographical profiling (which is manually done on a map by using a selection of different-coloured pins, each of which represents a crime or incident that has taken place) are useful in showing crime hot spots and allowing police observers to see at a glance where crime is concentrated. Such information assists police managers to allocate their resources more effectively and to focus their policing on those areas which appear to have the highest rates of crime.

3.2.6 Computerised processing

According to Block et al. (1995:15), there are often so many pieces of information that it is impossible for the human mind to assimilate them, sort them out and use them for strategic and tactical crime analysis decisions. This has precipitated a technological revolution, such as computer mapping, which has generated a need for analytical methods and techniques to make spatial decisions, and a foundation for answering practical and policy questions in the policing environment.

Block et al. (1995:xiii) argue that the change from manual processing to automated processing is important, not only because it supplements the expertise of an experienced police officer, but also because the knowledge and techniques accumulated over the years do not retire with a veteran detective. They are there for others to build on.

According to Goldsmith et al. (2000:12-13), the COMPSTAT (Computerised Statistics) crime reduction strategy in New York City started by using electronic pin-mapping software and the mainframe computer network. Managing the growth and improvement of the COMPSTAT process is challenging, especially with regard to technology and software changes. An ongoing assessment of changing technology and its impact has become a routine part of managing the

COMPSTAT process. Interest in new technologies, such as DNA analysis, forensic science analysis and investigative analysis software, to name a few, has grown dramatically over the past few years (Paulsen, 2004:234).

3.2.7 Crime Information Analysis Centre

According to Louw (2001:4), the CIAC's in the SAPS are centralised at police stations, under the administrative control of the Station Commissioner. This was confirmed in an interview between the researcher and the Station Commissioner at SAPS Rustenburg (Pretorius, 2006).

To the question "Do you have a CIAC at the Rustenburg Detective Service?" the sample responded as follows:

Twenty one (21) of the responses were "No", while nine (9) of the responses were "Yes". The "Yes" responses by the sample probably refer to the CIAC under the administrative control of the Station Commissioner at Rustenburg. The "No" responses are referring to the detective service. This confusion is due to the present situation of the CIAC. However, this has been cleared by the majority of the respondents who stated "No". The researcher also has knowledge of the Rustenburg Detective Service, and concurs with the "No" respondents.

According to Director S. Pretorius (2006), Station Commissioner of SAPS Rustenburg, the CIAC at the police station is responsible for the processing of all geographic crime information products, while the Forensic Science Laboratory (FSL) and the Criminal Record Centre (CRC) process all scientific crime information products for the detectives at Rustenburg. The role of the CIAC, the FSL and the CRC is to assist the detective in solving the case under investigation. The detective service has a CIM who coordinates the requests of detectives for the CIAC and the scientific analysis institutions. It is expected of the detectives to record the utilisation of all crime information products received for investigation purposes, in the investigation diary of the relevant case docket.

The case study done by the researcher shows that in six (6) out of a hundred (100) case dockets, fingerprints were processed by fingerprint experts to assist detectives in the investigation of their cases. There are records of these reports in the case dockets.

To the question "Who processes your crime information products for the investigation of crime?" the sample responded as follows:

- investigating officer or LCRC (nine (9) of thirty (30) respondents);
- CIAC, CIG, Organised Crime Unit (OCU), Criminal Record Centre (CRC) (six (6) of thirty (30) respondents);
- experts (six (6) of thirty (30) respondents);
- FSL (five (5) of thirty (30) respondents);
- CIM (two (2) of thirty (30) respondents);
- exhibits are secured at crime scene for evidence (one (1) of thirty (30) respondents);
- do not understand (one (1) of thirty (30) respondents).

The majority of the respondents indicated that they are assisted by other specialised components. It is clear from the responses that they do not have a crime information analysis capacity at the detective service in Rustenburg.

To the question "What is your understanding of the concept 'processing of crime information products for the investigation of crime'?" the sample responded as follows:

- CIAC, CAS, etc. is used to process investigation analysis products (eight (8) of thirty (30) respondents);
- this is when you send blood samples for forensics (five (5) of thirty (30) respondents);
- compiling and dispatching of evidential material to relevant institutions for examination (four (4) out of thirty (30) respondents);

- analysing and comparing evidence with those of samples taken from suspect (four (4) of thirty (30) respondents);
- fingerprints lifted from scene and suspect can be identified (two (2) of thirty (30) respondents);
- no response (two (2) of thirty (30) respondents);
- LCRC collects all the material (one (1) of thirty (30) respondents);
- making sure there is no breakdown of evidence (one (1) of thirty (30) respondents);
- guide to assist in the arrest and linking of suspect (one (1) of thirty (30) respondents);
- it is different resources used in the investigation of crime (one (1) of thirty (30) respondents);
- do not understand (one (1) of thirty (30) respondents).

It is clear from the responses that specialised components process crime information products for use by detectives, e.g. CIAC, FSL, CRC etc. The responses also indicate lack of knowledge on processing. According to the responses in the interviews, twenty four (24) of the thirty (30) respondents interviewed underwent training in the collection, processing and utilisation of crime information. It is important that the trained investigators become practically involved in processing at their local detective environments, to improve their knowledge and skills in information management and crime analysis.

3.3 PROBLEMS EXPERIENCED BY DETECTIVES IN THE PROCESSING OF CRIME INFORMATION

According to Louw (2001:4), research found that the absence of an “information culture” in the police underlies the problems affecting crime analysis – particularly, how crime information is processed at station level. The research also revealed that sources of human error included insufficient training and inadequate resources and computer support at station level.

To the question “What problems do you experience when using manual techniques in the processing of crime information products?” the sample responded as follows:

- information is not always available (six (6) of thirty (30) respondents);
- no problems experienced (five (5) of thirty (30) respondents);
- long planning without reacting (three (3) of thirty (30) respondents);
- do not know how to use techniques (three (3) of thirty (30) respondents);
- don’t use it (two (2) of thirty (30) respondents);
- information and manpower not sufficient to do follow-up (two (2) of thirty (30) respondents);
- no response (two (2) of thirty (30) respondents);
- shortage of resources (one (1) of thirty (30) respondents);
- time-consuming (one (1) of thirty (30) respondents);
- problems in CIAC (one (1) of thirty (30) respondents);
- don’t know people committing crime (one (1) of thirty (30) respondents);
- units not working hand in hand with each other (one (1) of thirty (30) respondents);
- difficult to compare when using manual techniques (one (1) of thirty (30) respondents);
- lack of knowledge (one (1) of thirty (30) respondents).

The responses indicate that there is inadequate information available, insufficient training, inadequate resources and no support for detectives to do manual processing of crime information.

To the question “What problems do you experience when using computer analysis techniques in the processing of crime information products? “The sample responded as follows:

- lack of training in the processing of computer products (eight (8)of thirty (30) respondents);
- information not captured correctly on the system

(five (5) of thirty (30) respondents);

- no access to computers due to shortage of computers (five (5) of thirty (30) respondents);
- no response (four (4) of thirty (30) respondents);
- too many different systems - no access to all the systems (three (3) of thirty (30) respondents);
- computers off-line receive information late (three (3) of thirty (30) respondents);
- people are not always available at CIAC to assist investigators (one (1) of thirty (30) respondents);
- no problems experienced (one (1) of thirty (30) respondents).

The responses indicate that there are data integrity problems, insufficient training, inadequate resources and computer support for detectives to do computerised processing.

3.4 STEPS TO BE IMPLEMENTED TO ADDRESS THE PROBLEMS EXPERIENCED IN THE PROCESSING OF CRIME INFORMATION

According to Clarke and Eck (2003:1), personnel appointed as crime analysts should be accustomed to provide the kind of crime information products needed to support investigators in the investigation of crime. This means that crime analysts should;

- know how to use modern computing facilities and how to access and manipulate comprehensive databases;
- know how to use software to map crime, to identify hot spots and to relate these to demographic and other data;
- be able to routinely produce charts showing weekly or monthly changes in crime at force and beat level, perhaps to support COMPSTAT style operations;

- be accustomed to carry out small investigations into such topics as the relationship between the addresses of known offenders and local outbreaks of car theft and burglary;
- have carried out some before-and-after evaluations of crackdowns, say, on residential burglaries or car thefts;
- have some basic knowledge of statistics and research methodology such as that provided by an undergraduate social science degree.

According to Cope, as quoted by Alison (2005:104) and Clarke and Eck (2003:2), crime analysts must think of themselves as experts, knowing what works in the investigation of crime, promoting problem-solving, learning about environmental criminology, developing research skills, and communicating effectively. Individual analysts should be appointed to service a team of detectives specialising in specific crimes, so that there is continuous collection and processing of crime information products (Goldsmith et al., 2000:4).

Reuland (1997:64) states that the Crime Analysis Unit (CAU) in the Dallas Police Department incorporates both centralised and decentralised approaches to analysing crime and related information. The centralised CAU handles requests for information from the general police personnel, public, other government departments, other police agencies and other external source requests. A decentralised CAU is situated at the detective service with its own analysts assigned to each specialised function or unit resorting under the detective service. The analysts have responsibilities to service the needs of individual investigators or investigative teams, by preparing reports, collating and processing crime information products, disseminating products and receiving feedback. They also play a coordinating role with the centralised office and other external sources.

The Directorate Special Operations (DSO) “The Scorpions” in South Africa also has a centralised Crime Analysis Division (CAD) at Head Office. Senior and

junior analysts who are based at the CAD are sent out to the provinces to support investigating officers tactically in the investigation of cases. They do so from a decentralised position under the direction of the chief investigator in the province. On a centralised level, the CAD supports the DSO Head Office management through the identification of trends and tendencies on the South African and international crime scene and the production of crime threat analysis (Redpath, 2004:36).

It is evident from Redpath (2004:36) and Reuland (1997:64) that a detective service should have its own Crime Information Analysis Unit (CIAU) with appointed investigation analysts functioning at a decentralised level, in coordination with the CIAC under the centralised control of the Station Commissioner. A CIAU ought to be seen as a sub-component of the CIAC.

In the past, much of the analysis was carried out mentally by seasoned detectives who used to pass down techniques to colleagues by word of mouth. The advent of the modern computer has, however, allowed the police and other agencies to have more sophisticated systems to help understand crime patterns (Ainsworth, 2001:82; Block et al., 1995:xiii).

Reuland (1997:12) states that although computers have had limitations in the past, the organisation needs to decide on the kind of technology that will be required for this purpose. The first issue is that one must compare the use of mainframe computers and microcomputers. Mainframe computers are faster in their searching ability and can store far more data than their microcomputing counterparts. Mainframes can be valuable, however, for storing and archiving data, as long as they can be easily assessed by microcomputers (smaller machines). Such transfers are no longer difficult. Hirschfield and Bowers (2001: 23) mention that the use of automated systems also demonstrates that with a little effort and very little analysis know-how, it is possible for an analyst to

produce crime information products by following directions on the computer system.

The second issue to consider is software. Most departments have at least three choices. One option is to develop an in-house analysis system. The second option is to contract with an independent vendor who would custom-design a system for the organisation. The third option is a system transfer - here the agency obtains some portion of a computer software application that was developed for or by another agency. The extent of the transferred information can occur at one of three levels, namely, concept transfers, design transfers and operational transfers (Reuland, 1997:13).

As microcomputers become the preferred analysis platform, system transfers from more advanced departments to less advanced ones will undoubtedly become more prevalent. The advantages of the transfer option include the specificity of these programs to police work and the low cost associated with working directly with another police department (Reuland, 1997:13). According to Block et al. (1995:160), because microcomputers have become more affordable and powerful, computer applications have become a practical tool in analysing crime.

Goldsmith et al. (2000:7) state that the ability of the GIS to relate and synthesise data from a variety of sources enables analysts to examine various types of criminal activity, including the built environment, crime risks and opportunity measures and offender search patterns. The GIS can be used for both strategic and tactical crime analysis. Hirschfield and Bowers (2001:210) state that the use of the GIS to support investigation is centered on suspect identification and pattern analysis. GIS can play a significant role in a crime in which the victim and perpetrator are strangers.

According to Goldsmith et al. (2000:12-13), the COMPSTAT crime reduction strategy in New York City started by using electronic pin-mapping software and the mainframe computer network. Managing the growth and improvement of the COMPSTAT process is challenging, especially with regard to technology and software changes. Computer hardware, operating systems and mapping software change at a very rapid pace. The department does not adopt every software revision and operating system upgrade, but eventually some changes must take place - new hardware may not support older software, and vendors may discontinue technical support for their older products. An ongoing assessment of changing technology and its impact has become a routine part of managing the COMPSTAT process.

To the question “What solutions do you suggest to overcome the problems when using manual techniques to process crime information?” the sample responded as follows:

- computerisation (ten (10) of thirty (30) respondents);
- to receive training (nine (9) of thirty (30) respondents);
- to monitor processing (four (4) of thirty (30) respondents);
- information to be coordinated (two (2) of thirty (30) respondents);
- more manpower needed to better analysis (two (2) of thirty (30) respondents);
- more computer resources to be given (one (1) of thirty (30) respondents);
- more coordination meetings with members to coordinate information (one (1) of thirty (30) respondents);
- data capturing to be done on systems (one (1) of thirty (30) respondents).

The majority of the respondents were in favour of computerisation, in line with the literature study. In addition, the respondents indicated solutions such as a need for more training, computer and human resources.

To the question “What solutions do you suggest to overcome the problems when using computer techniques to process crime information?” the sample responded as follows:

- training on computers (eighteen (18) of thirty (30) respondents);
- computers to be provided to members (five (5) of thirty (30) respondents);
- information to be captured speedily and correctly on system (three (3) of thirty (30) respondents);
- getting better technology (two (2) of thirty (30) respondents);
- receiving timely information (one (1) of thirty (30) respondents);
- an integrated computer system with other government departments and police agencies (one (1) of thirty (30) respondents).

Taking into consideration the responses from the sample and the literature study, it is clear that there is a desire to move towards computerisation as a solution to manual problems. However, in many instances the manual techniques are there to support the computer techniques, especially in the case of computers being off-line or dysfunctional for long periods of time. Sometimes manual techniques also serve as a good visual aid on parades, e.g. pin-mapping crime trends with different-coloured pins. Many respondents cited a lack of computer skills and the shortage of computers, as contributing factors. There ought to be ongoing training interventions for new and existing investigators, so that they are accustomed to the dynamics of processing.

3.5 SUMMARY

Processing the information needed by investigating officers can also pose problems, especially in terms of the investigating officers’ needs, the level of training of the analyst and the technical support (in terms of the operating systems, hardware and software) (Block et al., 1995:161). The final impact of the analysis lies in the monitoring and evaluation of the crime information product. One of the most important responses developed to overcome investigative obstacles has been the effort to create systems of information management, as

well as methods of prioritising potential suspects so that investigations can proceed in the most effective and efficient manner possible (Block et al., 1995:67).

CHAPTER 4: UTILISATION OF CRIME INFORMATION

4.1 INTRODUCTION

Criminal investigation revolves around the utilisation of crime information, whether subjective or objective, by means of which the whole truth of a crime situation can be revealed (Du Preez, 1990:376). Investigation of crime makes heavy demands on detectives. It stands to reason, therefore, that a detective must have in-depth knowledge and skills in the field of information management and crime analysis, to successfully investigate a crime. According to Altbeker (1998:28), most detectives work in a routine and repetitive fashion. Deductive and inductive arguments and rational reconstruction of crime information are not applied to solve cases. An examination of what detectives do with the crime information they collect raises a fundamental issue that surrounds crime analysis. The utilisation of crime information products is important to identify conditions that facilitate crime, so that policy makers may make informed decisions about proactive and reactive approaches (Lyman, 1988:147).

4.2 UTILISATION OF CRIME INFORMATION FOR THE INVESTIGATION OF CRIME

Once the processing of the crime information has been completed, and a comprehensive report has been prepared, it is time to disseminate the information for utilisation by all who need it. In information management and crime analysis, one can recognise when and how to utilise a crime information product. The utilisation of crime information products for the investigation of crime will require one to first survey the scenario and then determine a course of action (Vellani & Nahoun, 2001:3).

According to Block et al. (1995:4), with a thorough understanding of the crime problem, analysts, together with investigators, can develop specific crime information products to help resolve it. Such tailored responses often involve creative policing approaches that incorporate community members, outside

agencies and private businesses. For effective strategies to be identified and implemented, it is necessary for the police agency to have an organisational command and reward structure that enables problem-oriented policing efforts at line level.

4.2.1 Crime Information products

Geographically coded information from police records can be used to detect crime trends and patterns, confirm the presence of people within geographic areas and identify areas for patrol unit concentration (Block et al., 1995:69).

Goldsmith et al. (2000:5) state that crime information products can be used for strategic and tactical purposes. Strategic crime information products usually involve the collection and study of information covering a period of several years. They are generally more research-oriented, involving inferential and multivariate statistics; they include crime trend forecasts, resource allocation and situational analysis. Tactical crime information products involve pattern detection, linkage analysis for suspect-crime correlations, target profiling and offender movement patterns. The main difference is the timeliness of the crime information data.

When suspects become targets of investigation, it is imperative for the tactical crime analyst to consider all possible information on the suspect. Any additional information collected can only increase the accuracy of the calculations. Tactical crime analysts will try to anticipate where the suspect will travel, and when he or she is likely to strike again (Reuland, 1997:30).

According to Block et al. (1995:86-88), while the specific approaches are best determined by the police investigators familiar with the case in question, some examples of utilisation tactics used in the past include:

- suspect prioritisation: where a lengthy list of suspects is developed, a geographic profile in conjunction with the criminal offender profile can help prioritise individuals for follow-up investigation work;

- patrol saturation: areas that have been determined to be most probably associated with the offender can be used as a basis for directed or saturation police patrolling efforts;
- police information systems: additional investigative leads may be obtained from the information contained in various computerised police record systems;
- outside agency database: data banks are often geographically based - the information from parole and probation officers, mental institutions, social services and similar agencies located in the most probable areas, can also prove to be of value;
- postal code prioritisation: if suspect offender description of vehicle information exists, prioritised postal codes can be used to conduct effective off-line computer searches of registered vehicle or driver's licence files contained in provincial or state motor vehicle department records.

According to Peterson (1994:29-59), Goldsmith et al. (2000:6), Hirschfield and Bowers, (2001:4-6) and Cope, as quoted by Alison (2005:94-95), the following crime information products are commonly used by detectives for the investigation of crime:

- Case docket analysis - is the overall study of investigation dockets to provide recommendations for its successful completion.
- Activity flow charts - are used to explain the paper trail in complex investigations, such as money laundering, commercial fraud, etc.
- Tables - all data is placed in tabular format to ascertain any commonalities or patterns. In a series of armed robberies, for example, the factors may include: time of day, location, type of establishment robbed, number of perpetrators, use of weapons, language spoken, manner of dress of perpetrators, and the type of financial instruments taken.
- Matrices - are used in analysis to organise data in such a manner that it can be compared to similar data. The triangular matrix is commonly used

as an association analysis matrix - for example, with names of crimes on one side and the names of places where the crimes occur on the top side, thus connecting at a triangular point, indicating a connection or commonality.

- Collection plan - is a preliminary step towards completing a strategic assessment,
- which shows what needs to be collected, how it is going to be collected, and by what date.
- Criminal profile - is the product of criminal investigation analysis in which indicators of behaviour and activity are used to create models. A profile is created by gathering all possible information on a type of behaviour or occurrence and then analysing and comparing that behaviour to cases or incidents on hand.
- Assessments - are a product of the strategic analysis process. They are written reports which can include the results of surveys, independent research, information gathered from independent case dockets, and data received from other law enforcement sources.
- Analytical briefings - are oral presentations of findings or products based on the data analysed.
- Pin maps - depict the location of offences, victims and, occasionally, offenders. They can provide information concerning the location of crime hot spots or high levels of reported crimes.
- Crime analysis - traditional crime analysis includes both the breaking down of criminal incidents into their composite parts (factors) to determine patterns and similarities,
- which may lead to the apprehension of the perpetrator(s) and also the statistical analysis of crimes to forecast future crimes. Information on a series of crimes which have been committed is used to complete a crime analysis. This information may include victim data, suspect data, dates, times and location of crimes, physical evidence, weapons used and the fruits of the crimes.

- Linkage analysis - correlates a suspect to one or more incidents. It can narrow search areas by identifying known criminals or other suspects who reside within a certain distance from incident locations. The objective of linkage analysis is the apprehension of suspects and case clearance.
- Association Analysis - depicts the relationships among people, groups, businesses or other entities in a way that provides the investigator with information on the nature of the group and the manner in which the group interacts.
- Criminal investigative analysis - entails the use of components of a crime and/or the physical and psychological attributes of a criminal, to ascertain the identity of the criminal. This technique has been used by the FBI in the area of homicide and sexually motivated crimes. Some analysts refer to it as profiling. In fact, a profile of a criminal is a product developed as a result of the criminal analysis process.
- Statistical analysis - is a review of numerical data to summarise it and to draw conclusions about its meaning.
- Pie charts - are used to give a graphic depiction of the parts of a whole; the pie equals the whole of something and the slices equal smaller parts. They are applied by law enforcement to show the occurrences of particular crimes in relation to the overall crime rate or the relative amounts/percentages of income from illegal sources. A bar chart is a graphic depiction of a certain activity in relation to or in comparison with another factor such as time, cost or another occurrence - both of which can generally be measured in numbers. It can be used in conjunction with a number of other analytical techniques.
- Composite tables - all data is placed in tabular format to ascertain any commonalities or patterns. In a series of armed robberies, for example, factors may include: time of day, location, type of establishment robbed, number of perpetrators, use of weapons, language spoken, manner of dress of perpetrators, and the type of financial instruments taken. The information known about each of the armed robberies committed could

then be put in tabular form. The table would then be reviewed for possible patterns, commonalties and differences. Conclusions about the persons responsible for the robberies might then be drawn.

- Automated mapping - automated pin-mapping, hot spot analysis and radial analysis are a few of the most extensively used. They can be used to identify the locations of high concentration of crimes, known as hot spots. An investigator may use intelligence and modus operandi data to identify that the same offender is likely to be responsible for a series of incidents.
- Geographic flow mapping - is a simple graphic depiction of a specific region, used to show some activity or occurrence related to criminal activity. Information gleaned from a map can relate to territories covered by a crime group, or to sources and routes of goods or services being transported by crime groups.
- Target profiling - identifies locations that may have an unusually high likelihood of victimisation within an active pattern area. Within a large geographic area, offenders tend to target certain types of locations rather than others, especially for crimes influenced by the location of commercial or service-oriented activity, such as convenience stores or banks.
- Offender movement pattern analysis - ties at least two or more points to one or more criminal incidents. One example is the theft location and recovery site of a stolen motor vehicle. Connecting the two locations - theft and recovery - may help identify the roads used by an offender after stealing an automobile. Similarly, relating an offender‘s last known residence to an arrest location, such as an open air drug market, can identify roads used by dealers to transport drugs.
- Forecasting - is a process which predicts the future on the basis of past trends, current trends, and / or future speculations. Within the field of analysis, both numeric and descriptive forecasting are done. Numeric forecasting is numerically used, and generally rests on past and current numbers of occurrences. Descriptive forecasting takes both quantitative

and descriptive trend data to predict the future. Forecasting is used both in crime analysis and strategic analysis.

The researcher's experience and his interview with the Station Commissioner at SAPS Rustenburg, has shown that the SAPS has the capability to produce the above products at national and provincial level – and, to a limited extent, at station level. The latter is due to a shortage of investigation analysts at station level and the lack of knowledge of such products by investigators, who do not task crime analysts to provide them with specific products to support them in the investigation of their cases.

4.2.2 Dissemination of crime information products

Peterson (1994:271) describes dissemination in the information management process as the release of the information product to a client, under certain conditions and protocols, usually based on the security classification of the information and the security clearance of the client. Jordaan (2003a:59) refers to dissemination as vital, as it encompasses information that was gathered and processed and which must be packaged and delivered to the clients who can use it. Dissemination of the crime information product is the first step in the utilisation stage. Dissemination can be carried out in several different ways, namely, by attending briefings and strategy sessions, presenting verbal reports, providing written reports, having face-to-face contact with detectives whenever the need arises, and public information systems - written and electronic media (Reuland, 1997:35).

The primary role of the crime analyst in dissemination is to support in the investigation of crime. It is the duty of the analyst to monitor reported cases and to inform investigators of all linkages. Report screening is another area of concern, where each report is assessed according to the number of solvability factors. It can also provide a global overview of all incidents and screen reports for use by investigators. The crime information reports from analysts can prompt

an immediate response from the specialised anti-crime surveillance units. Taking a proactive approach is likely to reduce future incidents to be committed by the perpetrator. In a similar way, the investigator may request analysts for listings of possible incidents where an arrestee may be involved. Analysts can also assist investigators with suspect and victim profiles (Reuland, 1997:28-29).

4.2.3 Feedback on the crime information products

The last phase of the utilisation stage is feedback. Analysts should not go blindly forward from day to day, without knowing which output products and formats (written reports, charts, graphs, overheads, computer-generated presentations and maps) work and which do not. Analysts spend a great deal of time preparing crime information products for the investigation of crime and must know how the end users plan to use the final product and how useful it is for them. Additionally, if the end users view the analysts' output as non-responsive to a request, they may not make additional requests. Either scenario wastes effort and compromises efficiency. To obtain feedback, analysts should routinely include a survey form with the prepared analysis report (Reuland, 1997:36-37).

To the question "Do you give feedback to the analyst on the utilisation of the crime information product?" the sample responded as follows:

- Yes (eighteen (18) of thirty (30) respondents);
- No (twelve (12) of thirty (30) respondents).

None of the case dockets gave any visible indication that feedback was given to analysts on the utilisation of crime information products.

To the question "How is feedback given to analysts?" the sample responded as follows:

- completing feedback forms to Forensics and the CRC (eight (8) of thirty (30) respondents);
- letters and meetings (eight (8) of thirty (30) respondents);

- verbally (six (6) of thirty (30) respondents);
- writing (four (4) of thirty (30) respondents);
- through commanders (two (2) of thirty (30 respondents);
- CIAC, phone or send a progress report (two (2) of thirty (30) respondents).

None of the case dockets gave any visible indication that feedback was given to analysts on the utilisation of crime information products.

4.3 PROBLEMS EXPERIENCED BY DETECTIVES IN THE UTILISATION OF CRIME INFORMATION PRODUCTS

There have been a few visible problems with the misuse of crime information. Allegations that certain agencies had improperly disseminated information on non-crime-related persons and organisations, led to strong public and media criticism. In hindsight, it is apparent that most of these problems were the result of poor information management and could have been avoided altogether had the units received closer supervision and adhered to appropriate guidelines (Police Chief, 1997:46).

Paulsen (2004:242) declares that the current means of crime information dissemination - that of reading out local crime problems at meetings - is inadequate, and raises the hope of providing officers with crime maps, together with reports, so that they can strategise to monitor their own performance to improve the crime situation.

Task team operations - those that have been formed to investigate a specific series of major crimes - usually collect and process crime information in some form of computer system. Often, these operations suffer from information overload and can benefit from the prioritisation of the information for utilisation by other investigators (Block et al., 1995:88).

The case study by the researcher does not show any evidence of the utilisation of crime information products for the investigation of crime. The investigation diary of each case docket was checked by the researcher, but no entry regarding the utilisation of any crime information product was found. According to Director S. Pretorius (2006), Station Commissioner at SAPS Rustenburg, the receipt and utilisation of crime information products should be recorded in the investigation diary of case dockets.

To the question "What problems do you experience in the utilisation of crime information products in the investigation of your cases?" the sample responded as follows:

- CIAC produces old, outdated crime information products which cannot be used (nine (9) of thirty (30) respondents);
- None (seven (7) of (30) respondents);
- Crime information products are not easily available (four (4) of thirty (30) respondents);
- detectives carry too many dockets to focus on crime information follow-ups (two (2) of thirty (30) respondents);
- no response (two (2) of thirty (30) respondents);
- do not use them (one (1) of thirty (30) respondents);
- no access to seniors to address problems (one (1) of thirty (30) respondents);
- forensic analysts take a long time to give feedback in rape and murder cases (one (1) of thirty (30) respondents);
- no sharing of ideas on crime (one (1) of thirty (30) respondents);
- incorrect information products are provided to investigators, e.g. wanted suspects are still shown as wanted on the list, when they have already been arrested and sent to prison (one (1) of thirty (30) respondents);
- not sure (one (1) of thirty (30) respondents).

The responses indicate that there is a need for training, on a continuous basis of all personnel, inclusive of support and functional personnel involved in the investigation and crime analysis environment. According to the respondents, the detective service and the CIAC seem to have certain shortcomings, which also need to be addressed.

4.4 STEPS TO BE IMPLEMENTED TO ADDRESS PROBLEMS EXPERIENCED IN THE UTILISATION OF CRIME INFORMATION

Peterson (1994:6) states that knowing analytical concepts and methods in information management and crime analysis makes investigators better equipped. This is why the majority of the people who undergo analytical training are investigators. They are not interested in analytical career paths but want to utilise the proven techniques of analysis in their cases. The utilisation of crime information products for the investigation of crime depends on the agencies' need to invest in training and infrastructure, to allow the full capability of the products to be realised (Paulsen, 2004:244).

One of the most important responses developed to overcome investigation obstacles has been the effort to create systems of information management and methods of prioritising potential suspects, so that investigations can proceed in the most effective and efficient manner possible (Block et al., 1995:67).

To promote an information utilisation culture, the American policing agencies have introduced an increasingly popular strategy of providing police officers with crime analysis information in the form of crime maps. The aim is to encourage officers to use crime information, determine problem areas and modify their strategies accordingly. This goes together with training and resources to allow for the full capability of crime mapping to be realised (Paulsen, 2004:234).

According to Reuland (1997:93), police agencies should begin to plan for a new technology system by looking at how they currently use information. For a proper

review, each individual piece of information – i.e. each separate field should be examined to determine who needs the information, why they need it and how they use it. A regular data utilisation assessment would be beneficial to the agency.

To the question “What solutions do you suggest to overcome the problems in the utilisation of crime information products?” the sample responded as follows:

- need training at station level (thirteen (13) of thirty (30) respondents);
- no response (ten (10) of thirty (30) respondents);
- listen to investigating officers (two (2) of thirty (30) respondents);
- update information (two (2) of thirty (30) respondents);
- feedback must be given as soon as possible (one (1) of thirty (30) respondents);
- appoint knowledgeable people (one (1) of thirty (30) respondents);
- visit CIAC once a week to give our needs (one (1) of thirty (30) respondents).

Generally, the respondents see ongoing training interventions and participative management as a solution to the utilisation of crime information products.

To the question “What suggestions do you have to improve the dissemination of crime information products?” the sample responded as follows:

- no response (thirteen (13) of thirty (30) respondents);
- training to be provided to everyone handling analysis products (six (6) of thirty (30) respondents);
- more resources must be made available to investigate cases (four (4) of thirty (30) respondents);
- make crime information easily accessible to investigators (two (2) of thirty (30) respondents);
- work closer with investigating officers (two (2) of thirty (30) respondents);
- there should be rules on how products should be disseminated

(one (1) of thirty (30) respondents);

- investigators to personally collect products so that they can be held personally responsible (one (1) of thirty (30) respondents);
- systems to be improved (one (1) of thirty (30) respondents).

Generally, the respondents see ongoing training interventions, additional resources, as well as participative management as a solution to improve the dissemination of crime information products.

To the question ”What suggestions do you have to improve the feedback to crime analysts?” the sample responded as follows:

- more training and manpower needed
  (fifteen (15) of thirty (30) respondents);
- technology to be upgraded for feedback to be given
  (six (6) of thirty (30) respondents);
- there should be rules in this regard (three (3) of thirty (30) respondents);
- better communication (one (1) of thirty (30) respondents);
- using a question and answer document
  (one (1) of thirty (30) respondents);
- investigator and analysts to have continuous discussions on the product (one (1) of thirty (30) respondents);
- forms must be completed and sent back to them so that they can keep records (one (1) of thirty (30) respondents);
- written feedback (one (1) of thirty (30) respondents);
- feedback to be given as soon as possible, before matter is finalised in court (one (1) of thirty (30) respondents).

Generally, the respondents see ongoing training interventions, policy guidelines / administrative procedures, improvement on technology and participative management as a solution to improve the feedback to crime analysts.

4.5 SUMMARY

The present situation – that of receiving crime analysis products for utilisation from the station CIAC and other specialised units - does not auger well for the performance of detectives at the Rustenburg Detective Service. Crime data must be timely, because the chances of apprehending an offender responsible for a series of cases depends on quick identification of the crime pattern (Goldsmith et al., 2000:4). The presence of an information culture, the training level of personnel, and the quality of the hardware/software technology used by data typists and analysts, would give integrity to the crime information utilised to investigate cases. Altbeker (1998:30-36) identifies the utilisation of crime information as a way to improve the performance and solve rate of detectives.

CHAPTER 5: FINDINGS AND RECOMMENDATIONS

5.1 INTRODUCTION

The aim of this research is to establish the nature and extent of problems experienced by detectives in the collection, processing and utilisation of crime information at the Rustenburg Detective Service. The researcher reached this conclusion by obtaining data through literature study, case study of case dockets and interviews with investigating officers, senior detective officers, senior crime intelligence officers, Station Commissioner of SAPS Rustenburg, and from his own experience. The researcher made the following findings and recommendations:

5.2 FINDINGS

5.2.1 Findings regarding the research questions

The following primary findings are based on the research questions:

5.2.1.1 Collection of crime information

According to the majority of the respondents:

- Collection of crime information is an act of gathering information for the purpose of evidence.
- Informers do not always provide correct information to investigators.
- Collected information is not captured correctly on the computer system to do computer analysis.
- Officials are careless in taking down reports, and the slow turnaround time between data collection and data entry into systems, creates data integrity problems.
- Reliable, valid and timely crime information is not always available for analysis.

- Since many other agencies are legally mandated to collect crime information in the South African context, this information is not integrated into the SAPS computer system for use by investigation analysts.

5.2.1.2 Processing of crime information

- Processing is an act of analysing raw crime information into timely and actionable crime investigation products.
- Whenever computers are off-line, crime information is received late for processing.
- The Crime Information Analysis Centre at the police station produces old, outdated crime information products which cannot be used by detectives in the investigation of crime. In most cases the products are not reliable, relevant or timely.
- The detectives do not have their own Crime Information Analysis capability at the Rustenburg Detective Service.

5.2.1.3 Utilisation of crime information

It is evident, in the case study carried out by the researcher, that;

- None of the detectives utilise crime information products to assist them in the investigation of their cases;
- Disseminated crime information products are not recorded at CIAC or in the investigation diaries of the case dockets.

According to the majority of the respondents:

- Crime information products are not easily available for utilisation by investigators.
- Not all detectives know how to utilise crime information that is collected and processed to assist in the investigation of crime.

- Investigators do not properly task and discuss crime information products with analysts, as they are not aware of the hardware and software available for analysis.
- There is a lack of knowledge on the different types of crime information products, dissemination and feedback on the utilisation of crime information products.

5.2.2 Secondary findings

The secondary findings were made on other general points that the researcher came upon during the research.

5.2.2.1 Training

Although twenty four (24) of thirty (30) respondents indicated that they attended training in the collection, processing and utilisation of crime information, the majority of the respondents mentioned that training provided in the collection, processing and utilisation of crime information, is not according to their needs.

5.2.2.2 Fear of criminals

According to the majority of the respondents:

- Witnesses are reluctant to assist the police with crime information or to make statements in criminal cases, because of fear of criminals.
- Detectives find it difficult to obtain crime information on criminals and syndicates, because of intimidation and fear.

5.2.2.3 Resource constraints

According to the majority of the respondents:

- There is a shortage of data typists and administration officials for information capturing on the computer systems.
- There are resource constraints when using closed means to collect crime information, as they are costly, require high levels of commitment and skill, and, most importantly, require visionary and innovative managers.

- Detectives do not all have access to computers to do computer analysis, due to a shortage of computers at the detective service.

5.3 RECOMMENDATIONS

The researcher recommends the following:

- Source reports used to collect crime information should be reviewed by supervisors and analysts, to ensure that the information is relevant, reliable, accurate and timely.
- Agreements can be reached so that specific information is provided regularly in a useable format by other departments.
- The right people must be identified through psychometric testing, and appointed as investigation analysts, so that they become specialists in their field to deliver the right crime information product to the detectives.
- A CIAU should be established at the Rustenburg Detective Service, which, in itself, will enhance the performance of the detectives. In the case of Rustenburg Police Station, the CIAC can serve as the centralised centre, while a decentralised unit with investigation analysis capacity can serve the Rustenburg Detective Service. Individual analysts should be appointed to service a team of detectives specialising in specific crimes, so that there is continuous collection and processing of data into crime information products.
- It is clear, from the respondents that an environment has to be created for members to be trained according to their competency gaps. Training cannot be compromised due to shortage of personnel or heavy workloads, or changes in operating systems and hardware and software technology. Training must be continuous and applicable to both functional and civilian personnel, according to their needs. Detective line managers should transfer skills and give guidance in the collection, processing and utilisation of crime information during inspection of case dockets, so that detective performance can be enhanced. Psychological services should

become involved in teambuilding and life skills survival training, to address the fear of criminals.

- Investigators should work with the CPF's to address community reluctance to assist the police with information.
- A resource audit should be carried out to determine personnel and physical resource needs, for the purpose of effective and efficient collection, processing and utilisation of crime information.
- The personnel responsible for analysis must be given the necessary hardware and software resources to perform their tasks effectively. The organisation's crime reduction strategy should dictate the adoption of hardware and software revision, together with operating systems which are always readily available in the mass media.

5.4 CONCLUSION

Fundamentally, the South African Police Service needs to create the right environment for analysis to flourish, where information management and crime analysis processes are valued and understood, and there is a desire to use evidence, rather than intuitive or experiential information, to inform decision making. The police must be ready to respond to the outcomes of analysis, and recognise that this may require a different approach to the allocation of police resources and management of planning and strategic development (Cope, as quoted by Alison, 2005:110).

LIST OF REFERENCES

Ainsworth, P.B. 2001. *Offender profiling and crime analysis*. Portland,Or. Willan.

Alison, L. 2005. *The range of issues in crime analysis: The Forensic Psychologists Casebook (Psychological Profiling and Criminal Investigation).* Cullompton: Willan.

Altbeker, A. 1998. *Solving Crime: The State of SAPS Detective Service. ISS Monograph Series South Africa,* 31, November:24-46.

Atkin, H. 2000. *Criminal Intelligence Analysis: A Scientific Perspective. IALEI Journal,* 13(1), May: 3-7.

Babbie, E.R. 2001. *Basics of Social Research*. 9th edition. Belmont, Calif.: Wadsworth.

Bailey, K.D. 1987. *Methods of social research.* 3rd edition. London: MacMillan.

Bless, C. & Higson-Smith, C. 1995. *Fundamentals of social research methods: An African perspective*. 2nd edition. Lansdowne: Juta.

Block, C., Dabdoub, M. & Fregly, S. 1995. *Crime analysis through computer mapping*. Washington, DC: Police executive research forum.

Bouma, G.D. & Atkinson, G.B.J. 1995. *A handbook for social research.* New York: Oxford University Press.

Bozza, C.M. 1978. *Criminal Investigation*. Chicago: Nelson Hall.

Clarke, R.V. & Eck, J. 2003. *Become a problem solving Crime Analyst in 55 small steps*. London: Jill Dando Institute of Crime Science University College.

Creswell, J.W. 1998. *Qualitative Inquiry and Research Design: Choosing among five traditions*. Thousand Oaks, Calif.: Sage.

Denscombe, M. 2002. *Ground rules for Good Research: A 10 point guide for social researchers*. Philadelphia. Open University Press.

Du Preez, G.T. 1990. *Security Forum.* Durban: Butterworths.

Du Preez, G.T. 1996. *Forensic Criminalistics: Criminal Investigation.* 2nd edition, Pretoria: Unisa.

Fischer, B.A.J. 2004. *Techniques of Crime Investigation*. 7th edition. Washington, DC: CRC Press.

Gardner, R.M. 2005. *Practical Crime Scene Processing and Investigation: Practical aspects of Criminal and Forensic Investigation series*. Washington, DC: CRC Press.

Goldsmith, V., Mcguire, P.G., Mollenkopf, J.H. & Ross, T.A. 2000. *Analyzing Crime Patterns: Frontiers of practice*. Thousand Oaks, Calif.: Sage.

Gottlieb, S., Arenberg, S. & Singh, R. 1994. *Crime Analysis: From First Report to Final Arrest*. Montclair, CA: Alpha.

Hirschfield, A. & Bowers, K. 2001. *Mapping and Analysing crime data: Lessons from research and practice*. London: Taylor and Francis.

Jordaan, J. 2003a. The Role of Intelligence in Investigations (Part 1). *Servamus*, 96(4), April:56-59.

Jordaan, J. 2003b. The Role of Intelligence in Investigations (Part 2). *Servamus,* 96(5), May:58-59.

Leedy, P.D. & Ormrod, J.E. 2001. *Practical Research: Planning and Research.* 7th edition. Upper Saddle River, NJ.: Prentice Hall.

Leedy, P.D. & Ormrod, J.E. 2005. *Practical Research: Planning and Design.* Upper Saddle River, NJ.: Prentice Hall.

Louw, A. 2001. *Understanding Police Crime Statistics. Crime Index South Africa,* 5(3), May – June:1-5.

Lyman, M.D. 1988. *Criminal Investigation: The Art and the Science.* Upper Saddle River, NJ.: Prentice Hall.

Marais, C.W. & Van Rooyen, H.J.N. 1990. *Misdaadondersoek*. Pretoria: Pro-media.

Mason, J. 2002. *Qualitative Research.* 2nd edition. New Delhi: Sage.

Matthews, A. 1986. *Freedom, State Security and the Rule of Law – Dilemmas of Apartheid Society.* Cape Town: Juta.

Maxfield, M.G. & Babbie, E. 1995. *Research Methods for Criminal Justice and Criminology*. 2nd edition. Belmont: Wadsworth.

Mouton, J. & Marais, H.C. 1988. *Research Methodology: basic concepts in the methodology of the social sciences*. Pretoria: HSRC.

Mouton, J. & Marais, H.C. 1996. *Research Methodolgy: basic concepts in the methodology of the social sciences*. Pretoria: HSRC.

Noak, I. & Wincup, E. 2004. *Criminological Research: Understanding Qualitative Methods*. London: Sage.

Oasis Library. 2005. *Information Management and Crime Analysis Research Topics.* Available from: http://www.unisa.co.za (Accessed: 2 November 2005).

Paulsen, D. J. 2004. *To Map or not to Map: Assessing the Impact of Crime Maps on Police Officer Perceptions of Crime. International Journal of Police Science and Management*, 6(4), August:234-246.

Peterson, M.B. 1994. *Applications in criminal analysis: a sourcebook*. Westport, Conn.: Greenwood Press.

Police Intelligence Operations. 1997. *The Police Chief*, 64(7), July:46.

Pretorius, S.,Station Commissioner SAPS Rustenburg. 2006. *Statement to author*, 6 November. Rustenburg.

Ratcliffe, J.H. 2003. *Paper on Intelligence Led Policing*. Australia: Institute for Criminology.

Redpath, J. 2004. *The Scorpions: Analysing the Directorate of Special Operations: Directorate of Special Operations: Justice in Action. ISS Monograph Series South Africa*, No. 96, March: 26-49.

Reuland, M.M. 1997. *Information management and Crime Analysis*. Washington, DC.: Police executive research forum.

Ribaux, O., Girod, A., Walsh, S., Margot, P., Mizrahi, S. & Clivaz, C. 2003. *Forensic intelligence and Crime analysis, Law, Probability and Risk*. Washington, DC.: CRC Press.

Robson, C. 2000. *Small –Scale evaluation: Principles and Practice*. London: Sage.

Van der Westhuizen, J. 1996. *Forensic Criminalistics*. 2nd edition. Johannesburg: Heinemann.

Van Heerden, T.J. 1986. *Inleiding tot die Polisiekunde*. Pretoria: Unisa.

Vellani, K.H. & Nahoun, J. 2001. *Applied Crime Analysis*. Boston: Butterworth – Heinemann.

APPENDIX "A" SA POLICE SERVICE PERMISSION TO CARRY OUT RESEARCH

04/09/2006 05:07 0123933178 S PAGE 02/02

South African Police Service — Suid-Afrikaanse Polisiediens

Private Bag / Privaatsak X94

Fax no / Faks no (012) 393 3178

YOUR REFERENCE / U VERWYSING

MY REFERENCE / MY VERWYSING 3/34/2

ENQUIRIES / NAVRAE S/Supt J Schnetler /Supt GJ Joubert

TEL NO (012)393 3177 / 3118

THE HEAD
STRATEGIC MANAGEMENT
PRETORIA
0001

4 September 2006

ASSIST-COMM D GOVENDER
AREA COMMISSIONER MARICO

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH : THE NATURE AND EXTEND OF PROBLEMS EXPERIENCED BY DETECTIVES IN THE COLLECTION, PROCESSING AND UTILIZATION OF CRIME INFORMATION AT THE RUSTENBURG DETECTIVE SERVICE: ASSIST-COMM D GOVENDER

1. Your application to conduct research on above mentioned topic refers.
2. This office perused and evaluated your research proposal and you are hereby granted permission to conduct the research.
3. The stipulations of National Instruction 1/2006 *Research in the Service,* is applicable to this project.

S/ Schnetler ASST-COMM
HEAD: STRATEGIC MANAGEMENT
G E MOORCROFT

APPENDIX "B" INTERVIEW SCHEDULE

INTERVIEW SCHEDULE

1. OPENING

My name is....., a member of the SA Police Service. I am doing research on the nature and extent of problems experienced by detectives in the collection, processing and utilisation of crime information at the Rustenburg Detective Service. I thought it a good idea to interview you, so that I can be better informed of the nature and extent of the problems experienced by detectives.

I would like to ask you some questions to determine the nature and extent of problems experienced by detectives in the collection, processing and utilisation of crime information at the Rustenburg Detective Service.

I hope to use this information to help detectives address the problems experienced in the collection, processing and utilisation of crime information.

The interview should take about 30 minutes. Are you available to respond to some questions at this time?

Do you give your permission to participate in the research and to be interviewed?
Yes/No.....

SECTION A : HISTORICAL INFORMATION

1. How many years / months of crime investigation experience do you have?
……

2. Did you undergo training in the investigation of crime?
.....

3. Did you undergo training in the collection, processing and utilisation of crime information for investigation purposes?

.....

4. Do you use investigative analysis products to assist you in the investigation of crime?

.....

5. Does your supervisor evaluate the use of investigative analysis products by detectives?.....

SECTION B: THE COLLECTION, PROCESSING AND UTILISATION OF CRIME INFORMATION IN THE INVESTIGATION OF CRIME

6. Define the concept 'investigation of crime'.

.....

7. What is the purpose of criminal investigation?

.....

8. What are the objectives of investigation of crime?

.....

9. Define the concept 'forensic investigation'.

.....

10. According to your knowledge, what is the difference between investigation of crime and forensic investigation?

.....

11. What are the functions of a criminal investigator in the investigation of crime?

.....

12. What is your understanding of the concept 'crime information' within the context of criminal investigation?

.....

13. What is your understanding of the concept 'collection of crime information for the investigation of crime'?

.....

14. What internal sources do you use to collect crime information to investigate your cases?

.....

15. What external sources do you use to collect crime information to investigate your cases?

.....

16. According to forensic science experts, forensic evidence collected from crime scenes to assist in the investigation of a crime is potentially useful in gathering information on criminals and their activities. If you agree with this statement, please give at least two examples to support this statement.

.....

17. What is your understanding of the processing of investigative analysis products?

18. Who processes your investigative analysis products?

19. What is your understanding of the utilisation of investigative analysis products in the investigation of crime?

.....

20. What types of investigative analysis products do you use in the investigation of your cases?

.....

SECTION C: PROBLEMS EXPERIENCED BY DETECTIVES IN THE COLLECTION, PROCESSING AND UTILISATION OF CRIME INFORMATION

21. How do you collect crime information in practice?

.....

22. Which crime information collection methods do you use in practice?

.....

23. What is your understanding of the overt crime information collection method?

.....

24. Which overt crime information collection techniques do you use in the investigation of your cases?

.....

25. Can you explain how an investigator can collect crime information by using the overt information collection techniques which follow?

Newspapers.....

Television.....

Radio.....

Internet.....

Books.....

People.....

Institutions.....

26. What problems do you experience in the use of overt crime information collection techniques in the investigation of your cases?

.....

27. What solutions do you suggest to overcome the problems identified under Question 26?

.....

28. What is your understanding of the covert crime information collection method?

.....

29. Which covert crime information collection techniques do you use in the investigation of your cases?

.....

30. Can you explain how an investigator can collect crime information by using the covert crime information collection techniques which follow?

Informants.....

Surveillance.....

Undercover officers /Agents.....

Monitoring and Interception.....

31. What problems do you experience in the use of the covert crime information collection techniques in the investigation of your cases?

.....

32. What solutions do you suggest to overcome the problems identified under Question 31?

.....

33. What do you understand by the concept ‘data integrity’?

.....

34. What problems do you experience with data integrity?

.....

35. What solutions do you suggest to overcome the problems identified under Question 34?

.....

36. Does the Detective Service use trained investigative analysts to process investigative analysis products for the investigation of crime?

Yes/No.....

37. Do you have a Crime Investigation Analysis Unit at the Detective Service?

Yes/No.....

38. How many people at the Detective Service are assigned to do investigative analysis as their primary responsibility?

.....

39. Is an investigative analyst assigned to each detective?

Yes/No.....

40. If the answer to Question 39 is ‘No’, please explain how investigative analysts are assigned to assist detectives in the investigation of crime.

.....

41. How do you process investigative analysis products in practice?

.....

42. Which manual techniques do you use to process investigative analysis products?

.....

43 What is your understanding of the manual techniques used in the processing of investigative analysis products, which follow?

Analysis.....
Charts.....
Tables.....
Maps.....
Matrix.....
Plans.....
Profiling.....
Assessments.....
Briefings.....

44. What problems do you experience when using manual techniques in the processing of investigative analysis products?

.....

45. What solutions do you suggest to overcome the problems identified under Question 44?

.....

46. Which computer techniques do you use in the processing of investigative analysis products?

.....

47. What is your understanding of the computer techniques used in the processing of investigative analysis products, which follow?

Analysis.....
Charts.....
Maps.....
Tables.....
Profiling.....
Matrix.....
Assessments.....
Forecasting.....

48. What problems do you experience when using computer techniques in the processing of investigative analysis products?

.....

49. What solutions do you suggest to overcome the problems identified under Question 48?

.....

50. How well do analysts transform data into useful investigative analysis products?

Excellent.....Good .....Satisfactory.....Poor.....

51. Please motivate your answer to Question 50.

.....

52. How are investigative analysis products disseminated to detectives?

.....

53. What problems are you experiencing in the dissemination of investigative analysis products?

.....

54. What solutions do you suggest to overcome the problems identified under Question 53?

.....

55. How do you utilise the investigative analysis products in the investigation of your cases?

.....

56. What problems do you experience in the utilisation of investigative analysis products in the investigation of your cases?

.....

57. What solutions do you suggest to overcome the problems identified under Question 56?

.....

58. How often do investigators and analysts discuss the investigative analysis products?

Never.....Sometimes.....Often.....Very often.....

59. How often do investigative analysis products assist you in the investigation of crime?

Never.....Sometimes.....Often.....Very often.....

60. Do you give feedback to the analyst on the utilisation of the investigative analysis product?

Yes/No.....

61. If the answer to Question 60 is ‘Yes’, how is feedback given?

.....

62. How would you rate your department’s efforts when it comes to training in the collection, processing and utilisation of crime investigative analysis products?

Excellent.....Good.....Satisfactory.....Poor.....None offered.....

63. Please motivate your answer to Question 62.

.....

SECTION D: SUGGESTED SOLUTIONS

64. Do you think that the crime information collection techniques need to be improved?

Yes/No.....

65. If the answer to Question 64 is ‘Yes’, what suggestions do you have for the improvement of crime information collection techniques?

.....

66. What suggestions do you have to improve the role of investigative analysts at the Detective Service?

.....

67. What suggestions do you have to improve the functions of an investigative analyst?

.....

68. What suggestions do you have to improve the quality of investigative analysis products?

.....

69. What suggestions do you have to improve the dissemination of investigative analysis products?

.....

70. What suggestions do you have to improve feedback to investigative analysts?

.....

71. What suggestions do you have to improve the training for detectives in the collection, processing and utilisation of crime information in the investigation of crime?

.....

Well, it has been a pleasure finding out about you and your work, Let me briefly summarise the information that I have recorded during our interview.

2. <u>CLOSING</u>

I appreciate the time you took for this interview. Is there anything else you think would be helpful for me to know?

.....

I should have all the information I need. Would it be all right to call you at any time, if I have any more questions? Thanks again.

Reference number of respondent .....Date: .....