

**THE VALUE OF OFFENDER PROFILING IN CREDIT CARD
FRAUD**

by

SHIKWAMBANE DES

Submitted in part gratification of the requirements for
the degree of

MAGISTER TECHNOLOGIAE

in the subject

Forensic Investigation

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: DR AC MADZIVHANDILA

September 2021

DECLARATION

I Shikwambane Des student number 53572181, declare that this dissertation '**The value of offender profiling in credit card fraud**', submitted in part gratification of the requirements for the degree of Master of Technology: Forensic Investigation at the University of South Africa, represents my own work, and all sources which I have used or quoted have been reflected and acknowledged by means of complete references.

Signature : *Shikwambane Des*

Date : 6 September 2021

ACKNOWLEDGEMENTS

- A special thank you to my supportive supervisor Dr A C Madzivhandila, who supported and guided me throughout this research process.
- Thank you to the South African Police Service (SAPS) for granting me the approval to conduct the research within the organisation.
- Thank you to all participants who willingly assisted with interviews.
- Special thank you to my partner, for your constant love, support and encouragement through difficult times during this research.
- Thank you to my siblings Neville, Tes, Colleen, Kulani and Ripfumelo.
- Thanks to my children Lwazi, Wendy (Linamandla) and Vusi who had to sacrifice family time to grant me the opportunity to do the research.
- My late father, Mahavela Mikia Shikwambane, for instilling in me the love of education at an early age.
- Finally, my mom, “Exikolweni mini rhumile niyile” You never stopped believing in my competency to finish this research.

ABSTRACT

The use of credit cards is prevalent in modern day society and credit card fraud has kept on growing in recent years. Financial losses owing to fraud affect not only merchants and banks (for example, repayments), but also individual clients. If the bank loses money, customers eventually pay as well through higher interest rates, higher membership fees, etc. Fraud may also affect the reputation and image of a merchant causing non-financial losses that, though difficult to quantify in the short term, may become visible in the long term

The aim of this research is to evaluate how offender profiling can be used as a technique in the investigation of credit card fraud within the Alexandra Cluster area. A successful investigation begins at the crime scene. Hence, it is important for investigators to always remember the objectives of crime investigation. Offender profiling remains a tool in investigations, despite concerns about its effectiveness.

The value of offender profiling in the investigation of credit card fraud was discussed. The researcher utilised national and international literature sources to gather new and current techniques credit card fraud investigations. Interviews were conducted with ten South African Police Service (SAPS) members who are investigating specifically credit card fraud cases.

The inclusive purpose of this study was to provide practical recommendations for the implementation and use of offender profiling by SAPS members in the investigation of credit card fraud.

KEY CONCEPTS

Forensic; investigation; profiling; offender profiling; fraud; Credit card fraud.

EDITOR CERTIFICATE

EDITING AND PROOFREADING CERTIFICATE

7542 Galangal Street

Lotus Gardens

Pretoria

0008

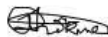
13 April 2021

TO WHOM IT MAY CONCERN

This certificate serves to confirm that I have technical edited DES Shikwambane's dissertation entitled, **"THE VALUE OF OFFENDER PROFILING IN CREDIT CARD FRAUD."**

I found the work easy and intriguing to read. Much of my editing basically dealt with obstructionist technical aspects of language, which could have otherwise compromised smooth reading as well as the sense of the information being conveyed. I hope that the work will be found to be of an acceptable standard. I am a member of Professional Editors' Guild.

Hereunder are my contact details:



Jack Chokwe (Mr)

Contact numbers: 072 214 5489

jackchokwe@gmail.com

Professional
EDITORS
Guild



LIST OF ABBREVIATIONS AND ACRONYMS

DNA	Deoxyribonucleic Acid
FSL	Forensic Science Laboratory
OP	Offender Profiling
SAPS	South African Police Service
SOP	Standard Operating Procedure
UNISA	University of South Africa

TABLE OF CONTENTS

DECLARATION	i
ACKNOWLEDGEMENTS	ii
ABSTRACT	iii
EDITOR CERTIFICATE.....	v
CHAPTER ONE: BACKGROUND AND OVERVIEW OF THE STUDY	1
1.1 INTRODUCTION	1
1.2 PROBLEM STATEMENT	1
1.3 AIM OF THE RESEARCH	2
1.4 OBJECTIVES OF THE RESEARCH	3
1.5 RESEARCH QUESTIONS.....	4
1.6 DEFINITION OF KEY CONCEPTS	4
1.6.1 Criminal investigation	4
1.6.2 Offender profiling	4
1.6.3 Fraud	4
1.6.4 Credit card	5
1.6.5 Credit card fraud	5
1.7 VALUE OF THE RESEARCH	5
1.8 RESEARCH DESIGN AND APPROACH	5
1.8.1 Research design.....	5
1.8.2 Research approach.....	6
1.9 POPULATION AND TARGET POPULATION	6
1.9.1 Target population.....	6
1.10 SAMPLING	7
1.11 DATA COLLECTION.....	8
1.11.1 Literature study	9
1.11.2 Interviews.....	9
1.11.3 Pilot test	10
1.12 DATA ANALYSIS.....	10
1.13 METHODS TO ENSURE VALIDITY	11
1.13.1 Credibility	11
1.13.2 Transferability.....	11
1.14 METHODS TO ENSURE RELIABILITY	12
1.14.1 Dependability	12

1.14.2 Confirmability	12
1.15 ETHICAL CONSIDERATIONS	12
1.16 RESEARCH STRUCTURE	13
CHAPTER TWO: OFFENDER PROFILING IN THE INVESTIGATION OF CREDIT CARD FRAUD	15
<u>2.1 INTRODUCTION.....</u>	15
2.2 CRIMINAL INVESTIGATION.....	16
<u>2.3 THE OBJECTIVES OF CRIMINAL INVESTIGATION</u>	17
2.3.2 To collect evidence.....	18
2.3.2.1 Contamination.....	19
2.3.2.2 Chain of custody.....	19
2.3.3 Arrest of suspect.....	19
2.3.4 Recover stolen property	20
2.3.5 Present the case to the prosecutor.....	20
2.3.6 Identify the suspect	20
<u>2.4 THE PURPOSE OF INVESTIGATION.....</u>	21
<u>2.6 PROFILING</u>	24
<u>2.7 OFFENDER PROFILING</u>	26
<u>2.7.1 Types of profiling</u>	28
<u>2.8 IDENTIFICATION</u>	30
2.8.1 Situational identification	30
2.8.2 Witness identification	30
2.8.3 Victim identification.....	31
2.8.4 Imprint identification	31
2.8.5 Origin identification	31
2.8.6 Action identification	31
2.8.7 Perpetrator identification.....	31
2.8.8 Cumulative identification.....	32
<u>2.9 THE APPLICATION OF PROFILING IN SUSPECT IDENTIFICATION</u>	33
<u>2.10 INDIVIDUALISATION.....</u>	35
<u>2.11 THE APPLICATION OF PROFILING IN SUSPECT INDIVIDUALIZATION</u>	36
<u>2.12 OFFENDER PROFILING AS AN INVESTIGATIVE TOOL.....</u>	38
<u>2.13 FRAUD</u>	39
<u>2.14 TYPES OF FRAUD</u>	47

2.14.1 Benefit fraud	48
2.14.2 Management fraud	48
2.15 CREDIT CARD FRAUD	49
2.15.1 Fraud with stolen / lost credit card	49
2.15.2 Fraud with fake and counterfeit card	50
2.15.3 Erasing the magnetic strip	51
2.15.4 Creating a fake card.....	51
2.16 SUMMARY	52
CHAPTER THREE: FINDINGS AND RECOMMENDATIONS.....	53
3.1 INTRODUCTION	53
3.2 FINDINGS.....	53
3.2.1 FINDINGS REGARDING RESEARCH QUESTION: WHAT IS THE VALUE OF OFFENDER PROFILING IN THE INVESTIGATION OF CREDIT CARD FRAUD? ...	53
3.2.1.1 Criminal investigation.....	53
3.2.1.2 Objectives of criminal investigation	53
3.2.1.4 Offender	54
3.2.1.5 Profiling	54
3.2.1.6 Offender profiling.....	54
3.2.1.7 Identification	54
3.2.1.8 The application of offender profiling in suspect Identification	54
3.2.1.10 The application of offender profiling in suspect individualisation	54
3.2.1.11 The value of offender profiling in credit card fraud	55
3.2.1.12 Fraud and the elements of fraud	55
3.3 RECOMMENDATIONS	55
3.4 CONCLUSION	56
REFERENCES	57
ANNEXURE A: INTERVIEWS SCHEDULE.....	65
ANNEXURE B: ETHICAL CLEARANCE	67
ANNEXURE C: PERMISSION LETTER	69
ANNEXURE D: TURNITIN RECEIPT	70

CHAPTER ONE: BACKGROUND AND OVERVIEW OF THE STUDY

1.1 INTRODUCTION

The practice of profiling offenders throughout investigations is totally not a new procedure. It has been in existence in the South African Police Service (SAPS) for many years. The researcher's understanding is that the term "profiling" was not familiar within SAPS organisation. The facts obtained from criminals was titled evidential information, and this material was accessible to investigators as a tool to help them in carrying out investigation duties. The study examined the value of offender profiling (OP) in credit card fraud within the SAPS.

In this section, the researcher gave a brief introduction, the problem account was clearly specified, and the research aim and objectives were presented, the researcher presented a clear research question. The value of this research is pronounced.

1.2 PROBLEM STATEMENT

Fraud has been in existence among humanity since time immemorial and can take a limitless variation of different practices. In addition, the expansion of new technology affords supplementary conducts in which delinquents may commit fraud. For example, in e-commerce the details of a particular card increase chances of the offender to commit fraud. Fraud entails intentionally making an unlawful misrepresentation (Snyman 2008:531). Connaway and Powell (2012:45) assert that the problem has to be detailed as exactly as imaginable to avoid any inconsistency among the researchers composes and what they mean. The biggest dilemma is that fraudsters are found guiltless during court proceedings and send back to the public for the reiteration of the identical crime yet again.

The researcher visited the Alexandra court at least twice a month for a period of 12 months (1 Jan 2017 till 31 December 2017) and witnessed credit card fraudsters being acquitted and send back to the community. However, it is uncertain what causes the unsuccessful conviction. The researcher argues that if the technique of OP was utilised optimally and all elements of fraud proven during the instigation, there would be a successful conviction in our courts.

According to Zinn (2007:77), the profile of an offender was never the way out to solve crime or to substitute the investigation, but a tool used to construct database intended for crime intelligence.

This substantial number of credit card fraud cases where the accused were found innocent and others withdrawn because of the technicalities by the SAPS investigator. Moreover, the detectives did not have in-depth understanding about this probing tool – offender profiling when investigating credit card fraud cases. This prompted the researcher to do this investigation. This problem impacts negatively on the community. Monetary losses owing to fraud do not only affect traders and banks for example: - compensations, but individual customers also. In the instant where the bank suffer a loss, consumers ultimately pay for that as well over greater interest charges, advanced membership fees, etc. Fraud may also affect the reputation and image of a merchant causing non-financial losses that, though difficult to quantify in the short-term, may become visible in the long period. For example, when a particular individual is victim of fraud with a certain bank, she might not be loyal to their brand and choose another bank.

The importance of this study is that it is projected to the body of knowledge in improving the practice of OP when investigating a credit card fraud case. The outcomes of this research makes recommendation to solve the problem through best practice. Again, the researcher argues that if this investigative technique, OP was optimally utilised when investigating a credit card fraud case there would be an increase in conviction rate in our courts.

1.3 AIM OF THE RESEARCH

The aim of research is to generate newer understanding of a phenomenon (Flick 2011:89). Research aim is the accurate data about the topic ingredient of the study (Denscombe 2012:7). In contrast, Bak (2004:16) emphasises that the academic aim must be central to the study and directs the reader to what the researcher wishes to accomplish. Customarily, it will include verbs similar to discuss, compare, determine, explore, investigate and assess. Therefore, this study was aimed at determining the value of offender profiling as an investigative tool when investigating credit card fraud.

1.4 OBJECTIVES OF THE RESEARCH

Referring to Creswell (2014:124), the researcher has to mention the objectives of the study by affirming whether the research is analytically, projecting, probing, explanatory or straightforward. Henning, Van Rensburg and Smit (2011:1) accentuate that the purpose of research will have an influence on the use of certain methods of data collection and data analysis. Babbie and Benaquisto (2010:92) echo Creswell's submission when they emphasise the three essential purposes of study are probing, explanation and substantiation. Keeping this in mind, the scholar gives details to the objective of this study as follows:

- The researcher evaluated the use of offender profiling by SAPS investigators in their credit card fraud investigations, aiming to gauge their dimness and strong point to study how they can be developed. The investigators are not familiar or have insufficient knowledge about OP when investigating credit card fraud cases.
- The researcher explored how offender profiling is being used in the investigation of credit card fraud by SAPS investigators. The researcher explored their knowledge on profiling credit card fraud offenders during interviews and the findings are documented under participants' despondence.
- The researcher intends to make recommendations based on the findings of this research and the new knowledge of international practice to develop good practice with regard to the use of offender profiling in the investigation of credit card fraud, the established data were used to solve the research problem and make recommendations to address the problem under this study.
- The researcher envisaged to empower his colleagues and educate SAPS credit card fraud. The researcher will present the findings of this research to SAPS training institutions and again present on station lectures and print pamphlets to investigators on how to use the technique offender profiling in their investigations. The outcomes of this research

contribute to the body of knowledge to improve investigations of credit card fraud.

1.5 RESEARCH QUESTIONS

Research question should be interesting and worthwhile to justify the investment of research effort (Silverman, 2013:179). Leedy and Ormrod (2013:39) submit that questions can be an excellent way of collecting data and will provide guidelines on how the researcher should analyse and interpret data. The researcher sought to answer the following research questions during this research:

- What is the value of offender profiling in the investigation of credit card fraud?

1.6 DEFINITION OF KEY CONCEPTS

Leedy and Ormrod (2013:44-45) assert that concepts of research must be defined operationally, i.e. the definition must interpret the term as it is used in relation to the research.

The following concepts were singled out by the researcher for definitions:

1.6.1 Criminal investigation

Van der Westhuizen (1996:1) describes criminal investigation as a systematic probing for the truth in order to solve a crime.

1.6.2 Offender profiling

According to Bekerian and Levey (2005:53), offender profiling is a method of collating various pieces of information and data about an offender, with the intention of establishing the most likely offender who committed the crime and is used to understand why and how the crime was committed.

1.6.3 Fraud

Snyman (2008:531) describes fraud as the unlawful and intentional making of a misrepresentation which causes actual prejudice or which is potentially prejudicial to another.

1.6.4 Credit card

A credit card is a small plastic card which allows you to purchase items now and pay for them later, (Rundell 2005:328).

1.6.5 Credit card fraud

Credit card fraud occurs when a person uses another person's credit card for personal purposes without the owner of the card or the card issuer being aware. The individual who uses the card has no relation to the cardholder or the issuer, and has no intention of paying back the money they spent (Tej Paul Bhatla, 2003).

1.7 VALUE OF THE RESEARCH

Denscombe (2010:24) and De Vos. (2011:107) suggest that research should be useful to the intended target audience and should be able to be used for practical purposes. The findings of this study would add to our understanding of how credit card fraudsters are profiled. This information will also be accessible to Unisa and the rest of the academic community. It can be used in the creation of curricula and as a resource for students and researchers.

The outcome of this research will be useful to the SAPS investigators because it will enhance investigations of credit card fraud cases. All investigators would benefit from this research because it will empower them with knowledge of offender profiling of fraudsters. They will also be able to benchmark their current practices against the findings of this research. More importantly, the South African society will benefit.

1.8 RESEARCH DESIGN AND APPROACH

1.8.1 Research design

Research design, according to De Vos et al. (2011:143) and Singleton and Straits (2010:11), is a strategy for how the researcher intends to collect and analyse data. The research is based on empirical evidence. Empirical studies are based on a qualitative study design, as stated by Welman, Kruger, and Mitchell (2005:52), and produce data from observation and experience (Maxfield & Babbie, 2012:5). (2012:8-9). According to Holliday (2012:1), qualitative research is all about reality and social life that has to be continually debated and repeated; it explains how things are.

1.8.2 Research approach

A research approach simply refers to the general direction in which a research project will be carried out (Bryman, Bell, Hirschson, Dos Santos, Du Toit, Masenge, Van Aardt & Wagner, 2014:30). The research took a qualitative approach. The dissertation is based on a qualitative research design and is methodological in nature. The qualitative approach to analysis is praised by Ary, Jacobs, Sorensen, and Walker (2014:27) because it is inductive, versatile and helps the researcher to generate hypothesis. The essence of the research issue necessitates the use of qualitative research to gain a thorough understanding of the problem. Since the researcher decided to analyse police procedures and findings based on experience and observation, empirical analysis proved to be more suitable for this study.

1.9 POPULATION AND TARGET POPULATION

The entire community or class of potential participants from which information is to be collected is referred to as a population (Dantzker & Hunter, 2012:198). Similarly, the population is the entirety of all potential participants who meet the requirements defined for a specific research project (Leedy & Ormrod, 2013:97). According to Bless, Higson-Smith, and Sithole (2015:162), population refers to the whole collection of artifacts or people studied.

1.9.1 Target population

The perfect sample size for this analysis would have been all SAPS investigators. However, owing to financial and practical limitations, all of the investigators in South Africa could not be interviewed. As a result, the population of this study was consisted of 18 investigators from the Johannesburg North Cluster who investigate credit card fraud cases for the SAPS.

The target population, according to Du Plooy (2013:109) and Welman, et al. (2012:126), is the real population to which the researcher would like to draw inferences based on the data in a study. Both SAPS investigators probing credit card fraud will be included in the study's target population. However, owing to the aforementioned factors, it was not possible to include all of them. Owing to time and cost constraints, Maree and Pietersen (2014:172) assert that including the

entire population in a study is normally impractical. As a result, an appropriate sample had to be drawn.

1.10 SAMPLING

A sample is a collection of a smaller number of people drawn from a larger population for the purpose of research (Alvi 2016:10). A sample is a collection of elements taken from a population that are thought to be representative of the entire population and are examined to learn more about it (Bless, et al., 2015:394).

The two types of sampling, according to Babbie (2010:191-200) and Strydom (2005:198-200), are probability and non-probability sampling. The researcher used a probability sampling technique for the first sample, which was a simple random sample, followed by a non-probability sampling technique for the second and third samples, which was purposive sampling.

The sampling techniques are not mixed; first, probability sampling was used for a simple random sample, and then non-probability sampling was used for a purposive sample. Convenience sampling, quota sampling and purposive sampling are examples of non-probability sampling techniques (Leedy & Ormrod, 2015:179-183).

Detectives from the Johannesburg North Cluster, Crime Intelligence Unit profilers from the Johannesburg North Cluster, and detectives from the Johannesburg West Cluster made up the study's sample. These three samples were referred to as samples A, B, and C, respectively, with the following units for each sample:

- Sample A: Credit card fraud cases are investigated by detectives from the Johannesburg North cluster. The researcher took a simple random sample of ten investigators from the population, two detectives from each police station. Each variable has an equal and independent chance of being selected in simple random sampling. The main reason for sampling, according to De Vos et al. (2011:224), is feasibility. According to Leedy and Ormrod (2013:97), in qualitative research, the researcher chooses a small number of participants.

- Sample B: Crime Intelligence Unit profilers Johannesburg North Cluster. The researcher identified three profilers by employing purposive sampling. The researcher selected these participants for the purpose of this study. Purposive sampling, according to Maxwell (2005:88) is described as choosing or selecting a specific group of participants in a specific setting for a specific purpose. The participants were chosen based on their relevant knowledge, experience, expertise, and exposure to the field of credit card fraud. Their background meant that they fulfilled the requirements of people who had lived or experienced the phenomena under investigation (Gray, 2014:208).
- Sample C: From all detectives in the Johannesburg West Cluster, the researcher selected a purposive sample of five detectives for a pilot test to ensure that the information obtained from the detectives in the Johannesburg North Cluster was relevant. There are no guidelines for the optimal sample size in qualitative research, but because of the in-depth interviews, the sample size is intended to be limited (Wagner, Kawulich & Garner, 2012:88).

1.11 DATA COLLECTION

Observation, surveys, interviews, papers, and focus groups are some of the data collection techniques used in qualitative research (Maree, 2012:82-92; Dantzker & Hunter, 2012:200; Bouma & Ling, 2010:172-180). Any type or representation of information, meaning, or knowledge that has meaning or informative value is referred to as data (Maxwell, 2005:79). Because of the scope of this analysis, the researcher relied heavily on qualitative data to gain a better understanding of the issue in words. Qualitative researchers usually gather data by analysing records, witnessing behaviour, or interviewing participants themselves (Creswell, 2014:185).

Documentation, observation, interviews, literature reviews, and case studies are all examples of data collection techniques (De Vos et al. 2011:328, 341,376; Flick, 2011:119,122; Leedy and Ormrod, 2010:146). During the study, the following data sources and data collection methods were used:

1.11.1 Literature study

The aim of a literature review is to educate the researcher about what is already known about the topic so that this information can be used as a foundation for an investigation that can advance and direct the analysis as new information becomes available (Denscombe, 2002:86). Welman et al. (2012:38) stress the value of a thorough literature review in relation to the research issue and questions (also see Leedy & Ormrod, 2013:51).

Literature references were also consulted, including articles on the Internet and research guides. Literature on the same subject as this study was searched in library catalogues and on the Internet. The author of this study visited Goldfields Library in Pretoria, Florida campus library again perused as well police guidelines and standard operating procedures (SOPs). However, there was so little information on the topic and similar to offender profiling and fraudulent use of a credit card. The relevant literature was examined, and information that answered the study's research questions and objectives was defined and chosen.

1.11.2 Interviews

According to Hofstee (2006:122), the interview is the most common method of data collection, in which a researcher tries to extract information from a group of people who are assumed to have the information the researcher is looking for. An interview, according to Maree (2012:87), is a two-way conversation in which the interviewer (researcher) asks the participant questions in order to gather data and learn about the participant's thoughts, values, perspectives, viewpoints, understanding, and behaviour.

There were both open-ended and closed-ended questions in this report. Open-ended questions have no defined answer structure and are meant to facilitate a more detailed, in-depth response when asked (Bouma & Ling, 2010:65-66). The benefit of such questions is that participants can provide information that is unexpected but crucial to the study.

The responses of the participants were recorded by the researcher. It is clear that the aim of this study was to gather information on the importance of offender profiling in credit card fraud investigations. For the first sample, which was chosen simply at random, the researcher conducted structured and open-ended

questions of the same context in the same phrases, same order, and intonation, and in the same interview environment. For the second and third samples, the researcher conducted semi-structured interviews that were versatile to allow additional questions to explain the answers. The researcher used semi-structured interviews to obtain the views and opinions of the third sample, which was purposefully chosen (Leedy & Ormrod, 2010:188).

1.11.3 Pilot test

As accordance with the guidelines of Leedy and Ormrod (2013:154 -157), the researcher conducted a pilot test to ensure the study's validity and reliability. A pilot test was performed to ensure that the questions were relevant. Detectives from the Johannesburg West Cluster, a third study suggested by Leedy and Ormrod, were asked the same questions (ibid). The researcher followed all of the guidelines for conducting successful interviews (Leedy & Ormrod ibid).

1.12 DATA ANALYSIS

The spiral method was used to analyse the data by the researcher in accordance with the guidelines suggested by (Leedy & Ormrod, 2010:153). The researcher's data were analysed by breaking it down into easily understandable trends and patterns and comparing it to national and international literatures on credit card fraud cases. The four-step spiral method of data analysis, as defined by Leedy and Ormrod (2010:153), was used to analyse the data.

- The researcher used a manual processing method to organise the results.
- The researcher went through the entire data collection multiple times to get a sense of what is in it.
- General themes and categories, as well as subcategories and subthemes, were defined, and each piece of data was then categorised appropriately.
- The data analysed were eventually combined and summarised. The researcher was able to make conclusions and suggestions about the research questions as a result of the data analysis.

The researcher followed Welman et al. (2005), and transcribed information from a voice recorder, integrated it with literature and case studies, and then noticed that the literature and the participant's responses substantiated each another.

1.13 METHODS TO ENSURE VALIDITY

According to Rosnow and Rosenthal (2013:107), validity is the degree to which the idea of what is being evaluated or experimentally manipulated is asserted, such as the constructs measured by psychological tests or acting as a connection between the independent and dependent variable. In qualitative analysis, the terms trustworthiness and validity are used interchangeably, according to Du Plooy-Cilliers, Davis, and Bezuidenhout (2014:258) and Wagner et al. (2012:137). To ensure that trustworthiness was preserved, the researcher followed the following guidelines:

1.13.1 Credibility

The data for this study were accurately reported as obtained from the participants. Interviews were performed using a variety of data collection methods. The interviews were transparent, relaxed and conducted in a secure setting to ensure integrity. The fact that the results are credible from the participant's perspective improved the study's credibility. Moreover, during the report, the researcher maintained a relaxed and neutral demeanour. Evidence and data were collected based on the study questions to ensure that they correctly calculated what they were supposed to calculate (Badore 2018:9).

1.13.2 Transferability

The researcher used a purposive sampling method to collect data. Gray (2014:185) echoes this concept when he suggests using purposive sampling as a method for ensuring transferability across relevant and related contextual factors. This qualitative study's theoretical insight can be extended to other related people, classes, or circumstances. The same results would be obtained if another researcher applies the findings to similar conditions and uses the same qualitative approaches.

1.14 METHODS TO ENSURE RELIABILITY

The term reliability refers to the processes and techniques used to collect data (Denscombe, 2002:100). The accuracy of measurement and the degree to which the researcher's findings could be replicated by another independent researcher are described as reliability in the research process (Schloss & Smith 1999:93; Welman & Kruger, 1999:143; Gillespie 2014:19).

1.14.1 Dependability

Gray (2014:185) goes on to say that consistent audit trails can be used in the data to ensure dependability. The research design, data collection, and data analysis methods, as well as the sampling procedures used, were all described in detail. Interviews with selected credit card fraud investigators were driven by standard interview schedules. Interviews were taped and references were correctly referenced after compiling a comprehensive reference list of all sources used.

1.14.2 Confirmability

To ensure conformity, the researcher maintained a clear record of all literature cited in order to demonstrate that the results and interpretations of those findings were not the product of the researcher's imagination. Confirmability is assured because the researcher used a spiral method to analyse the data. Other researchers would be able to draw similar conclusions because of the comprehensive descriptions of how the data were obtained and analysed (Badore 2018:10).

1.15 ETHICAL CONSIDERATIONS

At the University of South Africa, there was a strict commitment to the research ethics programme (UNISA, 2016). The researcher also considered the suggestions Leedy and Ormrod stipulated (2005:101)

- Damage protection: The researcher ensured that none of the participants suffered any needless physical or psychological harm. Interviews were held in a safe, comfortable setting.
- Informed consent: The researcher explained to all participants the nature of the study and requested consent from participants prior the start of

interviews, further informed participants that if they wish to withdraw from participating, they can do so.

- Right to privacy: The researcher displayed high level of respect to all participants' right to privacy was maintained responses of participants was not disclosed and identity was protected.
- Transparency with knowledgeable colleagues: The researcher reported the study's results honestly, with no wording misrepresentation. Plagiarism, which is a form of academic fraud, was also considered by the researcher.

1.16 RESEARCH STRUCTURE

Chapter 1: General orientation

The following chapters make up the remainder of this research report:

Chapter 2: Offender profiling in investigation of credit card fraud

The researcher identified offender profiling, various types of profiling, the intent of offender profiling, and the importance of offender profiling in credit card fraud investigations in this chapter. Furthermore, the researcher described murder and explored the elements of murder. The researcher discussed the use of suspect profiling in murder investigations.

Chapter 3: Findings and recommendations

The results are reported in this chapter, and recommendations are made, bringing the research report to a close. A few recommendations are made to solve the perceived issue with each result that the researcher believes needs to be corrected. The researcher attempts to compile a list of practical suggestions in this chapter. This indicates that the guidelines are considered implementable and obviously beneficial (Hofstee, 2006:159).

CHAPTER TWO: OFFENDER PROFILING IN THE INVESTIGATION OF CREDIT CARD FRAUD

2.1 INTRODUCTION

The practice of using offender profiling during investigations is not entirely recent. It has been in use by the SAPS for a long time. According to the researcher, most station level detectives were unfamiliar with the phrase "profiling," and only a few members were aware of it, but it was well-known in specialized units such as the Director of Priority Crime Investigation (DPCI). The information gathered from criminals was referred to as crime information, and police could use it in their investigations. Offender profiling, according to Anniss (2014: 28), is the method of attempting to determine who committed a crime and why they did so based on a knowledge of criminal behaviour. Conducting research on profiling, a tactic used in criminal investigations, is challenging but rewarding work full of fun. The aim of this chapter is to demonstrate that the SAPS investigators are unaware of this investigative method and how empirical analysis was conducted for this report.

Since the researcher wanted to perform the analysis among the SAPS detectives, I used both primary and secondary data. The researcher wanted to combine primary and secondary research, but due to the limited research in this area, it was difficult to concentrate on primary research. Moreover, the researcher was extremely inspired and excited about learning from actual experts on the ground and acquiring more experience, not just through theory but also through practice.

The researcher conducted a field study to perform face-to-face interviews or simply ask them questions. The researcher continued to broaden his area of study and conducted research using a variety of resources, including books, online publications, journals, magazines, newspapers, movies, and documentaries.

The researcher expands on the relationship between offender profiling and criminal investigation in this chapter, defining offender profiling, its intent, and the various forms of profiling focused on credit card fraud.

2.2 CRIMINAL INVESTIGATION

Criminal investigation is described by Benson, Horne, and Jones (2015:19) as a systematic, organised, thought, reasoning, evaluation, and review mechanism designed to look for truth in which all forms of crimes or unlawful actions are investigated and thoroughly analysed. A criminal prosecution does not happen by itself (Lochner, 2014:4). Any investigation, including a criminal investigation, requires a competent and skilled individual. Additionally, Van der Westhuizen (1996:1), is a systematic search for the facts in order to solve a crime.

Criminal investigation, according to Benson et al. (2015:19) and Van der Westhuizen (1996:1), is the systematic search for the evidence. Lochner (2014:4), on the other hand, emphasises the importance of a skilled individual conducting a criminal investigation. A criminal investigation, according to the writer, is a systematic quest for the facts aimed at solving a crime. Lochner (2014:6) goes on to say that criminal investigation is described as the legal tracing of people and things to reconstruct the true circumstances of an illegal act, crime, transgression, event, or omission, as well as the reprehensible state of mind that followed it. The participant's samples (A, B and C) were requested to define criminal investigation and the following feedback was received:

Sample A

- One viewpoint is that all crime-related physical evidence should be gathered and analysed to reach a conclusion about the perpetrator.
- Three participants defined criminal investigation as a system/ planning used by investigators to search for the truth.
- Two participants believed that criminal investigation is a study of collecting information believed to be evidence for a legal enquiry.
- Three submitted that criminal investigation is a study/technique used by law enforcement agency to prove a fact related to an incident or a crime.

Sample B

- Bestowing to two participants, criminal investigation is the process by which the police gather and analyse information in order to determine who committed the crime.
- One participant suggested that criminal investigation is the legal enquiry that include tracing of person who is alleged to has committed a crime.

Sample C

- Bestowing to two participants, a criminal investigation is a systematic inquiry into gathering facts that can be used as evidence in the prosecution of a suspect.
- Two states that it is a legal search for the truth pertaining an alleged crime.
- One respondent said that criminal investigation is the method of analysing evidence to justify or disprove a crime.

The participants' answers are consistent with the literature in that they both recognise that criminal prosecution is about exposing the facts through the presentation of evidence in court. Another area where literature and respondents agree is that police investigation entails analysing facts to solve a crime.

2.3 THE OBJECTIVES OF CRIMINAL INVESTIGATION

According to Benson et al. (2015:23), education is a critical part of criminal investigation priorities and objectives. They argue that the terms criminal investigation priorities and crime investigation goals are often interchanged. According to Brandl (2014:4), crime-related information is gathered to solve a crime in a lawful manner.

The following are the goals of a criminal investigation, according to Becker and Dutelle (2013:18):

- Detecting crimes, including determining the type of crime.
- Suspects must be detected and tracked down.
- The investigation's evidence must be found, collected and handled in a legally sound manner.

- Thorough planning prior to the trial, including ensuring that all relevant documentation is complete and correct.
- Testify in a court of law and assist with the introduction of related facts to obtain a conviction.

The main goals of criminal investigation, according to Benson et al. (2015:13), Brandl (2014:4), are to solve crimes in a lawful manner. Furthermore, Brandl (2014:4) posits that crime-related data is gathered lawfully in order to solve a crime. Again, Brandl (2014:3) maintains that the goals of police investigations are signs and information about a particular crime or perpetrator.

2.3.1 To find out whether a crime has been committed

The first goal of a criminal investigation is to determine whether a crime has been committed or not. To decide if a crime was committed, the investigator must be familiar with criminal law and be able to recognise the characteristics of each crime (Gilbert, 2010:52; Osterburg & Ward, 2010:6). According to Siegel, Saukko, and Houck (2013:13), for an investigation to begin, the crime must first be brought to the attention of the authorities, after which the investigation sequence starts. The researcher concurs with these authors that when a complaint is received at the police station before an investigation can unfold, the crime officer starts by verifying the report by the complainant by visiting the alleged scene to determine if indeed the house was broken into or not, then identify all elements of crime.

2.3.2 To collect evidence

The very second objective of crime investigation is the collection of evidence at the scene of crime. Documenting witness reactions to what occurred, according to the researcher, is also part of the evidence gathering process. When Osterburg and Ward (2010:91-92) and Palmiotto (2013:29) say that evidence is all relevant material admissible in court, they are echoing this viewpoint. Evidence can be used to decide if a crime has been committed, connect a suspect to a crime scene, affirm or refute theories and witness accounts, locate a perpetrator or victim, exonerate the innocent, elicit confessions, and help guide further investigations (Lyle, 2012:21). Evidence plays two very critical roles, according to Gilbert (2010:52) and James, Nordby, and Bell (2014:28-29), namely,

inculpatory evidence and exculpatory evidence. This means that the existence of evidence may either confirm or disprove a person's identity as a source. As a result, an individual may be either indicted or exonerated. In practice, it can be argued that if a suspect's fingerprints are discovered on a crime scene, he is put on the scene.

2.3.2.1 Contamination

According to Lochner and Zinn (2015:20), evidence that is treated without protective clothing, would be the most polluted. The researcher concurs with the viewpoint of the above writer and further argues that contamination is introducing foreign DNA source to the original exhibit, for example using one pair of gloves to collect two or more exhibits. It is strongly recommended that an investigator should not smoke, drink or do anything else at the crime scene that may jeopardize the crime scene or the evidence (Dutelle, 2011:225). More importantly, it is necessary to note, according to Lochner et al. (in press), that information obtained should be processed and transported in a way that prevents contamination.

2.3.2.2 Chain of custody

The chain of evidence is a record of each person or entity who has monitored or taken possession of examined or checked evidence or had some other kind of interaction with evidence from its discovery to the present day (Chisum and Turvey, 2011:652); Fisher, Miller, Braswell & Wallace, 2014:22) The discovery and continuous safekeeping of objective evidence from the moment it is discovered until it is presented as evidence in court is known as chain of custody or continuity of possession (Bertino, 2012:22).

2.3.3 Arrest of suspect

After a suspect has been identified by either means of investigative methods and techniques or by means of witness pointing out on identification parade, then the arrest follows. According to Marais (1989:19), a suspect is arrested to guarantee his or her attendance for trial. When an arrest is accomplished, Pena (2000:6) cautions us that it must have been done in conformity with the law.

2.3.4 Recover stolen property

The recovery of stolen property is the fourth goal. After an arrest, recovered property must not be limited to what the plaintiff said was taken, but should also include other exhibits such as equipment used to commit the crime. In a fraud case, the system used to commit the crime, such as a printer, scanner, or computer, may be recovered. This can be used as proof and also tested for empirical evidence (Marais & Van Rooyen, 1990:21).

2.3.5 Present the case to the prosecutor

The presentation of the case for prosecution is one of the important objectives and investigators should consider that the successful prosecution of criminals rest upon the comprehensiveness of the case docket. Again, it is the investigator's duty to ensure that all witnesses are prepared for court hearings throughout the trial and that exhibits are accessible during the trial without jeopardizing the evidence's credibility (Van der Westhuizen, 1996:7).

2.3.6 Identify the suspect

Lastly, the aim of a criminal investigation is to find the perpetrator so that a lawful arrest can be made. This involves using facts gathered from investigative knowledge to connect the perpetrator to the crime. The identification of the suspects, according to Brandl (2014:4) and Van der Westhuizen (1996:7), is the connection between the crime and the facts and evidence gathered during the investigation. The researcher accentuates that there are several methods and techniques that can be used to identify the suspect. Investigators can conduct identification parade, expert testimony evidence through 212 Statement of CPA, eyewitness statement and a strategy for identifying offenders is known as *modus operandi*.

The people who attended were requested to indicate their knowledge on objectives of criminal investigation and the following feedback was received:

Sample A

- According to two participants, the goals of a criminal investigation are to find and identify the suspect and to prepare a solid criminal case for the prosecutor.

- Three participants agreed on the importance of establishing that a crime was committed and identifying the perpetrator.
- Two participants reach an agreement, seeking real evidence of a crime and helping in the prosecution of those accused of it.
- Three participants submit that objectives of criminal investigation is to prove allegation of an incident.

Sample B

- According to one person, the goals of a police investigation are to gather information about the crime and locate the suspect.
- Two participants agree that the goals of a criminal investigation are to gather evidence, locate the perpetrator and put the perpetrator before a court of law.

Sample C

- According to three participants, the goals of a criminal investigation are to find and identify the suspect and to prepare a solid criminal case for the prosecutor.
- According to one participant, the aim of a criminal investigation is to prove the hypothesis of an incident.
- According to one participant, the aim of a criminal investigation is to prove that a crime was committed and to find the perpetrator.

In summary, the responses from the participants indicate that it is clear that all participants thought the aim of an investigation should be to establish evidence that prove or disprove the allegations. Identifying of suspect and assisting in the prosecution. However, the crime scene and arresting of suspect and to recover stolen property appears not to be exposed among the participants.

2.4 THE PURPOSE OF INVESTIGATION

According to the researcher, the aim of an investigation into a possible legislative act breach is to figure out what happened, what caused it, who was responsible, what steps should be taken to remedy the current situation, and what actions should be taken to ensure that a similar violation does not happen again. The researcher goes on to say that the aim of an investigation is to dig deep into the

allegations, investigate the evidence and decide whether or not there was any wrongdoing or illegal act was committed or not. The collected information pertaining the allegations is then brought forth for litigations, with the hope of conviction. Investigation starts when allegations are reported then followed by information analysis and reconstruction and ends at the stage of a verdict by the presiding officer or judge in the court.

According to the researcher's realistic experience, any competent investigator with a positive attitude toward investigation will always have a positive outcome for any investigation he conducts; therefore, response from participants is accurate when they point out the following:

- To include or exclude the suspects from the scene;
- To prove if crime was indeed committed or not; and
- To promote justice.

Benson, et al. (in Zinn & Dintwe, 2015:18) define a distinctive criminal investigation as lawfully collecting data and evidence using traditional methods guided by the Criminal Procedure Act, with the aim of:

- Reconstructing a crime scene;
- Identifying the perpetrator;
- Discovering, identifying, and collecting objective and subjective information and evidence; and
- Establishing whether a crime has been committed.

The participants were requested to indicate their knowledge on the purpose investigation and the following feedback was received:

Sample A

- Four participants believe that the object of the investigation is to reconstruct the scene, locate the suspect, and bring the suspect before the court, in compliance with section 205 (3) of the Constitution of the Republic of South Africa, Act No. 108 of 1996, the powers and functions of the South African Police Service (SAPS).

- Three participants agree that the aim of an investigation is to find out whether the suspect is involved in the crime and to bring the perpetrator to justice.
- According to one person, the aim of an investigation is to collect evidence to reconstruct and prepare a case for trial.
- Two participants were unable to determine the purpose of the inquiry.

Sample B

- One participant said that the aim of the investigation is to gather evidence and connect the suspect to the crime scene.
- According to one participant, the aim of an investigation is to collect information about the crime and bring the perpetrator to trial.
- One participant believes that section 205 (3) of the Constitution of the Republic of South Africa, Act No. 108 of 1996, the powers and duties of the SAPS, and the prosecution of any crime or suspected offence, perfects the object of investigation to reconstruct the scene, identify the suspect and testify at court.

Sample C

- Three participants concur that the aim of the investigation is to recreate the scene, locate the perpetrator, and bring him to justice.
- Two participants accentuate that the aim of an investigation is to collect information about a crime and bring the perpetrator to justice.

2.5 DEFINITION OF AN OFFENDER

According to Bennett and Hess (2007:161), an offender is a person who is suspected of being directly or indirectly involved in the commission of a crime, either through an overt act or through planning or directing it.

The participants were asked what an offender is and the following feedback was received:

Sample A

- Seven participants concur that an offender is someone who commits an illegal act.
- Three participants are of the viewpoint that an offender is a person who breaks the law.

Sample B

- Two participants are of the viewpoint that the offender is someone who commits an illegal act.
- One participant is of the viewpoint that the offender is a person who is linked to a crime.

Sample C

- Three participants are of the viewpoint that the offender is someone who commits an illegal act.
- Two participants assert that the offender is a person has committed a crime.

The researcher noticed that all of the participants agreed with each other, but their responses were phrased differently. They also agree with the author who started that an offender is a person who is guilty of a crime, and that perpetrators of a crime are technically known as offenders.

2.6 PROFILING

According to Boba (2005), profiling can be described as an intelligent attempt to provide investigating agencies with detailed details about the type of person who committed a specific crime. In addition, according to Mostert (2018:8), profiling is also known as criminal offender profiling. Profiling, according to Padgett (2015:61), is the collection of different pieces of information, data, or intelligence in relation to a crime or criminal offender. The researcher agrees with the above writers' submission. Profiling, according to the researcher, is the documenting and examination of a person's psychological and behavioural attributes to determine or predict their strengths in a specific sphere or to aid in the identification of a group of individuals.

The researcher would like to add another type of profiling as well that is not mentioned by all authors cited earlier. The study of geographical locations correlated with the spatial movements of a single serial offender is known as geographical profiling (Bartol & Bartol 2012).

The participants were asked what is profiling and the following feedback was received:

Sample A

- Three participants are of the viewpoint that profiling is a short article giving a description of a person.
- Three participants are of the viewpoint that profiling is collecting information about the person or relating or describing that person.
- Four participants are of the viewpoint that profiling is collecting information of the person who is believed to have committed a crime, for example; race, gender, workplace residential area etc.

Sample B

- One participant asserted that profiling is a formal way of putting together information that is related to a person.
- Two participants are of the viewpoint that profiling is collecting information of the person who is believed to have committed a crime, for example; race, gender, workplace residential area etc.

Sample C

- Three participants concur that profiling is collecting information about the person or relating or describing that person.
- Two participants concur that profiling is a short article giving a description of a person.

It is clear from the preceding discussion that the participants' vocalisation does not differ from the submission of the authors. The researcher concurs with the viewpoint of the participants and does not dispute any submission of the above writers.

2.7 OFFENDER PROFILING

Various scholars have described offender profiling in a variety of ways, depending on their backgrounds. Offender profiling, criminal personality profiling, crime scene profiling, behavioural and psychological profiling are all terms used to describe criminal profiling, and the person who compiles the profile is known as the profiler (Labuschagne, 2015:283). According to Zinn (2007:77), profiling criminals is not a solution to crime or an alternative to prosecution, but rather a tool for creating a database for crime intelligence purposes.

Even though the majority of the literature references the FBI's impact and advancement of the science of profiling, Dr Johann (Hans) Baptist Gustav Gross is the founding father of modern criminal profiling (Williams, 2015:10). According to Eaton and Korach (2015:2), the FBI first used the word profiling in 1974 when they established their Behavioural Analysis Unit, and has gone to great lengths to formalise and integrate procedural documentation ever since.

The researcher understands that criminal profiling, also known as offender profiling, is a valuable investigative tool that prosecutors must use when compiling different pieces of information and data about an offender as part of a forensic investigation. Offender profiling is also classified as criminal profiling, according to Padgett (2015), who agrees with Labuschagne. He claims that criminal profiling may also be referred to by the following words (Padgett 2015:67):

- Psychological profiling;
- Criminal personality profiling;
- Offender profiling;
- Behavioural profiling;
- Crime scene profiling; and
- Criminal investigative analysis.

Offender profiling, according to Anniss (2014: 28), is the method of attempting to determine who committed a crime and why they did so based on a knowledge of criminal behaviour.

According to Turvey (2011), a criminal profile is a collection of inferences about the attributes of a particular suspect during the process of investigating crime. However, there must be a distinction made between inferences and speculation. A hypothesis based on proof and logic is called an inference. In contrast, speculation is when a conclusion is reached based on hypothesis or conjecture rather than solid proof. Criminal profiling has aided the police in improving intelligence efficiency by suggesting characteristics of the suspect that would limit the search (Howitt: 2015).

The participants were requested to define offender profiling and the following feedback was obtained:

Sample A

- Six participants were reciprocal that an offender profile is a tool to help the investigation and shows features of those likely to commit crime, such as individual traits, appearance, age, and popular patterns.
- Two participants revealed modus operandi being vital in offender profiling.
- One participant could not define offender profiling.

Sample B

- One participant submitted apart from particulars of the offender in his opinion; he mentions the motive of the offender.
- Two participants gave a detailed response that offender profiling is known by various names by different authors but moreover, mention characteristics of the crime scene and collection of data information about the offender for investigation purposes, cognitive tendencies of the offender and an aid investigative technique in forensic investigation.

The above discussion is echoed by Bartol and Bartol (2012) when they state that offender profiling is the method of determining an unknown offender's cognitive traits, behavioural habits, emotional dispositions, and demographic variables based on crime scene characteristics.

Sample C

- Two participants asserted that offender profiling is used by police to collect information of a person who committed a crime.
- Two participants asserted that offender profiling is the method of determining an unknown offender's cognitive traits, behavioural habits, emotional dispositions, and demographic variables based on crime scene characteristics.
- One participant talked about modus operandi being vital in offender profiling.

Since investigators are not qualified psychologists and need practical guidance to profile fraud suspects, it is clear that offender profiling during fraud investigations should not be solely based on psychological factors. As a result, fraud suspects' unique attributes, red flags, modus operandi, and motives prove to be useful in offender profiling. The participants' knowledge of offender profiling is focused on their realistic experience dealing with offender profiling. However, none of them has undergone any formal training in the field. It is not surprising that they have different ideas of what offender profiling is, it became evident that there are different opinions among authors about offender profiling.

Offender profiling holds more promise, but there are many questions that need to be answered before it can become a more reliable and empirical profession. A clear effect of more stringent anti-fraud measures in domestic markets has been that the fraudulent use of cards has moved from domestic to cross-border, into locations where anti-fraud protection is weaker for the time being. There are much higher fraud losses on the international use of cards compared to domestic card fraud losses are evident.

For this dissertation, the researcher will not discuss the different types of profiling, but instead will just list the types of profiling which are related to the study.

2.7.1 Types of profiling

The researcher discovered that there are different forms of offender profiling during this research. Furthermore, there seems to be a misunderstanding regarding the various forms of offender profiling, as offender profiling has come to mean different things to different people. During this research, the researcher discovered that over the years, various authors have identified offender profiling

using various terminologies such as psychological profiling and criminal profiling, criminal investigative analysis, crime scene analysis, behavioural profiling, criminal personality profiling, socio-psychological profiling and criminological profiling.

Padgett (2015:67) concurs with Turvey (2008:13) that criminal profiling can also be referred to by the following words: Psychological profiling; criminal personality profiling; offender profiling; behavioural profiling; crime scene profiling; criminal investigation research; and investigative psychology.

Many profiling strategies are already in use in many nations, according to Ainsworth (2001:152), even though these techniques are still to be proven empirically. Ainsworth (2001) asserts that there are different offender profiling techniques:

- Criminal personality profiling;
- Criminal profiling;
- Psychological profiling;
- Inductive criminal profiling;
- Deductive criminal profiling;
- Intelligence profiling; and
- Investigative profiling.

From the submission of the three authors, the researcher notices some similarities, and conclude that they all settle with:

- Offender profiling / criminal profiling as discussed to be same thing;
- Investigative psychology / investigative profiling / psychological profiling seem to the researcher as the same thing based on David Canter's approach to profiling. This approach also analyses previous cases and experience based on empirical principles. Crime scene material as well as patterns present, he dismissed FBI's **'psychological profiling'** and instead chose to settle for a more vague term of **'investigative psychology'**.

2.8 IDENTIFICATION

Lochner (2016:48) and Benson et al. (2015:47) buttress that the term identification refers to a classification system in which objects or individuals with similar attributes are clustered all together in a single category (class) and assigned a name. On the contrary, Van Graan and Budhram (2015:47) slightly differ in wording and vocalize that identification is a process, their standpoint is that the term identification can be described as a process that compares an object's or substance's form properties to evidence obtained from a crime scene. According to Chisum and Turvey (2011:109), uniqueness is not needed or implied by the word identification. The following are some of the different types of recognition, according to Zinn and Dintwe (2015:48):

- Situational identification;
- Witness identification;
- Victim identification;
- Imprint identification;
- Origin identification;
- Action identification;
- Perpetrator identification; and
- Cumulative identification.

2.8.1 Situational identification

Zinn and Dintwe (2015:49) define 'situation identification' as a psychological rebuilding of the situation in respect of the incident. In contrast, Canter (2019) highlights that situation identification refers to a new scientific approach aimed at enhancing our understanding of criminal behaviour and the criminal justice system.

2.8.2 Witness identification

Tran (2018) describes eyewitness identification as the process where a witness identifies the wrongdoer of a certain crime based on physical observation to that crime. In addition, Zinn and Dintwe (2015:50) assert that 'witness identification' can be described as the progression of linking a separable perpetrator to a specific incident.

2.8.3 Victim identification

According to Zinn and Dintwe (2015:50), identification of the victim spreads mostly to deceased or unconscious victims. In contrast, the researcher's opinion is that victim identification can be completed after the investigating officer interviews the first respondent to get an understanding of what might have happened.

2.8.4 Imprint identification

The researcher's experience as a fingerprint expert in the SAPS submits that imprint identification can be accomplished after a comparison of two prints either finger, palm or footprints and found to be similar in pattern, shape, seven points characteristics and no unexplainable difference. Zinn and Dintwe (2015:51) echo the above statement when they accentuate the method of comparing two instances of friction-ridge skin impressions from human fingertips, the palm of the hand, footprints, or even toes is known as imprint recognition.

2.8.5 Origin identification

Van Heerden (1986:199) argues that 'origin identification' is concerned with determining whether organic samples such as blood, saliva and sperm, as well as inorganic samples such as soil, arms, and fibre of materials/fabrics, have a common origin. The researcher concurs that origin identification is completed at the SAPS FSL when a lab technician examines the origin of piece of tape that was found on the scene with the investigative sample.

2.8.6 Action identification

Zinn and Dintwe (2015:52) submit that the 'identification of an action' relates to human behaviour that directly constitutes all the elements of a crime. Their viewpoint is supported by SAPS (2013:6) that the detection of human actions that are specifically linked to the crime or are a core element of it is referred to as action identification.

2.8.7 Perpetrator identification

Van Heerden (1986:190) shows that voice identification, parades, facial composition, and personal recognition are all methods of identifying an individual as the perpetrator. The researcher concurs that in the SAPS, an investigating

officer accomplish perpetrator identification by means of conducting identification parade and facial comparison most.

2.8.8 Cumulative identification

According to Van Heerden (1986:190), the concept cumulative identification extends to its use of different forms of identification in the investigation of crimes. Cumulative detection, according to Zinn and Dintwe (2015:54), is when different specialists' contributions are combined.

When participants were asked what they meant by the term identification, they gave the following responses:

Sample A

- Four participants shared a viewpoint that identification is a system of comparing a particular piece of object and place it to its originality or identity.
- Two participants submitted that identification is to single out a particular thing through comparison of characteristics.
- Two participants submitted that identification is a process of describing someone by means of ID or photographs.
- One participant could not define identification.

Sample B

- Two participants mentioned that identification is the process of classifying objects of the same characteristics, for example, fingerprints.
- One participant submitted that identification is to bring or place a particular object to a same group of class characteristics.

Sample C

- One participant mentioned that identification is the process of classifying objects of the same characteristics, for example, fingerprints.
- Three participants submitted that identification is a system of comparing a particular piece of object with others and place it to its originality or identity.

- One participant could not define identification.

During researcher's evaluation of other sources of data, it became evident that the participants' views resonate with those of Gardner (2005:24) who is of the viewpoint that identification is the act of grouping objects that have similar characteristics together, the characteristics meaning would be shared to a particular group. Few participant's responses were a concern to the researcher and the researcher conclude that the respondents are confusing identification with individualisation. The responses of the participants indicate that absence of a specialised training could be the reason for lack of awareness.

The researcher encourages that SAPS investigators who investigate fraud cases need to undergo formal training and emphasise that a unit dedicated to credit card fraud cases be implemented. Furthermore, the researcher points out that there is a distinction to be made between identity and individualisation. Individualisation is a subject that will be discussed later.

2.9 THE APPLICATION OF PROFILING IN SUSPECT IDENTIFICATION

New legislation has been drafted in South Africa in the form of the Criminal Law (Forensic Procedures) Amendment Bill. This bill not only establishes, administers and maintains a national DNA database, but it also outlines the creation of five separate indexes, including:

- Crime scene index;
- Reference index;
- Convicted offender index;
- Volunteer index; and
- Personnel, or elimination, index.

The researcher transmits how can profiling be used to identify a suspect, in the matter [2016] Nkwanyana v S (AR108/16) Ms Thomas, an expert witness, testified in ZAKZPHC 82 (27 September 2016), describing to the court that each person has a specific DNA, except for identical twins, regardless of where it is derived from that person's body. She further gave a full description of a full DNA profile, and the court convicted the suspect to life imprisonment.

The researcher submits that geographical profiling can as well be used to identify the suspect whereabouts. The study of geographical locations correlated with the spatial movements of a single serial offender is referred to as geographic profiling (Bartol & Bartol, 2012). The researcher argues that geographic profiling is an investigative technique that can pinpoint the offender's probable neighbourhood or another location (such as his or her workplace or girlfriend's home) that serves as an anchor point or base of operations. This is done with a computer software in the SAPS system that records all types of crimes and depict them in the form of graph for better utilisation of resources.

The participants were asked how profiling can be used to identify a suspect and the following feedback was obtained:

Sample A

- Four participants reported that psychological profiling will aid in the identification of the suspect.
- Four participants highlighted that DNA profiling will aid in the identification of the suspect.
- One participant could not answer.

Sample B

- One participant indicated that employing investigative profiling will aid in the criminal investigation since it will introduce inductive profiling and deductive profiling that will identify a suspect behaviour on the crime scene.
- Two participants submitted that geographic profiling will help locate the whereabouts of the suspect.

Sample C

- Two participants are of the view point that psychological profiling by the Psychological Investigative Unit will aid to identify the suspect.
- Three participants shared a view point that DNA profiling will aid in the identification of the suspect.

It is clear from the previous section that participants from sample A and sample C share common understanding when they postulate that DNA profiling and psychological profiling will aid in the identification of the suspect. One participant from sample B submits that investigative profiling, introduce inductive profiling and deductive profiling that will identifying a suspect behaviour on the scene of the crime, again the other two participants from sample B suggest that geographic profiling would aid in locating the suspect's location.

2.10 INDIVIDUALISATION

Individualisation, according to Chisum and Turvey (2011:107), Greene (2007:563), and Lochner (2016:48), refers to the demonstration that a specific sample is exceptional, even among members of the same class. Individualisation, according to Ogle (2012:9), necessitates the contrast of dubious artifacts discovered at a crime scene with the documented source.

When participants were asked what individualisation is, the following feedback was obtained:

Sample A

- Two participants submits that individualisation is to identify a single unit out of many; for example, identification parade, and witness pointing out a suspect.
- Four participants reported that individualisation is to point out a specific person or object from a group along with a comparison of qualities.
- Four participants highlighted that individualisation is the demonstration that a given sample is distinct from those in its class.

Sample B

- One participant mentions that individualisation is completed after a DNA profile is compared with other profiles and a single suspect is identified.
- Two participants asserted that individualisation is meant to single out a particular object from a group through comparison of characteristics; for example, fingerprints comparison.

Sample C

- Two participants submit that individualisation is to identify a single unit out of many; for example, identification parade, and witness pointing out a suspect.
- Three participants argue that individualisation is to single out a particular object from a group through comparison of characteristics; for example, fingerprints.

The participants describes individualisation as the process by which an individual becomes distinct, which is in contrast to the definition provided by Birzer and Roberson (2012:104), individualization is the process of narrowing the classification until only one item remains in the class.

The researcher opines that in individualisation of factual facts, such as behaviour observed at a crime scene, is completed during a credit card fraud investigation. This is done to identify the personality and contribution of the particular offender.

2.11 THE APPLICATION OF PROFILING IN SUSPECT INDIVIDUALIZATION

DNA is a distinguishing feature that is special to each person. As a result, it makes sense that forensic DNA profiling, in conjunction with other forensic methods, is extremely effective in the detection of crimes and the prosecution of criminals. Nonetheless, the legal community does not always understand DNA analyses and profiles, and the belief that DNA data is reliable obscures several possible issues posed by the methods and interpretation of such evidence.

The participants were asked how profiling can be used to individualise a suspect and most of them responded as follows:

Sample A

- DNA profiling will individualise a suspect.
- Psychological profiling will individualise a suspect.

Sample B

- Two participants submit that after geographic profiling identified the group of suspects. DNA profiling will individualise the one particular donor of the blood found on the scene.

- One participant reported that Psychological Investigative Unit will assist in the individualisation of a suspect through their investigative techniques.

Sample C

- Two participants submit that DNA profiling will individualise a suspect.
- Two participants submit that psychological profiling will individualise a suspect.

From the preceding responses, it is clear that participants from sample A, B and C settle with two varieties of profiling, namely, DNA and psychological profiling as a method of investigation that will aid during individualisation of the suspect. The researcher concurs with the viewpoint of the participants that the new Criminal Law (Forensic Procedures) Amendment Act is a DNA bill that will enable the SAPS to increase arrest and conviction rates by providing an overall system for fingerprints and DNA collection and storage. Awareness of the scientific concepts that underpin how DNA samples are analysed and how DNA profiles are interpreted is required to explain forensic DNA profiling. The procedures are used by the South African Police Service's Biology Unit of the Forensic Science Laboratory to analyse DNA evidence (S De Wet and other: 2011).

The Locard Principle of cross-transfer, according to Van Niekerk, is the foundation of forensic biological analyses. In terms of forensic DNA testing, the Locard Principle states that a person can obtain the following information by analyzing and comparing their DNA profile:

- be accused in a crime or linked to a crime scene owing to biological evidence matching his or her DNA profile, or
- be exonerated owing to his or her DNA profile varying from that of the biological material found at the scene.

The Criminal Procedure Act is also presented by the researcher. Section 212(4)(a) of the Act states:

(a) If any fact is formed through any analysis or method that necessitates the use of any skill:

(l) in biology, chemistry, physics, astronomy, geography, or geology;

(ii) in mathematics, applied mathematics, or mathematical statistics, or in statistical analysis;

(iii) is or may become appropriate to the issue at criminal proceedings, a document purporting to be an affidavit signed by a person who alleges in that affidavit that he or she is in the service of the State..., and that he or she has formed that fact by means of such an investigation or procedure, shall be prima facie proof of such fact upon mere production at such proceedings. The researcher believes that, under the provisions of section 212(4)(a), such an affidavit can be submitted, given that the section's admissibility criteria are met.

South Africa's first DNA profiles were entered into what is now known as the South African National DNA Database (NDDSA). The SAPS Forensic Science Laboratory (FSL) Tshwane opened the world's first fully automated device for high volume forensic DNA analysis and profiling in 2006.

The researcher argues that DNA profiling can individualise a suspect, for example, meat or blood on a razor fence after a suspect escaped the scene. Throughout South Africa, numerous private and government laboratories use DNA profiling in paternity testing. Therefore, the researcher submits the following case study as an example of how profiling can be used to individualise the suspect? In 2002, DNA profiling cleared six people accused of raping a nine-month-old baby girl named Tshepang by the community. Profiling, on the other hand, identified the real suspect. It has also been used to help solve the Happy Sindane mystery, as well as locate the mother and identify the father of twin babies found abandoned in a taxi.

2.12 OFFENDER PROFILING AS AN INVESTIGATIVE TOOL

Participants were asked if they thought offender profiling was a useful investigative tactic. This question was replied affirmatively by all of the participants. They were consistent in their assertion that offender profiling is an effective investigative technique, even though it is not widely used by SAPS investigators.

Offender profiling is an investigative technique used predominantly by law enforcement, psychologists, researchers, and experts to help determine an

offender's main personality, behavioural, and socioeconomic indicators following a review of crime scene activities (Douglas & Burgess, 1986; Fox & Farrington, 2015). Indeed, criminal profiling has aided the police in improving intelligence efficiency by recommending characteristics of the suspect that would narrow the hunt (Howitt, 2015).

Geographical profiling and case linkage have helped to improve and broaden the scope of profiling (Swart, 2015). It is also been used in non-traditional areas like counter-terrorism, interviews and interrogations, risk analysis and management for sentencing, parole, and expert testimony in courts. Modern profiling, rendered by the researcher, is focused on a variety of disciplines, including criminology, psychology and psychiatry, and forensic sciences. Since their foundations are in various fields, inferences are made in a variety of ways. This shifts away from statistical reasoning and toward subjective intuitive judgments based on personal conviction and experience as well as investigating specific criminal activities (Turvey, 2011). The participants' statements are consistent with Crighton's (2010:153) assertion that the evidence base on offender profiling is surprisingly narrow.

2.13 FRAUD

Misrepresentation (or falsification of the truth), unlawfulness, intent, and prejudices are all elements of fraud (Snyman, 2008:531; Budhram: 2007). An act is one of the aspects of all crimes. This is voluntary human behaviour that may take the form of either doing something (commission) or failing to do something that the law requires. The term fraud comes from the Latin word *falsum*, which means "to falsify" (South African Police Service Advance Training Manual Commercial Crime, 2002:78). The crime of fraud has been around since the beginning of time, and the first commonly recognised example can be found in the Bible. Jacob and his mother deceived his father, Isaac, for Jacob to be blessed instead of Esau. Because of this misrepresentation, Esau was prejudiced on purpose. His birth right was taken away from him, though Jacob was granted those privileges that he would not have had otherwise (South African Police Service, Basic Fraud Course, 2000:1).

Fraud is described as the illegal and deliberate falsification that causes actual prejudice or is potentially prejudicial to another (Hopwood, Leiner, & Young, 2012:32; Snyman, 2008:531).

Fraud is described by the Law of South Africa (LAWSA) as the unlawful and deliberate creation of a “misrepresentation” that causes actual prejudice or has the potential to cause prejudice to another. It is also defined as an wilful misrepresentation of the truth made with intent to deceive and resulting in actual or potential injustice to another, (Criminal Law and Procedure; Gardiner and Lansdown).

Since the distinction between fraudulent and legitimate behaviour is not always clear, fraud is difficult to detect. Fraud, on the other hand, is not limited to financial losses; it may also result in violations of human rights, as well as physical and psychological damage. Financial institutions, insurance firms, businesses, and even the government are all vulnerable to fraud. Fraud is described as the deliberate and material misrepresentation of one or more material facts with the intent to defraud a victim of their property (Hopwood, Leiner & Young 2012:32). Snyman (2008:531) defines misrepresentation as the illegal and deliberate creation of a false statement that causes real or possible prejudice to another. Moreover, fraud is an ethical phenomenon that continues to be one of South Africa's problems, undermining the battle against corruption by causing money intended for infrastructure and growth to end up in the pockets of corrupt officials (The South African Prevention and Combating of Corruption Activities Act, No. 12 of 2004).

Fraud is a type of crime in which money is stolen through criminal deception, false representation, deceptive artifice, or trick to help the thief. It is easy to be wise after the fact, and deception is always hidden in the details (Comer, 2003:4).

(S v Deetlefs: 1953) shows that individual X can be found guilty of fraud if he pays Y with a cheque and X does not have sufficient funds in his or her bank account to honour the cheque on presentation. He indirectly represents to Y that he trusts or is confident that the cheque will be honoured when it is submitted for payment.

Fraud is among the ancient crimes known to humanity (Van Rooyen, 2008:63). He uses the examples of Adam and Eve, in which Eve deceives Adam with the apple, and Jacob, who defrauds his half-brother Esau of his birth right by deception. The researcher concurs with the definition of all the above writes and further points out that the deceiving part or that act of committing the crime fraud can also come in a form of omission. When it comes to fraud, Pasco (2009:26) emphasises that it entails deception and false statements, as well as an omission or deliberate failure to state material facts (ACFE, 2010; Duffield & Grabosky, 2001; Levi, 2008; Kiragu, Wanjau, Gekara, & Kanali, 2013). Manurung and Hadian cite Merriam Webster's Dictionary of Law (1996) as a source (2013, p. 4), affording to the definition of fraud as any gesture, speech, omission, or concealment intended to deceive another to his or her detriment, specifically, a misrepresentation or concealment in regard to some fact material to a transaction that is made with knowledge of its falsity. And/or in wilful disregard for its reality or falsity, with the intent to mislead another, and that is fairly relied on by the other who is harmed as a result.

Fraud is described as the use of deception methods or any device that results in a person or group receiving an unfair advantage over others by making incorrect suggestion or not telling the truth, which includes all surprises, tricks, cunning, or dissembling (Albrecht, Albrecht, Albrecht & Zimbelman, 2011; Fraud Act, 2006; Wells, 2011).

The Association of Certified Fraud Examiners (ACFE) broadly defines fraud as the intentional misuse or misapplication of the employing institution's resources or assets for the purpose of personal enrichment (ACFE, 2011).

While in the UK The Auditing Standards Board's Statement of Auditing Standards (SAS) 110 (para.4) notes that "...fraud" includes both the use of deception to gain an unfair or illegal financial advantage and deliberate misrepresentations affecting financial statements by one or more persons among management, staff, or third parties.

Fraud can take the form of:

- Falsification or distortion of accounting and perhaps other files or documents;
- Wealth misappropriation or theft;
- The omission or absence of transaction effects from records or documents;
- Transactions without any substance are recorded;
- Misattribution of accounting practices on purpose; and
- Deliberate deception of transactions or the state of affairs of an entity.

Affording the description above, fraud is an intentional act committed against others that allows the perpetrator to generate false financial details. As a consequence, as the determinant, the users will suffer a loss in the end (Button et al., 2012). Another delineation of fraud is that of the anatomy of fraud and developed by Albrecht. (2011:7). The following are the elements of this anatomy:

- There is a fraud or misappropriation;
- A strange occurrence is discovered;
- The alleged perpetrator(s) has already been identified;
- Collection of evidence;
- The situation has been brought to the attention of the public;
- There is sufficient evidence to justify a prosecution; and
- The offender or perpetrators was found guilty of a crime.

Definite discrimination, on the other hand, is not a prerequisite. It is sufficient (R v Heyne:1956) that a misrepresentation can trigger the victim prejudice (i.e. that the potential for prejudice exists).

The participants were asked to define fraud and most of them settle with the following:

Sample A

- Three participants submit that fraud is an unlawful act that is conducted intentionally to rob another person's belongings by means of misrepresentation of false information.

- Three participants mentioned that fraud is a theft of money by means of misrepresentation dishonesty.
- Two participants mentioned that the intentional use of false or misleading information in an effort to defraud another individual or agency of money is known as fraud.
- Two participants mentioned that fraud is a distortion of the truth or fraudulent manipulation intended to accomplish personal gain.

Sample B

- Two participants reported that fraud is an unlawful and intentional act of misrepresentation which causes prejudice to another.
- One participant posits that fraud is an unlawful expression or omission that is misrepresented intentionally to deceive another person.

Sample C

- Two participants mentioned that fraud is the use of false or misleading information to unlawfully rob another individual or company of money on a global scale.
- One participant mentioned that fraud is financially gained after unlawful and intentional misrepresenting a false document.
- Two participants mentioned that fraud is a theft of money by means of misrepresentation dishonesty.

From the above discussion, the researcher will now discuss Snyman's elaboration of the elements of fraud or the conditions of fraud (2008). Fraud is described by Snyman (2008:531) as the illegal and intentional falsification that causes actual prejudice or is potentially prejudicial to another.

Lawmanns (2010:63) accentuates that fraud comprises the deliberate concealment of a truth by one who has knowledge or conviction of the fact and a promise made with no intention of following through. According to Birzer and Roberson (2012:200), fraud is a broad term that encompasses all the various methods that human imagination can concoct in order for one individual to gain an advantage over another by false representation. Hopwood, et al (2012:11)

describe fraud as a method by which one individual gains an advantage over another by making false statements or suppressing the facts. An unfortunate definition is given by Pasco (2013:26), that fraud is categorised as a deliberate misrepresentation of material existing reality made by one person to another with knowledge of its falsity for the purpose of inducing the other person to act, on which the other person relies, resulting in injury or damage to the other person. Fraud may be orchestrated by a variety of individuals or organisations. Fraud is a broad concept that encompasses lying, deception and stealing, as well as the actions of people who claim to be something they are not (Orthmann & Hess, 2013:441; South African Police Service, Basic Fraud Course, 2000:06). The first criterion for fraud is that there must be a misrepresentation, or as it is often called, a perversion or distortion of the facts (Snyman, 2008:531). Misrepresentation is characterised as the intentional or unintentional distortion of the facts, which can be done orally, in writing, directly or implicitly (Snyman, 2008:531). A person must portray another person with a fact or collection of facts that does not exist in reality. Misrepresentation, according to Snyman (2008:531), is a perversion or distortion of the facts. Misrepresentation most often takes the form of spoken or written sentences, but it may also take the form of nodding one's head. The other aspects of the offense must be affected by the misrepresentation. This is what they are:

- It has to be a distortion.
- The host must either know it is false or be unconcerned about it.
- It had to be planned or calculated to get the victim to do something.
- The person to whom it is addressed, or someone else, must be subjected to real or possible discrimination as a result of it.

From the above discussion, the researcher submits an example: person D has a bogus credit card in his pocket, but he never shows it to anyone. As a result, the misrepresentation is incomplete, and D is not guilty of fraud.

The participants were requested to name elements of fraud. The concept of fraud was well-understood by all informants. This is actually the most important part for the researcher's idea that all of the participants are eligible to participate in the research study and are skilled. Furthermore, the researcher will go on from the

above discussion and now discuss the forms of this element of fraud a discrepancy.

A misrepresentation can be made in a variety of ways, including in writing, verbally, through a combination of words and actions (commission), through silence (omission), or by expressing a false belief (SAPS, Advance Training Manual, Commercial Crime, 2002:126).

This is perhaps the most common form of misrepresentation, and it normally entails telling a lie in order to persuade someone else that it is true (SAPS, Basic Fraud Course, 2000:10; Budhram: 2007). A stallion is offered by a stud horse breeder to a buyer, for example. He is conscious that the stallion is not pedigree, but he convinces the buyer otherwise. The court decided in (*S v Shaban*: 1965) that when minutes are taken at a director's conference, the absence of some terms in those minutes constitutes a misrepresentation.

A misrepresentation may be made solely based on behaviour. A representation does not have to be rendered in express words; it can be made by actions (SAPS Advance Training Manual, Commercial Crime, 2002:91; Budhram, 2007).

The accused persuaded the claimant to send him a check (as a loan) by representing to him that he would repay him out of his income at the end of the month in the case of (*R v Larkins*: 1934). Prior to that, the accused had given up the entirety of his salary to someone else. The court decided that a representation does not have to be rendered in words, but rather in actions. His actions included silently pretending to the plaintiff that he had complete ownership of his salary when in reality he had already relinquished such ownership.

A misrepresentation can sometimes be made by omission, which is when one party fails to disclose a material fact to the other that, if not disclosed, could lead the other party to act in his or another's best interests (SAPS, Detective Training Manual, 2004:5; Budhram: 2007).

The conditions of an omission, as per the SAPS Advance Training Manual, Commercial Crime (2002:108; Budhram: 2007), include an obligation to report the specific fact.

- A deliberate breach of this obligation in such circumstances that the nondisclosure is equated with a portrayal of the fact's nonexistence; and
- An attempt to defraud, which, according to Gup (1990:85; Budhram: 2007), entails the following:
- Deliberately refusing to disclose in order to manipulate and compel the representee to behave to its prejudice or possible prejudice; good understanding of the specific fact;
- Level of knowledge and understanding of the nature of the obligation to disclose;

At (Ex parte Lebowa :1989). In that case, Stegmann J said of *dolus eventualis* fraud, the essence of *dolus eventualis* fraud appears to be the deception practiced by the representor in claiming that which he knows might not be real. He deliberately exposes the representee to a danger while deceptively keeping the representee unaware of the risk. Therefore, any case of fraud by *dolus eventualis*, I believe, could be investigated further to reveal another fraud lurking underneath and following the first.

According to Snyman (2002:145), an act's or omission's illegality is dictated by society's interpretation of what is morally right or wrong at any given moment. It must be shown that the accused was mistaken and, to establish his motive, that he was aware of his mistake. It must also be established that there were no justifications in place at the time the act was committed.

Permitting the SAPS Basic Fraud Course (2000:13), the offender must have the motive to both deceive, that is, to induce someone to believe anything is true when it is not, and to defraud, that is, to induce another to behave to his prejudice based on the misrepresentation. X, for example, shows a credit card with security features that have been changed. X deliberately and knowingly deceives the individual receiving the card into believing that the card is legitimate and valid for the transaction.

Purpose to defraud has two main components: the intent to cheat and the intention to persuade others to change or refrain from changing their legal status. The motive to defraud can be expressed either directly or indirectly by *dolus eventualis* (See JRL Milton South African Criminal Law and Procedure Vol II 3rd

Ed at 730). For example, when following state versus Oscar Pistorius case Boshkop CAS 110/02/2013, when the defence argues that Oscar had no intention of killing Reeva until the state ballistic expert testified to prove Oscar's intention, then he was eventually found guilty of murder.

Prejudice may be either real or possible. The probability of prejudice need not be probable, direct, or fairly certain; all that is needed is a fair likelihood of prejudice (Snyman, 2002:507). The purpose to deceive was proven in (S v Brown: 2015), para 118. It was designed to sway people's opinions. Objectively, there was a chance that any damage was done. It does not have to be financial or proprietary, and it does not have to be addressed to the person to whom it was addressed (see R v Heyne & others: 1956). For instance, X is a businessperson who poses as a company director. He advises B to purchase stock in his business. The stock certificates have been fabricated. B is completely unaware that X is deceiving him, and he pays a large amount of money for the forged stock certificates. X committed fraud. Even if a misrepresentation can harm another person, it is still fraud. As a result, there is no need for real discrimination (Snyman, 2002:507). A and B were the founders of a bottle store in (R versus Heyne: 1956). They failed to keep proper sales records and made some false entries in the books as well. They were found guilty of fraud because of their actions; they made false statements to the police, which could have harmed the state.

The prejudice, or possible prejudice, does not have to be personal. When A was ordered to submit a forged driver's license in court in (State v. JASS: 1965), he did so. The question is whether his misrepresentation has caused anyone any real or potential proprietary damage. The court decided that the discrimination did not have to be personal.

2.14 TYPES OF FRAUD

The researcher observed during literature review that there are different types of fraud that can be listed as follows:

- Benefit fraud;
- Management fraud;
- Vendor fraud;
- Customer fraud;

- Miscellaneous/Specific fraud;
- Occupational fraud;
- Insurance fraud; and
- Credit card fraud.

A skilled con artist may persuade others to commit or conceal fraud (Rudewicz, 2011). An individual with a strong persuasive personality can be able to persuade others to participate in a scam or simply turn a blind eye. Because of the contents of this thesis, not all crime will be addressed, but those that are will all be directly or indirectly linked to credit card fraud.

2.14.1 Benefit fraud

Benefit fraud is characterised as the act of falsely claiming or obtaining money from the government as a benefit from public funds on the grounds that it is legitimate, but with the intent of lying about such facts (Jones, 2011). In the case of the Public Protector's report on Nkandla, the Constitutional Court ruled that President Jacob Zuma must repay the money.

2.14.2 Management fraud

This form of fraud is typically committed against an organisation, or on behalf of the organisation, by upper-level executives to achieve a particular goal or vision (Jones, 2011). Delphi Financial Services' most common concept is: Management fraud, also known as fraudulent financial reporting, which is the intentional deception perpetrated by management to defraud investors and creditors by presenting materially false financial statements.

(see <http://www.delphisfinancial.com/glossary.php?letr=M>)

Insider trading, kickbacks, backdating of executive stock options, abuse of corporate property for personal gain, and individual tax violations are all examples of fraudulent transactions and accounting entries, fake trades, and self-dealing by corporate insiders, which involves insider trading, kickbacks, backdating of executive stock options, misuse of corporate property for personal gain, and individual tax violations (Wells, 2011). Credit card fraud and various forms of credit card fraud will be addressed next, including counterfeit card fraud,

missing and stolen card fraud, account takeover, cardholder not present, skimming, and white plastic.

2.15 CREDIT CARD FRAUD

Credit card use for online transactions has increased significantly because of the rise and rapid growth of e-Commerce, resulting in a sudden epidemic of credit card fraud. In the credit card industry, fraud is one of the most serious ethical problems. Fraudulent use of credit cards has been on the rise. Credit card fraud can be divided into two types: internal card fraud and external card fraud. E-commerce levels have continued to rise in recent years. Inner card fraud is a collusion between merchants and cardholders that uses false transactions to defraud banks of money. External card fraud, on the other hand, involves the use of a fraudulent or fake credit card to make purchases, such as purchasing costly, small-volume goods or goods that can be easily converted to cash.

Today's criminals are nearly as technologically advanced as the card industry, and criminals find ways to circumvent high-tech fraud prevention mechanisms almost as quickly as the card industry does (Rapp, 1991:18). Fraud has developed into a highly organised industry on a global scale. Fraud is a form of criminal fraud used to gain financial gain. With the advancement of information technology, fraud has spread across the world, resulting in massive financial losses. With the increased use of credit cards, fraudsters are seeking more ways to engage in fraudulent activities, resulting in significant financial losses for both banks and cardholders.

2.15.1 Fraud with stolen / lost credit card

When a person loses his card or a card is stolen, or when a legitimate account holder receives a card and loses it or someone steals the card for fraudulent purposes, then this type of fraud occurs. This is the simplest method for fraudsters to obtain cardholder details without having to invest in new technology. It is the most difficult form of conventional credit card fraud to combat. The majority of this type of fraud occurs in stores before the cardholder has announced the loss (Rapp, 1991:12). The difficulty in combating this form of fraud, according to Budhram (2007:31), is that neither the card nor the cardholder must be present at the point of sale. This means that retailers are unable to verify

the card's physical security features to ascertain whether it is genuine; it is difficult to confirm the customer is the genuine card holder without a signature or a pin; and card issuers are unable to guarantee that the information issued in a card do not present environment relates to the genuine card holder.

In the case of (*S v SALCEDO*: 2003), the accused committed credit card fraud by picking up a credit card that had dropped out of the account holder's pocket in a mall and going on a shopping spree on the same day. On nine counts of fraud, the defendant was found guilty and sentenced to six months in prison on each count.

Transactions involving credit cards can be divided into two categories: 1) Transaction with a physical card; 2) Transaction with a remote/clicker card. In a physical card-based transaction, the cardholder(s) physically shows his card to the dealer to make a payment. An intruder must steal the credit card in this form of transaction to conduct fraudulent operation(s). On the other hand, only a few pieces of card information (Card Number, Expiration Date, Secure Code, and Credit Card Verification (CCV)) are needed to complete the transaction. Fraudsters need to know the card number, the time, and the fact that the legitimate cardholder is unaware that his or her card information has been seen or stolen to commit fraud in these types of transactions. To detect this form of fraud, examine the users' or customers' spending profiles on each card and look for any discrepancies with their normal spending patterns (see (*International Journal of Computer Science and Network (IJCSN)* Volume 1, Issue 4, August 2012)).

The identification of credit card fraud often has two peculiar characteristics (s). Obviously, the extremely short time frame in which the credit card(s) approval or rejection decision must be made second, the massive volume of credit card transactions that must be processed in a short period of time.

2.15.2 Fraud with fake and counterfeit card

A counterfeit card is described as a genuine credit card manufactured by a licensed printer but with one or more features modified by mechanical or electronic means (*Visa International Law Enforcement Education Program* 2000:125). This is another form of credit card fraud in which the manufacture of

counterfeit cards, as well as missing or stolen cards, pose the greatest danger. Fraudsters are still coming up with fresh and inventive ways to make fake cards. Some of the techniques used to create fake and counterfeit cards are mentioned next (Tej Paul Bhatla, 2003).

2.15.3 Erasing the magnetic strip

This is a form of fraud in which the fraudsters use a powerful electro-magnet to remove the magnetic stripe. The fraudster then alters the card's information to make them match those of a genuine card that they might have obtained. When the fraudster starts using the card, the cashier will swipe it through the terminal several times before realising that the metallic strip is not working. After that, the cashier can manually enter the card information into the terminal.

The accused in *State versus Martin Ivanoff and Others*, 1999 (1) SA, had made a card reader available to a waitress for the purpose of capturing credit card details. When accepting cards as a form of payment from customers, the waitress would swipe the card through the unit, which would capture and store the data, which she kept in a moon bag attached to her waist.

2.15.4 Creating a fake card

We now have sophisticated machines that can produce a counterfeit card from scratch. This is the most popular form of fraud, but making fake cards takes more time and effort. Many security features on modern cards are designed to make it difficult for fraudsters to conduct high-quality fraudulent activities. The use of holograms in credit cards has made it extremely difficult to counterfeit them (Tej Paul Bhatla, 2003).

Credit card protection features are normally changed using a variety of methods, including (Visa International Law Enforcement Education Programme, 2000:32):

- **Shave and Paste:** This is a method that entails carefully removing the embossed account number from the plastic using a sharp razor blade. After rearranging the numbers to fit a valid account number, the card can be used to make transactions.
- **Punching:** This method entails the criminal punching each number from the plastic card with a paper hole puncher. The card can then be

imprinted on a sales draft by carefully positioning the holes in the plastic to fit a good account number.

- Re-embossing: This procedure entails superimposing a valid account number on a missing or stolen passport. The good account number can then be embossed over the flattened number and displayed for payment after the card has been flattened.

2.16 SUMMARY

In this chapter, the research question was unpacked, awareness raised and better understanding provided on the importance of offender profiling in credit cards fraud, the rationale of responding to the following headings was used: criminal investigation, criminal investigation priorities, forensic investigation, and discrepancies between a criminal and a forensic investigation. Profiling was used as an investigation tool, as well as recognition and individualisation. When creating an offender profile, data and material from a variety of sources would need to be combined. It should be remembered that profiling a fraudster's offender includes profiling an offender who has already been detected. The profiling method entails gathering information from a variety of sources to determine how and why a particular offender committed a crime of fraud. The main goal is to collect factual facts with the aim of presenting it in a court of law. According to evidence gathered from the literature, investigators must have certain attributes, and their characteristics and qualities may have an effect on crime detection. Such information in an offender profile is important because it aids in the interrogation process and gives the offender the idea that the prosecutor knows more about him than he really does.

CHAPTER THREE: FINDINGS AND RECOMMENDATIONS

3.1 INTRODUCTION

The study's results are presented in this chapter. In this qualitative investigation, the researcher interviewed 18 participants who are employed by the SAPS as detectives in order to understand their role in the profiling of fraud offenders. The researcher summarised the study's results and made suggestions for SAPS detectives who use offender profiling as an investigative technique in the investigation of credit card fraud.

3.2 FINDINGS

The results of this study will be summarised in the form of themes found during the study. The researcher collected findings based on the literature and participant responses to questions posed to them during one-on-one interviews.

3.2.1 FINDINGS REGARDING RESEARCH QUESTION: WHAT IS THE VALUE OF OFFENDER PROFILING IN THE INVESTIGATION OF CREDIT CARD FRAUD?

3.2.1.1 Criminal investigation

- The views of all participants corroborate literature despite being phrased differently. Another issue on which the literature and the respondents agree is that criminal investigation deals with analysing collected evidence to solving a crime.

3.2.1.2 Objectives of criminal investigation

The aim of an investigation, according to all participants, is to create evidence that proves or disproves the charges, identify suspects, and assist in the prosecution. The crime scene, the arrest of a suspect, and the recovery of stolen goods, on the other hand, tend to be hidden among the participants.

3.2.1.3 The purpose of criminal investigation

- All participants agree that the object of an investigation is to reconstruct the scene, identify the perpetrator, and bring the suspect to justice, as stated in the literature. Finding a positive solution and successful conviction seem to be distant from the minds of the participants.

3.2.1.4 Offender

- The views of all participants resonate with literature. Participants submit that an offender is someone who commits an illegal act, or a person who is linked to a crime.

3.2.1.5 Profiling

- All participants corroborate the literature when they said that profiling is collecting information of the person who is believed to have committed a crime, e.g. race, gender, workplace, residential area etc.

3.2.1.6 Offender profiling

- All participants understood and agreed with literature but phrased their responses differently. Participants' viewpoint is individual traits, appearance, age, and common trends are shown in an offender profile, which is a tool to help the investigation.

3.2.1.7 Identification

- All participants shared a viewpoint that agrees with literature when they said identification is a system of comparing a particular piece of object and place it to its originality or identity, for example, fingerprint comparison.

3.2.1.8 The application of offender profiling in suspect Identification

- Since samples A, B, and C all had the same number of participants, they believed that DNA profiling and psychological profiling would assist in the suspect's identification.

3.2.1.9 Individualisation

- The feedback obtained from participants was not pleasing. Only few participants presented an adequate answer. For these participants, individualisation is the process by which an individual becomes distinct. This lack of knowledge is a concern to the researcher; maybe it emanates from the absence of a formal training programme.

3.2.1.10 The application of offender profiling in suspect individualisation

- All participants in samples A, B, and C agree to use two forms of profiling, namely; DNA and psychological profiling, as an investigative method to help the perpetrator be identified.

3.2.1.11 The value of offender profiling in credit card fraud

- This question was replied affirmatively by all the participants. They were unanimous in their belief that offender profiling is an important investigative tool, even though it is not commonly used by investigators of SAPS.

3.2.1.12 Fraud and the elements of fraud

- All participants concur that fraud is unlawful act that is perpetrated intentionally to rob other person belongings by misrepresentation of false information.
- All participants settle with the following elements of fraud:
 - unlawful;
 - intentional act;
 - misrepresentation; and
 - which causes prejudice to another.

3.3 RECOMMENDATIONS

One of the goals of this research was to suggest that the results of this report, as well as new knowledge obtained from international experience, be used to improve good practice in the use of offender profiling in credit card fraud investigations. The recommendations were based on a combination of the literature reviewed in this study and the knowledge gathered from the participants during the interviews.

The researcher suggests the following recommendations:

- The SAPS to establish a unit dedicated to credit card fraud investigation
- The SAPS to conduct a workshop for the station level detectives and lecture thorough on Offender Profiling, identification techniques and individualisation.
- A regular theoretical and practical training to investigators to help increase the awareness of this important investigative tool.
- Further research is recommended on offender profiling of credit card fraud.

3.4 CONCLUSION

In this chapter, the researcher achieves increased understanding, as well as a better observer, of the research question What is the importance of offender profiling in credit card fraud?. To do so, the rationale was to answer to the following headings: criminal investigation, criminal investigation priorities, forensic investigation, and investigation intent. Fraud and its components were examined. Offender profiling as an investigative technique was discussed. Identification and individualisation were discussed.

REFERENCES

- Ainsworth, P.B. 2001. *Offender profiling and crime analysis*. Portland, Or. Willan Publishing
- Alvi M.H (2016): *A Manual for Selecting Sampling Techniques in Research*: University of Karachi, Iqra
- Ary, D., Jacobs, L.C., Sorensen, C. & Walker, D. 2014. *Introduction to research in education*. Belmont, CA: Wadsworth.
- Babbie, E. & Benaquisto, L. 2010. *Fundamentals of Social Research*. 2nd edition. Toronto: Nelson Education.
- Babbie, E. 2010. *The Practice of Social Research*. 12th edition. Wadsworth: Cengage Learning
- Badore, F. (2018). *Evaluation of modus operandi as a perpetrator identification technique in the investigation of Rape Cases*. MTech dissertation, University of South Africa, Pretoria.
- Bak, N. 2004. *Completing your thesis: A practical guide*. Pretoria: Van Schaik.
- Bartol, C. R. & Bartol, A. M. (2012). *Introduction to Forensic Psychology: Research and Application*. USA: SAGE
- Becker, R.F. & Dutelle, A.W. 2013. *Criminal Investigation*. 4th Edition. United States: Jones & Bartlett Learning.
- Bekerian, D.A. & Levey, A.B. (2005). *Applied psychology: putting theory into practice*. New York: Oxford University Press
- Bennett, W.W. & Hess, K.M. 2007. *Criminal Investigation*. 8th Edition. Belmont: Thomson Wadsworth.

- Benson, B.C., Horne, J.S. & Jones, G. 2015. Forensic Investigation of Crime, Irregularities and Transgressions. In Zinn, R.J. & Dintwe, S.I. 2015. *Forensic Investigation: Legislative Principles and Investigative Practice*. Cape Town: Juta.
- Bertino, A.J. 2012. *Forensic science: Fundamentals and Investigations*. USA: Cengage Learning.
- Birzer, M.L. & Roberson, C. 2012. *Introduction to criminal investigation*. Boca Raton, Fla: CRC.
- Bless, C., Higson-Smith, G. & Sithole, S.L. 2015. *Fundamentals of Social Research Methods: An African Perspective*. 5th edition. Claremont: Juta.
- Boba, R. 2005. *Crime analysis and Crime Mapping*. SAGE.
- Bouma, G.D. & Ling, R. 2010. *The research process*. Victoria: Oxford.
- Brandl, S.G. 2014. *Criminal Investigation*. Wisconsin-Milwaukee: SAGE.
- Bryman, A. (2012). *Social research methods*. 4th ed. Oxford: Oxford University Press.
- Budhram, T. (2007). *Examining the unique security features of a credit card with the aim of identifying possible fraudulent use*. MTech dissertation, University of South Africa, Pretoria.
- Chisum, W.J. & Turvey, B.E. 2011. *Crime Reconstruction*. 2nd edition. Elsevier: London
- Connaway, L.S. & Powell, R.R. 2012. *Basic research methods for librarians*. (5th edition). California: Greenwood Publishing Group.
- Creswell, JW. (2014). *Research design: qualitative, quantitative and mixed methods approaches*. Thousand Oaks: Sage
- Crowder, S. 2010. Law enforcement investigations: Essential considerations. In Petherick, W.A., Turvey, B.E. & Ferguson, C.E. 2010. *Forensic Criminology*. USA: Elsevier Academic Press.

- Dantzker, M.L. & Hunter, R.D. (2012). *Research methods for Criminology and Criminal Justice*. (3rd edn.). Sudbury, MA: Jones & Bartlett.
- De Vos, A.S., Strydom, H., Fouche, C.B. & Delport, C.S.L. (2011). *Research at grass roots: For social science and human service professions*. 4th edition. Pretoria: Van Schaik.
- Denscombe, M. (2002). *Ground Rules for Social Research: Guidelines for Good Practice*. 2nd edition. New York: Open University Press.
- Denscombe, M. (2010). *Ground Rules for Social Research: Guidelines for Good Practice*. 2nd edition. New York: Open University Press.
- Denscombe, M. 2012. *Research proposals: A practical guide*. Berkshire, England: McGraw-Hill.
- Detective Learning Programme. 2004. *Introduction to Crime Intelligence flow and Interpol learner's guide*. Pretoria: SAPS Training Division.
- DNA Project 2010 DNA *Laws are passed everywhere but here!*
- DNA Project 2010 DNA Laws are passed everywhere but here!
<http://webcache.googleusercontent.com/search?q=cache:eCofP21KyfUJ:dnaproject.co.za/blog/dna-laws-are-being-passed-everywhere-butthere+DNA+bill+second+phase+consideration+by+parliament+2011&cd=1&hl=en&ct=clnk&gl=za&source=www.google.co.za>. Accessed on 01/03/2020.
- Douglas, J. E., Ressler, R. K., Burgess, A. W. & Hartman, C. R. (1986). « Criminal Profiling from Crime Scene Analysis ». *Behavioral Sciences and The Law* (vol. 4, issue 4), pp. 401-421.
- Du Plooy-Cilliers, F., Davis, C. & Bezuidenhout, R. (2014). *Research Matters*. Cape Town: Juta.
- Eaton, T. & Korach, S. 2015. A Criminological Profile of White-Collar Crime. *The Journal of Applied Business Research*. Volume 32.

- Flick, U. (2011). *Introducing Research Methodology. A Beginner's Guide to Doing a Research Project*. London: Sage.
- Gardner, R.M. 2005. *Practical Crime Scene Processing and Investigation*. 2nd edition. Boca Raton: CRC Press
- Gillespie, R.T. (2016). *The best practices applied by forensic investigators in conducting lifestyle audits on white collar crime suspects*. MTech dissertation, University of South Africa, Pretoria.
- Gray, D.E. (2014). *Doing research in the real world*. 3rd edition. London: Sage.
- Greene, J.R. 2007. *The Encyclopaedia of Police Science*. 3rd edition. New York: Routledge.
- Henning, E., Van Rensburg, W. & Smit, B. 2011. *Finding your way in Qualitative Research*. Pretoria: Van Schaik.
- Hofstee, E. (2006). *Constructing a good dissertation*. Sandton: EPE.
- Hopwood, W.S., Leiner, J.J. & Young, G.R. 2012. *Forensic accounting and fraud examination*. 2nd edition. New York: McGraw-Hill.
- Howitt, D. (2015, January 23). *Introduction to Forensic and Criminal Psychology*. Essex: Pearson.
- James, S.H., Nordby, J.J. & Bell, S. 2014. *Forensic science: an introduction to scientific and investigative techniques*. 3rd edition. Boca Raton: CRC Press.
- Labuschagne, G. 2015. *Criminal investigative analysis: An Applied Perspective*. Cape Town: Juta.
- Leedy, P.D. & Ormrod, J.E. (2005). *Practical research: Design and planning*. 10th Edition. Upper Saddle River: New Jersey.
- Leedy, P.D. & Ormrod, J.E. (2010). *Practical Research: Planning and Design*. 9th edition. New Jersey: Pearson: Education International.
- Leedy, P.D. & Ormrod, J.E. 2015. *Practical Research: Planning and Design*. 11th edition. England: Pearson Prentice Hall.

- Leedy, PD & Ormrod, JE. (2013). *Practical research: planning and design*. New Jersey: Pearson. Education International.
- Lochner, H.T. & Zinn, R.J. 2015. *Crime Scene Investigation*. Cape Town: Juta.
- Lochner, H.T. 2014. *Taking Effective Witness Statements*. Cape Town: Juta.
- Lochner, H.T. 2016. The use of modus operandi information from incarcerated cash-in-transit robbers in the Investigation of cash-in-transit robberies. D.Lit(t) Et Phil. Thesis, University of South Africa, Pretoria
- Lyle, D.P.M.D. 2012. *Forensic Science* .USA: Bar Association.
- Maree, K. & Pietersen, J. 2014. Sampling. In Maree, K., Creswell, J.W., Ebersohn, L., Eloff, I., Ferreira, R., Ivankova, N.V., Jansen, J.D., Nieuwenhuis, J., Pietersen, J., Plano Clark, V.L. & Van der Westhuizen, C. 2014. *First Steps in Research*. Pretoria: Van Schaik.
- Maree, K. (Ed.). (2012). *First steps in research*. Pretoria: Van Schaik.
- Maxwell, J.A. (2005). *Qualitative research design. An interactive approach*. (2nd ed.). Thousand Oaks, CA: Sage.
- Mostert, D. (2018). *Profiling of white-collar crime perpetrators in the short-term insurance industry in south africa*. MTech dissertation, University of South Africa, Pretoria.
- Ogle, R.R. 2012. *Crime Scene Investigation and Reconstruction*. New Jersey: Pearson Education.
- Padgett, S. 2015. *Profiling the fraudster. Removing the mask to prevent and detect fraud*. New Jersey: John Wiley & Sons Inc.
- Palmiotto, M.J. 2013. *Criminal Investigation*. 4th edition. USA: CRC Press.
- Pena, M.S. 2000. *Practical Criminal Investigation*. 5th edition. USA: Delmar Cengage Learning.
- Rosnow, R.L. & Rosental, R. (2013). *Beginning Behavioral Research*. Boca, Rotan: Pearson.

- Rundell, M. 2002. *English Dictionary for advanced learners: International student edition*. Oxford: Macmillan Education.
- Schloss, P.J. & Smith, M.A. 1999. *Conducting research*. Upper Saddle River, NJ: Prentice Hall.
- Silverman, D. 2013. *Doing qualitative research*. (4th edition). Los Angeles: Sage.
- Singleton, R.A. & Straits, B.C. (2010). *Approach to Social Research*. 3rd edition. New York: Oxford University Press.
- Snyman, C.R. (2008). *Criminal law*. 5th edition. Durban: LexisNexis.
- South Africa. 1977. *Criminal Procedure Act 51 of 1977*. Pretoria: Government Printer
- South Africa. 1996. *Constitution of the Republic of South Africa 108 of 1996*. Pretoria: Government Printer
- Strydom, H. 2005. Sampling and sampling methods. In De Vos, A.S., Strydom, H., Fouché, C.B. & Delport, C.S.L. 2005. *Research at Grass Roots for the Social Sciences and Human Service Professions*. 3rd edition. Pretoria: Van Schaik.
- Swart, J. (2015). *Criminal Profiling: Predict and Screen the Characteristics of Unsubs*. Detroit, MI, USA: Lilit Publishing
- Tej Paul Bhata.,2003-at.All-“Understanding Credit Card Fraud” Card business review.
- Turvey, B.E. 2008. *Criminal Profiling. An introduction to behavioral evidence analysis. 3rd Edition*. London: Elsevier Inc.
- University of South Africa. 2016. *Policy on research ethics*.
- Van der Westhuizen, J. 1996. *Forensic Criminalistics*. Johannesburg: Heinemann.
- Van Graan, J. & Budhram, T. 2015. Principles of Evidence. In Zinn, R.J. & Dintwe, S.I. (eds). 2015. *Forensic Investigation: Legislative Principles and Investigative Practice*. Cape Town: Juta.

- Wagner, C., Kawulich, B. & Garner, M. (2012). *Doing Social Research*. A Global Context. London: Sage.
- Welman, C. Kruger, F. & Mitchell, B. (2011). *Research methodology*. Cape Town: Oxford University Press SA.
- Welman, J.C. & Kruger, S.J. 1999. *Research methodology for the business and administrative sciences*. Johannesburg: International Thompson Publishing.
- Welman, J.C., Kruger, S.J. & Mitchell, B. 2005. *Research Methodology*. Cape Town: Oxford University Press.
- Welman, C. Kruger, F. & Mitchell, B. (2012). *Research methodology*. 3rd edition. Cape Town: Oxford University Press SA.
- Williams, A. 2015. *Forensic Criminology*. New York: Routledge.
- Zinn, R.J. & Dintwe, S.I. (eds). (2015). *Forensic investigation: Legislative Principles and Investigative Practice*. Cape Town: Juta.
- Zinn, R.J. 2007. Incarcerated perpetrators of house robbery as a source of crime intelligence. From: <http://bibinf.unisa.ac.za/infoweb/sbj-db-grp-placementslist.htm> (accessed 2 March 2020).

Case Law.

S v Nkwanyana [2016] (AR108/16) ZAKZPHC 82

S v Deetlefs 1953 (1) SA 418 (A)

(R v Heyne 1956 (3) SA 604 (A) 622)

S v Shaban 1965 4 SA (W)

(R v Larkins 1934 AD 91

101E-I, Ex parte Lebowa Development Corporation Ltd 1989 (3) SA 71 (T)

S v Pistorius (CC113/2013) [2014] ZAGPPHC 793,

S v Brown 2015 (1) SACR 211; [2014] ZASCA 217 (SCA)

S v JASS (1965 3 SA 248 OK)

S v SALCEDO 2003 (1) SACR 324 SCA

S v Martin Ivanoff and Others, 1999 (1) SA

Zuma v Office of the Public Protector (1447/2018) [2020] ZASCA 138

ANNEXURE A: INTERVIEWS SCHEDULE

PARTICIPANT NUMBER 001

TOPIC: THE VALUE OF OFFENDER PROFILING IN CREDIT CARD FRAUD

AIM: Evaluation of offender profiling as a technique in the investigation of credit card fraud

RESEARCH QUESTIONS:

- What is the value of offender profiling in the investigation of credit card fraud?

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

Privacy will be maintained throughout the study, the researcher will ensure that participants are treated equally regardless of their socio-economic status. The information given will be treated with confidentiality and no other person will have access to interview data. The participants to the research will remain anonymous. The information you provide will be used only in a research project for a Master of Technology degree registered with the Programme Group: Police Practice at the University of South Africa. The analysed and processed data will be published in a research report.

Your answers will be noted by the interviewer himself, on paper. Should any question be unclear, please ask the researcher for clarification. Only one answer per question is required. When answering the questions, it is very important to give your own opinion. Written permission has been obtained from the South African Police Service in advance, for the interview to be conducted.

PARTICIPANT

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

YES / NO

SECTION A: BACKGROUND INFORMATION

- Where are you working?
- How long have you been in a place of employment?
- What is your rank?
- Are you currently investigating fraud cases?
- For how many years have you been involved fraud related issues?
- What is your highest qualification?
- Did you undergo any training on profiling credit card fraud?

SECTION B: OFFENDER PROFILING IN CREDIT CARD FRAUD INVESTIGATION

1. How will you define criminal investigation?
2. What are the objectives of criminal investigation?
3. What is the purpose of investigation?
4. What is an offender?
5. And, what is profiling?
6. In your own words what is offender profiling?
7. What is the meaning of identification?
8. How can profiling be used to identify a suspect?
9. What is individualisation?
10. How can profiling be used to individualise a suspect?
11. Do you regard offender profiling as an important investigative tool?
12. What is fraud?
13. What are the elements of fraud?
14. What are the different types of fraud?
15. What is credit card fraud?
16. What is the value of offender profiling in credit card fraud?

ANNEXURE B: ETHICAL CLEARANCE



UNISA CLAW ETHICS REVIEW COMMITTEE

Date 20190527

Reference: ST54-1 of 2019

Applicant: D Shikwambane

Dear D Shikwambane

Decision: ETHICS APPROVAL

FROM 01 May 2019

TO 01 May 2022

Researcher: Des Shikwambane

Supervisor: Dr NJC Olivier

The Value of Offender Profiling in Credit Card Fraud

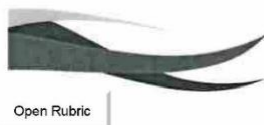
Qualification: M-Tech Forensic Investigation

Thank you for the application for research ethics clearance by the Unisa CLAW Ethics Review Committee for the above mentioned research. Ethics approval is granted for 3 years.

*The CLAW Ethics Review Committee reviewed the **Low risk application** on 27 May 2019 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment. The decision was ratified by the committee.*

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the CLAW Committee.



University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.
7. No research activities may continue after the expiry date 1 May 2022. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number ST54-1 of 2019 should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Yours sincerely,



PROF T BUDHRAM
Chair of CLAW ERC
E-mail: budhrt@unisa.ac.za
Tel: (012) 433-9462



PROF M BASDEO
Executive Dean : CLAW
E-mail: MBasdeo@unisa.ac.za
Tel: (012) 429-8603

ANNEXURE C: PERMISSION LETTER

South African Police Service



Suid-Afrikaanse Polisie

Privaatsak
Private Bag X94

Pretoria
0001

Faks No.
Fax No.

(012) 393 2128

Your reference/U verwysing:

My reference/My verwysing: 3/34/2

THE HEAD: RESEARCH
SOUTH AFRICAN POLICE SERVICE
PRETORIA
0001

Enquiries/Navrae:

Lt Col Joubert
AC Thenga
(012) 393 3118
JoubertG@saps.gov.za

Tel:

Email:

Mr D Shikwambane
UNIVERSITY OF SOUTH AFRICA

**RE: PERMISSION TO CONDUCT RESEARCH IN SAPS: THE VALUE OF OFFENDER
PROFILING IN CREDIT CARD FRAUD: UNIVERSITY OF SOUTH AFRICA: MASTERS
DEGREE: RESEARCHER: D SHIKWAMBANE**

The above subject matter refers.

You are hereby granted approval for your research study on the above mentioned topic in terms of National Instruction 1 of 2006.

Further arrangements regarding the research study may be made with the following office:

The Provincial Commissioner: Gauteng:

- **Contact Person:** Col Peters
- **Contact Details:** (011) 547 9131
- **Email Address :** petersNS@saps.gov.za
- **Contact Person:** Capt VJ Nevumbani
- **Contact Details:** (011) 547 9131
- **Email Address :** NevumbaniV@saps.gov.za

Kindly adhere to paragraph 6 of our attached letter signed on the **2019-09-10** with the same above reference number.

MAJOR GENERAL

**THE HEAD: RESEARCH
DR PR VUMA**

DATE: 2019-10-21

ANNEXURE D: TURNITIN RECEIPT



Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author: Des Shikwambane
Assignment title: Revision 1
Submission title: dissertation
File name: Shikwambane_16_turn_May_2021.docx
File size: 106.81K
Page count: 56
Word count: 16,308
Character count: 90,697
Submission date: 17-May-2021 06:36AM (UTC+0200)
Submission ID: 1587648970

CHAPTER ONE: BACKGROUND AND OVERVIEW OF THE STUDY

1.1 INTRODUCTION

The practice of profiling offenders throughout investigations is totally not a new procedure. It has been in existence in the South African Police Service (SAPS) for many years. The researcher's understanding is that the term 'profiling' was not familiar within SAPS organisation. The facts obtained from criminals was limited evidential information, and this material was accessible to investigators as a tool to help them in carrying out investigation duties. The study examined the value of offender profiling in credit card fraud within the SAPS.

In this section, the researcher gave a brief introduction, the problem account was clearly specified, and the research aim and objectives were presented, the researcher presented a clear research question. The value of this research is pronounced.

1.2 PROBLEM STATEMENT

Fraud has been in existence among humanity since time immemorial and can take a limitless variation of different practices. In addition, the expansion of new technology affects supplementary conducts in which delinquents may commit fraud. For example, in e-commerce the details of a particular card increase chances of the offender to commit fraud. Fraud entails intentionally making an unlawful misrepresentation (Strydom 2008:531). Conway and Powell (2012:4) assert that the problem has to be detailed as exactly as imaginable to avoid any inconsistency among the researchers' compasses and what they mean. "The biggest dilemma is that fraudsters are found guilty during court proceedings and sent back to the public for the rehearsal of the identical crime yet again".

The researcher visited the Alexandra court at least twice a month for a period of 12 months (1 Jan 2017 till 31 December 2017) and witnessed credit card fraudsters being acquitted and sent back to the community. However, it is uncertain what causes the unsuccessful conviction. The researcher argues that

1

Copyright 2021 Turnitin. All rights reserved.

[Open Rubric](#)