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An Exploratory Examination of Profiling Techniques in Criminal Cases

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This is to certify that the doctoral dissertation by

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Walden University
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Abstract

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Dissertation Submitted in Partial Fulfillment

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Abstract

Profiling is a vital process in criminal investigations that facilitates not only the proper identification of offenders in the fight against crime but also the quick apprehension of said individuals. Finding viable techniques to investigate criminal activity has been a significant focus of research on crime and related fields. The objective of this qualitative study was to examine the primary techniques involved in geographic profiling, crime scene profiling, suspect-based profiling, psychological profiling, and psychological autopsies in order to assist academics and professionals in the profiling field as well as law enforcement and criminal justice officials in identifying and apprehending offenders of violent crime. The theoretical foundation employed was social learning theory developed by Albert Bandura. A purposeful sample of 10 participants with diverse profiling and law enforcement background were interviewed. Interview transcripts were analyzed following Braun and Clark's six-step coding procedure. Seven themes emerged from this analysis: (a) the importance of establishing protocols and rigorous methodology, (b) understanding determinants of criminality, (c) quantifying criminality to build models, (d) profiling requires a multidisciplinary approach, (e) rigorous crime scene analysis is necessary, (f) profiling plays a central role in threat mitigation, (g) and deep reading of case files is necessary. These seven themes revealed patterns in the techniques utilized by profilers, which can be a future benefit to both law enforcement and criminal justice professionals in creating a legally defensible and operational profile.

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Dedication

First and foremost, this work is dedicated to all law enforcement and investigators with whom I have worked and continue to work in order to locate and successfully prosecute offenders. I hope that the information in this study provides them with more refined techniques to locate and apprehend dangerous individuals.

Secondly, I dedicate this work to my family and friends. You have been my inspiration and drive behind so much that I do and I love you all.

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Chapter 1: Introduction to the Study

Introduction

Profiling is a vital process in criminal investigations that facilitates the proper identification of offenders in the fight against crime. The importance of profiling has been evident in recent years following suspicious activities in the late 1900s and early 2000s, when most profilers demonstrated unprofessionalism. The majority lacked professional training in the field and relied on their current or past experiences as law enforcers to investigate and apprehend criminal suspects. At other times, they were individuals with academic backgrounds in psychiatry, psychology, criminal justice, or criminology. Some had degrees from correspondence schools that claimed to be exceptional training facilities for profiling. This disparity and inconsistency in training and experience continues today within the profiling field (Petherick & Brooks, 2021), thus indicating a need for understanding how profilers with diverse backgrounds develop their techniques.

Media reports often indicate events where profilers engage in investigations and successfully solve problems. However, such sensationalized successes seem to legitimize the unprofessional profilers' activities that are popularized in media discourse and entertainment. This coverage exposes the erratic nature of the unprofessional methods used in these cases, although sometimes achieving success by chance and are indicative of a lack of authoritative best practices in profiling (Greiwe et al., 2022). Some reports, however, cover profiling efforts that have been unsuccessful. A notable example of such negative coverage is the Beltway Sniper case from 2002, in which sporadic shootings in

Washington, DC, Virginia, and Maryland caused the deaths of 10 people and significant injuries in three other individuals over three weeks. Responding to the case, profilers suggested to the police that the sniper was probably a White, United States resident residing close to the crime scenes, performing the acts in a white truck and likely acting alone. However, investigations revealed the perpetrators as two African Americans, one aged 41 years and the other 17 years, who were using a blue sedan car at the time of their arrest. Both were unemployed and did not live in the areas of the crimes (Horsley, 2014). The DC police pointed out that the information the profilers provided was misleading. It was a matter of coincidence that police discovered a shooting hole in the perpetrators' blue sedan which led to an arrest, not the insights from profilers. The Beltway Sniper case was eventually solved and the perpetrators of the shootings were confirmed to be the two suspects, which cast doubt on the profilers' accuracy in giving reliable information to help in solving the crime.

Background

The earliest public acknowledgment of profiling as a legitimate field in the US was during the mid-1900s following an investigation of a case involving a bomber in New York. A discussion of the Mad Bomber case is critical due to the historical significance of both the benefits and costs of profiling. Between 1940 and 1956, George Metesky (the "Mad Bomber") planted over thirty bombs in different places around New York, evading police ambushes in the process. With unclear intentions, he attached notes at some crime scenes that helped investigators discover the bombs before they detonated. Some of the discovered bombs later detonated with few injuries to people, while others

did not. Metesky's activities brought uncertainty about the safety of people around New York, causing many to live in fear and anxiety which causes the emergency community to be on high alert.

In 1956, frustrated investigators contacted psychiatrist Dr. James A. Brussel to assist in the development of a predictive analysis of Metesky's possible actions and motives to help arrest him. Using a psychiatrist to try to arrest a criminal was unprecedented but arose out of necessity because other methods of finding and arresting the suspect were unsuccessful. Law enforcement provided Brussel with a range of information and materials related to the suspect, hoping they would help him analyze the suspect's movement and characteristics. At Brussel's insistence, law enforcement published the following profile in the New York Times:

> Single man, between 40 and 50 years old, introvert. Unsocial but not anti-social. Skilled mechanic. Cunning. Neat with tools. Egotistical of mechanical skill. Contemptuous of other people. Resentful of criticism of his work but probably conceals resentment. Moral. Honest. [Not] interested in women. High school graduate. Expert in civil or military ordnance. Religious. Might flare up violent at work when criticized. Possible motive: discharge or reprimand. Feels superior to critics. Resentment keeps growing. Present or former Consolidated Edison worker. Probably case of progressive paranoia. (Meagher, 1956, p. 31)

From the letters and notes left by the perpetrator, Brussel outlined additional traits and behaviors exhibited by the bomber. The suspect was arrested within a year of the publication following his admission as the person whom the police were looking for

(Greenburg, 2011). His dress after the arrest, a double-breasted suit, and statements made by the defendant revealed his sense of pride. This confirmed that the profile published in the newspapers served its purpose in lifting the suspect's sense of pride that caused him to admit to planting the bombs.

Metesky's case is the first documented instance of profiling in law enforcement making it historically significant in the domain of criminology. Experts recognized Brussel as the first profiling expert in the United States, although his methods were criticized by others as being theoretically unfounded. Police departments across the country began to utilize these same techniques in solving criminal cases. The Boston Police Department used Brussel's methods to solve the "Boston Strangler" case, which involved crimes that occurred between mid-1962 and early 1964 (Bulman, 2014). Notably, Brussel was also directly involved in developing the profile of the Boston Strangler. Unlike the Mad Bomber case, Albert DeSalvo, arrested as the suspected strangler, did not confess to the strangling and rape accusations, but was found guilty of various sexual offenses unrelated to those attributed to the Boston Strangler.

Broadly defined, profiling encompasses techniques that analysts use to identify the conduct, mental condition, and personality of known and unknown criminal suspects. The characteristics examined could include behavioral, cognitive, emotional, and demographic characteristics. Although the term "profiling" includes a wide range of investigatory techniques, methods, and assessments, there are five distinct, but interrelated sub-specializations: psychological autopsies, psychological approaches to profiling, suspect-based profiling, crime scene profiling, and geographical profiling

(Ribeiro & Soeiro, 2021). Geographic profiling involves identifying the suspect's area of probable residence or the likely area of criminal operation. The analysis focuses on examining the crime scene and establishing spatial relationships between the crime sites and the potential behaviors of the suspect (Rossmo, 2000). Crime scene profiling entails identifying demographic variables, motivational factors, cognitive tendencies, and patterns exhibited by the offender based on evidence from the crime scene (Bartol & Bartol, 2013). The investigators may utilize the information to predict future behavior or possible reactions of the suspect to some triggers that may aid in apprehending him/her.

Suspect-based profiling, otherwise referred to as "prospective profiling," enables law enforcement to deduce the regular activities that offenders may undertake. These activities may include drug trafficking or terrorist activities (Cole & Lynch, 2006). Likewise, psychological profiling focuses on projecting the suspect's mental condition and potential future risky activities based on threat and risk assessment (Kocsis et al., 2002). Both of these types of profiling are predictive in nature meaning that they rely on the deduction of offender traits for the purposes of determining characteristic and future behavior.

Lastly, psychological autopsies, also known as “reconstructive psychological evaluations” or “equivocal death analysis”, are types of profiling performed on dead suspects. According to Johal et al., (2024), psychological autopsies are defined as retrospective interviews between profilers aimed at exploring and better understanding the factors that led to a possible suicide or unexplained death. This technique is used in profiling to determine the suspect's manner of death (whether uncertain or equivocal) and

can be used to reconstruct the suspect's emotional life, behavioral patterns, and cognitive features (Saxena & Saini, 2019). Specific behavioral trails that are frequently screened for in psychological autopsies are impulsiveness and aggression, which aid in determining whether a suspect's death was caused by suicide or natural causes (Gurguis et al., 2025). Research on the original theories of the psychological autopsy and its applications in various contexts to solve crimes has not been sufficient, necessitating more research in the field. There are several types of profiling developed in later years which will not be examined. This study seeks to contribute to the field by facilitating an examination of profiling techniques in criminal cases.

Problem Statement

Finding viable techniques to investigate crime has been a significant focus of researchers on crime and related issues. Specifically, the need to apply profiling techniques in tracking criminals to identify and apprehend them has increased in recent years as serial and violent offenders continue to manifest. In this regard, accurate profiling is a major tool for law enforcement and other criminal investigators today. Based on statistics, diverse types of investigators have increasingly sought to apply profiling methods in tracking, identifying, and apprehending offenders in the last 50 years (Petherick & Brooks, 2020). However, the accuracy of profiling significantly affects law enforcement efforts because of its inadmissibility in both scientific research and court proceedings. Pundits question the reliability of various profiling methods, pointing out various drawbacks associated with them (Petherick & Brooks, 2020). They argue that most of these methods rely on intuitive or emotional applications that may not directly

relate a suspect to specific crimes to meet the 'beyond reasonable doubt' threshold for typical legal admissibility (Ribeiro & Soeiro, 2021). Given these factors, a need exists to examine current profiling techniques to establish value to criminal investigation and research applications.

Understanding the underlying principles that guide profiling is crucial for its practice and application in studies and tracking criminals. Significantly, profiling finds more application in cases involving serial crimes that investigators need to stop (Ribeiro & Soeiro, 2021). Exploring and examining its various concepts, applications, and categorizations would benefit the entire practice of profiling, including providing valuable information to aid in its development. More importantly, achieving a reliable and accurate profiling approach from substantive research on the subject would aid in addressing serial and other types of crimes and applying the legal process in the solution. Legal admissibility is vital to any approach that links criminal evidence to specific occurrences of crime as it facilitates the application of the law to the process of fighting crime (Petherick & Brooks, 2020). Therefore, this study sought to fill a vital gap in crime investigation and prevention caused by unreliable and inadmissible profiling methods.

Considering and examining the various categories, concepts, and applications of theory in behavioral profiling enables the researcher to identify current methods and identify any existing shortfalls in them for later improvement. Essentially, there is a need to understand and apply the most appropriate tools in apprehending criminals, especially serial offenders who cause substantive harm to people (Petherick & Brooks, 2020). This study will fill a gap in the research by focusing on the unity and/or consistency of

profiling techniques utilized in criminal cases. This study is vital to researchers and law enforcement because it will not only assist them in understanding individual-level factors of violent serial offenders but also enable them to comprehend how different profiling techniques are applicable collectively for better results. In this case, factors such as geographical movements, deliberations, and motivation of the offenders provide significant insight into their behavior.

Purpose of the Study

The purpose of this study was to examine the practice of profiling techniques in criminal cases. Reliable and legally admissible profiling methods are vital to the fight against crime, especially serial offenses (Petherick & Brooks, 2020). This study sought to aid in improving the practice of profiling by identifying current shortfalls and devising ways of improving them, focusing on distinguishing between malpractices that have created uncertainty in the admissibility of current methods to legal procedures while also affirming the potential of profiling as a vital tool in fighting crime.

Current profiling approaches incorporate a broad range of crime scene examinations, material analysis, and the application of various categorization models. Some of these approaches are not scientifically formulated, raising concerns about their accuracy and reliability (Petherick & Brooks, 2020). Significantly, profiling may include a wide range of investigative and analytical approaches that may involve psychological and other fields of study. These include approaches of interviewing suspects, placing publications of crime, prioritizing subjects for investigations and the use of resources, analyzing statements, and addressing witnesses and victims (Ribeiro & Soeiro, 2021).

The multiplicity of factors involved in profiling may complicate their joint application in the process, which may interfere with profiling legitimacy and authenticity as a criminal investigative process. Analysis of these areas from interviews of experts in each of these fields will provide an explanation of duties and techniques utilized in their respective examinations will allow for patterns and themes to emerge as to how these subfields can and will operate together in analyzing crime and the apprehension of serial criminal suspects.

Research Question

The purpose of this study was to examine the practice of profiling techniques in criminal cases. It was guided by the following research question:

Research Question: What are the primary techniques involved in geographic profiling, crime scene profiling, suspect-based profiling, psychological profiling, and psychological autopsies?

Expert interviews will be conducted and analyzed relating to their field of study, analyzing patterns, themes, consistencies, protocols, and techniques in the subfields of criminal profiling.

Theoretical Framework for the Study

The theoretical foundation of this study is social learning theory developed by Albert Bandura in 1977. The theory recognizes behavioral development as a product of an individual's observation of the behaviors of those around them (Pritchett & Moeller, 2022). It distinguishes the relationship between learning and environmental conditioning, including punishment and positive behavioral reinforcement.

In the crime and law enforcement context, the social learning concept emphasizes the role of psychological and sociological factors in influencing a criminal's behavior and engagement in crime. In particular, social learning theory combines concepts from sociological traditions and psychological behaviorism. The application of the theory to the modern domain of criminology was initiated by Ronald Akers, who examined learning mechanisms and related them to the nonconformity aspects of behavioral change (Akers & Jenson, 2006). Based on a recent definition, the social learning theory is:

> A general theory that offers an explanation of the acquisition, maintenance, and change in criminal and deviant behavior that embraces social, nonsocial, and cultural factors operating both to motivate and control criminal behavior and both to promote and undermine conformity. The basic proposition is that the same learning process in a context of social structure, interaction, and situation, produces both conforming and deviant behavior. (Akers & Jensen, 2003)

Akers describes the theory by relating it to four primary domains that include imitation, differential behavioral reinforcement, definitions, and differential association (Akers & Jenson, 2006). The concept of differential association includes interaction with others who engage in certain kinds of behavior or express norms, values, and beliefs supportive or contrary to such behavior (Akers & Jensen, 2006). The authors explain imitation as a distinguished form of behavioral change that employs different social mechanisms compared to the differential association. In particular, the theory is evident when individuals observe the behaviors of people through their interaction with them and adopt their characteristics. On the other hand, differential reinforcement emanates from a

person's perception of behaviors from other people and considers their potential positive and negative consequences before adopting them. In this case, behavioral acquisition becomes a gradual and active learning process. The authors identify the cultural concept as the major component of the social learning theory. They point out its reliance on behavioral acquisition based on the social components of beliefs, cultural norms, and values, as well as religious influences (Akers & Jensen, 2006). In this case, a person is bound to obtain criminal behavior if the social values encourage and acknowledge dishonest methods of income generation.

The use of Bandura's social learning theory, as well as Aker's version in this study, aligned the research methods with its purpose and objectives as represented in the study statement of purpose and research question. The study explores the principles employed in profiling and considers profiling techniques and the way they interact in criminal applications. Therefore, the social learning theory is a significant application that reveals the interplay between the various parties involved in each context of criminal activity.

Nature of the Study

The nature of this study will be qualitative, with a generic approach (Gerring, 2017). Qualitative research entails collecting and analyzing non-structured data for a holistic examination (Patton, 2015). It seeks a more in-depth understanding of the attitudes, perspectives, and opinions of its participants rather than just numerical information (Nassaji, 2020). This study and research approach was consistent with understanding and applying the concepts of profiling and analyzing techniques associated

with each discipline, which is the focus of this dissertation. Utilizing a case study approach, the results of the survey and interviews will provide information to analyze profiling components. (Gerring, 2017).

Properly interpreting and evaluating these findings is important for those using this and other research in this area for possible social change and future policy and program formations (Barr et al., 2021). The intended results of this study will be translations of this research into practice, such as prevention methods, investigative methods and techniques, and enhanced investigation and prosecution techniques (Barr et al., 2021). Data for the study will include a pre-interview survey of experts and professionals within the field, followed by select interviews with experts in the profiling field.

A qualitative study into offender profiling will be conducted, utilizing the case study method and survey methods identified and discussed by Gerring (2017). Both Gerring (2017) and Yin (2016) discuss several analysis strategies. One analysis strategy is to follow the theory, which is the basis of your case studies. Beginning the analysis with social learning theory and its use in explaining offender behavior, this theory shaped my data collection plan, which will ultimately guide not only the case study analysis but the entire analysis. Numerous analytic techniques were available to those researching using the case study method, but using a pattern-matching technique is applicable in this research prospectus.

Definitions

The following list of definitions are terms that are used throughout this study. Further definitions will be included in Chapter 3 to clarify these and other terms about this study.

Crime scene profiling is identifying cognitive tendencies, behavioral patterns, motivation, emotional dispositions, and demographic variables of an *unknown offender* based on characteristics and evidence gathered at the crime scene (Hegarty, 2015).

Geographic profiling is a method of identifying the area of probable residence or the probable area of the next crime of an unknown offender based on the location of and the spatial relationships among various crime sites (Rossmo, 2000).

Psychological profiling is often used to identify and predict dangerous individuals in society – though it may also be used to identify positive traits. In most cases, the person's identity being assessed and predicted is already known. Two highly similar procedures for accomplishing the former task are threat assessment and risk assessment (Bartol & Bartol, 2013).

Suspect-based profiling – some researchers prefer the term "prospective profiling" – refers to identifying the psychological or behavioral features of persons who may commit a particular crime, such as drug trafficking, school shooting, stalking, shoplifting, bombing, skyjacking, or terrorist activities. Suspect-based profiling is derived from systematically collecting behavioral, personality, cognitive, and demographic data on previous offenders (Martineau et al., 2023).

Equivocal death analysis, also called reconstructive psychological evaluation, is the reconstruction of a deceased person's emotional life, behavioral patterns, and cognitive features. In this sense, it is a postmortem psychological analysis and is frequently referred to simply as a psychological autopsy (La Fon, 2008).

An expert is an individual whose performance is consistently superior to that of its peers, produces concrete results and whose expertise can be replicated and measured in the lab (Ericsson et al., 2007). An expert is an individual with a high level of knowledge or skill relating to a particular subject or activity (Cambridge Dictionary, 2023).

The definition list does not include recently developed profiling categories.

Assumptions

The researcher assumes that the sample field is an accurate representation of the entire field of profiling professionals in the US context. Relying on professionals to provide information to be used in the analytical process significantly enhances the study outcomes. Interviews with professionals required appropriate questions, allowing for specific evidence and criteria and open-ended evidence and criteria.

Scope and Delimitations

This study was concentrated on the examination of the techniques of crime scene profiling, geographic profiling, psychological profiling, suspect-based profiling, and equivocal death analysis (psychological autopsy) profiling. Interviews were conducted on those individuals identified as experts in each of their respective fields related to profiling. Additional data was collected from peer-reviewed articles and other scholarly documents contained in online databases. The study encompassed the entire practice of

profiling, including examining its historical development, current applications, and shortcomings.

Limitations

Qualitative methodologies intend to understand the meaning of actions in a selected context. However, this methodology comes with its limitations in the collection of data. Although case studies can provide detailed information about individuals, it can be challenging to create a case study that represents the entire study field accurately, addressing all concerns of the study, and is transferable to diverse contexts. Structured interviews can reach a large sample and are easy to replicate but appear very rigid, with little to no flexibility in the response choices (Creswell & Creswell, 2018). Lastly, in-depth interviews can be adjusted to get detailed and insightful information but can be time-consuming and relatively costly.

Significance

Significance to Theory

Research on profiling has been a significant focus by crime experts and other interested groups, including policymakers, in recent years. The breadth of research has been broad, encompassing varied topics, including psychological autopsies, psychological approaches to profiling, suspect-based, crime scene, and geographical profiling (Ribeiro & Soeiro, 2021). However, research that focuses on the principles of profiling and its reliability has been limited. Research in this area may add to the available body of knowledge and provide information to aid the practice and its growth. This study was an exploration of profiling techniques and their significance in criminal

cases. It facilitates the continuity of the subject and its adoption to future contexts in the fight against crime.

Significance to Practice

This study was an examination of profiling techniques in criminal cases and an offender's behavior and motivations. This information will assist investigators' attempts to apply profiling effectively in their law enforcement practice. Additionally, current profiling methods have various critical shortcomings that limit their use in the legal process (Ribeiro & Soeiro, 2021; Binti Mustaffa et al., 2022). In this regard, the approaches are not effective in the fight against crime. This study sought to aid policymakers in developing approaches that are admissible in court proceedings and adoptable to the various professions involved in profiling. Therefore, it plays a crucial role in advancing the profiling practice and aligning it with emerging demands in addressing crime.

Significance to Positive Social Change

Positive social change is diverse and includes various phenomena described in numerous ways. It is defined variably as "the process of transforming patterns of thought, behavior, social relationships, institutions, and social structure to generate beneficial outcomes for individuals, communities, organizations, society, and/or the environment beyond the benefits for the instigators of such transformations" (Stephan et al., 2016, p. 6). Through this research, avenues exist to educate law enforcement in the techniques of profiling which can lead to quicker apprehension of serial offenders. Additionally, an

understanding of all varieties of profiling can assist law enforcement specifically related to the crime being investigated.

Summary

This chapter involved a discussion of vital subjects related to the proposed research to provide background information. It laid the basis for conducting the study, including describing relevant concepts, methods, and approaches involved in the research. It also outlined the purpose of the study, problem statement, research concerns, nature of the study, the research questions, the conceptual framework used, its scope and limitations. The second chapter will further explore these areas through a thorough review of the literature on relevant principles of the research, including social learning theory, profiling generally, as well as a discussion of what is an expert, crime scene profiling, geographic profiling, suspect-based profiling, psychological profiling, and psychological autopsies.

Chapter 2: Literature Review

Introduction

The study of crime as a social problem has been a major focus by researchers in recent years as they strive to develop credible tools and approaches to mitigating it. Primary approaches have been identifying tools that can aid law enforcement in investigating, apprehending, and subjecting criminals to the legal process. In this regard, the focus has been on understanding and applying criminal and behavioral profiling in tracking and apprehending criminal suspects, especially repeat offenders, to present them to the legal process for justice. Researchers have concentrated on identifying various profiling techniques and gauging their effectiveness in aiding the tracking and apprehension of criminal suspects (Binti Mustaffa et al., 2022). Despite the evidence of growth in profiling techniques in recent years, experts question their significance as tools for aiding legal procedures involving tracked criminals because of the admissibility of evidence collected through them in a court proceeding. It is worth noting that the effectiveness of profiling as an investigative tool relies on this application in legal processes, and the admissibility of related evidence is vital to the achievement of these goals.

In practice, behavioral and criminal profiling entails a range of methods and strategies for analyzing aspects of suspects' behaviors and conduct based on evidence provided from the scene of the crime to help in their tracking and apprehension. Typical approaches to profiling measure an individual's demographic and emotional characteristics, cognitive functions, and behavioral tendencies based on specific features

of the crime scene (Bartol & Bartol, 2013). Notably, profiling often involves a wide range of analytical methods and techniques that are distinctive in five primary segments, namely, psychological autopsy, suspect-based profiling, psychological profiling, geographic profiling, and crime-scene profiling. Geographic profiling involves identifying the suspect's area of probable residence or the likely area of criminal operation. The analysis focuses on examining the crime scene and establishing spatial relationships between the crime sites and the potential behaviors of the suspect (Rossmo, 2000). On the other hand, crime scene profiling entails identifying demographic variables, motivational factors, cognitive tendencies, and patterns exhibited by the offender based on evidence from the crime scene (Hegarty, 2015). In this case, the investigators may utilize the information to predict future behavior or possible reactions of the suspect to some triggers that may aid in apprehending him/her.

Suspect-based profiling, otherwise referred to as "prospective profiling" enables law enforcement to deduce the regular activities that offenders may undertake, including drug trafficking or terrorist activities that may help in apprehending them (Martineau et al., 2023). Likewise, psychological profiling focuses on projecting the mental condition of the suspect and potential future risky activities based on threat and risk assessment (Kocsis et al., 2002). Consequently, it may be possible to predict their future actions that may lead to their arrest.

Criminal profiling involves profiling the interests of the offender, such as "persistent sexual arousal to atypical objects or situations" to establish their behavior and potential actions (Mundy & Cioe, 2019). Lastly, psychological autopsies, also known as

reconstructive psychological evaluations or equivocal death analysis are a type of profiling performed on dead suspects. In this case, the suspect's manner of death may be uncertain or equivocal, and the autopsy is conducted to reconstruct the suspect's emotional life, behavioral patterns, and cognitive features (La Fon, 2008). Considering the research on the original theories and their applications in various contexts to solve crimes has not been sufficient, necessitating more research in the field. This study seeks to contribute to this field of study by facilitating an examination of the various approaches of profiling, including underlying principles, categorizations, and protocols to establish their effectiveness.

Understanding the underlying principles that guide profiling is crucial for its practice and application in studies and tracking criminals. Significantly, profiling finds more application in cases involving serial crimes that investigators need to stop (Petherick & Brooks, 2020). In this regard, exploring and examining its various concepts, applications, and categorizations would benefit the entire practice of profiling, including providing valuable information to aid in its development. More importantly, achieving a reliable and accurate profiling approach from substantive research on the subject would aid in addressing serial and other types of crimes and applying the legal process in the solution (Binti Mustaffa et al., 2022). Legal admissibility is vital to any approach that links criminal evidence to specific occurrences of crime as it facilitates the application of the law to the process of fighting crime. (Petherick & Brooks, 2020) Therefore, this research seeks to fill a vital gap in crime investigation and prevention by examining profiling techniques in criminal cases. More importantly, the study will help various

interest groups, law enforcement and policymakers to comprehend the vital elements of profiling and identify the best approaches to utilizing them in their practice for better results (Petherick & Brooks, 2020). The purpose of this qualitative research study is to examine profiling techniques as it relates to offenders and criminal activity. The case study design allows for the development of a greater understanding of the specific techniques of profiling and its subtypes and how this relates to criminal cases and apprehension of offenders within the community.

To begin, this chapter will discuss the theoretical framework of the social learning theory, experts/expert testimony, psychological autopsy (equivocal death analysis), crime scene analysis/profiling, geographic profiling and mapping and suspect based profiling.

Literature Search Strategy

To gather the most recent data and research on criminal profiling and its subcategories, the Walden University Library, York College of Pennsylvania Library, Michigan State University Library, Google Scholar, and relevant online databases and websites were searched for peer-reviewed journal articles dating between 2018 and 2025, using the keywords *criminal profiling, victimology, crime, criminal activity, crime scene profiling, crime classification manual, geographic profiling, mapping, serial rape, serial murder, serial arson, psychological profiling, threat assessments, risk assessments, suspect-based profiling, equivocal death analysis, reconstructive psychological evaluation, psychological autopsy, suicide, criminology, behavioral profiling*. However, because limited research has been conducted in recent years on these topics, some pertinent articles and treaties were included from years before 2018.

As articles for the literature review were collected, I reviewed the reference sections in each article to determine if there were additional articles that may be of use to this literature review and research. Published books that contained relevant data and information were also encompassed including Douglas et al.'s (2011) *Crime Classification Manual, Criminal Profiling* (Turvey, 2022), *Criminal and Behavioral Profiling* (Bartol & Bartol, 2017), *Geographic Profiling* (Rossmo, 2000), *The Psychological Autopsy* (2017) and Canter and Young's (2009) *Investigative Psychology: Offender Profiling and the Analysis of Criminal Actions.*

Finally, since I approached this study from the social learning theory perspective, Google Scholar and Walden University Library were used to search the keywords *social learning theory, crime, criminal profiling, profiling, behavior analysis, and victimization*. I also used the Walden dissertation search tools to find dissertations that cover the keywords referenced above.

Theoretical Foundation

Albert Bandura's (1977) social learning theory is a comprehensive and seminal approach to understanding how humans learn from their environment, particularly through observation and imitation of others. This theory is rooted in the notion that human behavior is not solely determined by genetics or individual motivation, but rather shaped by a complex interplay of environmental, cognitive, and personal factors (Bandura, 1977).

One of the foundational principles of Bandura's theory is that human beings learn through observation, which he refers to as "vicarious learning" (Bandura, 1977). This

means that individuals can learn by observing the behavior of others, as well as the consequences of that behavior. Through this process, individuals can develop new skills, attitudes, and beliefs. Bandura also suggests that people are more likely to imitate behaviors that they perceive to be rewarded and less likely to imitate behaviors that result in punishment or negative consequences (Bandura, 1977).

Bandura's social learning theory also emphasizes the importance of cognitive processes in learning. According to this theory, individuals are not simply passive recipients of information, but instead actively process and interpret what they observe in their environment (Bandura, 1986). This includes their thoughts and perceptions, as well as their prior experiences and beliefs. Bandura refers to this cognitive processing as "self-regulation" which involves setting goals, evaluating one's performance, and adjusting as needed to achieve desired outcomes (Bandura, 1986).

Another key aspect of Bandura's social learning theory is the concept of modeling, which refers to how individuals can learn by observing and imitating the behavior of others (Bandura, 1977). Modeling can take many forms, including direct observation of others, as well as exposure to media, such as television or movies. Modeling can have both positive and negative effects on behavior, as individuals may imitate both desirable and undesirable behaviors (Bandura, 1977).

Bandura's social learning theory has numerous implications for understanding human behavior and fostering positive change. One of the most significant implications is that individuals are influenced by the behavior of others and that this influence can be used to promote positive social change (Bandura, 1977). For example, social norms can

be changed by modeling and rewarding desirable behaviors, such as recycling or community service. Another implication of Bandura's theory is that individuals have the power to shape their behavior through self-regulation (Bandura, 1977). By setting goals, monitoring their behavior, and adjusting as needed, individuals can take an active role in shaping their own lives. This can be particularly important in areas such as health and wellness, where individuals can use self-regulation to adopt healthier habits and behaviors.

As applied to this study, social learning theory has been called the dominant theory of crime and delinquency with some scholars equating it with differential association theory espoused by RL Akers. According to Bandura's vision of the social learning theory, individuals are more likely to imitate behaviors they perceive as being rewarded or reinforced. As Akers aptly points out, this can be particularly relevant in the context of criminal activity, as individuals may observe others who engage in criminal behavior and see that behavior as being rewarded or beneficial in some way (Burgess & Akers, 1966).[1] For criminal investigators and professionals, it is important to understand why individuals engage in criminal behavior before implementing the tools of criminal profiling.

Social learning theory also suggests that individuals are more likely to engage in criminal behavior if they are exposed to others who engage in such behavior and are not

[1] For example, a young person may observe an older sibling or friend who engages in drug dealing or other criminal activity, and see that person gaining material possessions, status, or respect. This can create an incentive to engage in similar behavior, as the individual perceives that there are benefits to be gained from doing so.

punished or held accountable for their actions. This can create a sense of impunity or a belief that one can engage in criminal behavior without facing consequences (Burgess & Akers, 1966). In some cases, individuals may also perceive that the criminal justice system is unjust or biased, which can further reinforce a sense that engaging in criminal behavior is acceptable or justifiable (Burgess & Akers, 1966).

In addition to these social factors, social learning theory also suggests that individuals may learn criminal behavior through exposure to certain environmental or situational factors (Burgess & Akers, 1966).[2] Social learning theory, theorized by Bandura and Akers, highlights the importance of understanding how individuals learn and acquire new behaviors, and how social and environmental factors can shape those behaviors. By addressing these underlying factors, it may be possible to prevent or reduce criminal activity and capture criminals quicker by utilizing the psychological tools involved in criminal profiling and by promoting positive social outcomes. This could involve interventions such as mentoring, education, job training, or community development, which aim to provide positive role models, reduce exposure to negative influences, and promote healthy and prosocial behaviors.

Over the years, social learning theory has been subjected to empirical inquiry with applications to forms of deviance, focusing on the theory's ability to explain variations in lawbreaking behavior (Kayes, 2017). This theory is not without criticisms, however.

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[2] For example, individuals who grow up in neighborhoods with high crime rates may be more likely to observe and be influenced by criminal behavior, as it is more prevalent in their environment. Similarly, individuals who experience poverty or other forms of social disadvantage may be more likely to engage in criminal behavior as a means of gaining resources or status.

Kayes (2017) noted that although social learning theory can explain many more complex social behaviors than models of learning, it cannot adequately account for how we develop a whole range of behaviors, including thoughts and feelings. Further criticisms identified by Kayes and others arise from social learning theorists' commitment to the environment as the chief influence on behavior. Therefore, it is limiting to describe behavior solely in terms of either nature or nurture and attempts to do this underestimate the complexity of human behavior. This research was not intended to discover the motivations of offenders and how this could impact criminal profiling techniques, but to expose the dynamics involved in assisting criminal investigators and criminal profilers through proper investigation and prosecution techniques.

Literature Review

Reconstructive Psychological Evaluation/Psychological Autopsy/Equivocal Death Analysis

General Discussion

An equivocal death analysis (EDA) or reconstructive psychological evaluation can be defined as a systematic and retrospective investigation of an individual's psychological state leading up to their death (Johal et al., 2024). According to La Fon (2008), an EDA is conducted to determine the mode and motivation of death, not the cause, and comes into play when the manner of death is unknown or undetermined. For example, Young (1992) gives an example of a skydiver falling to the ground from 5,000 feet, resulting in death from multiple injuries. During an autopsy, a forensic pathologist can quickly determine that the cause of death was due to massive trauma but cannot

establish whether it was an accident (parachute malfunction), suicide (intentionally jumped with rigged equipment), natural (heart attack mid-air), or even quite possible a homicide (someone else tampered with the equipment).

An EDA involves reconstructing the individual's mental health history, identifying potential risk factors, and understanding the underlying motivations or psychological factors that may have played a role in his/her death and is conceptually related to crime scene profiling (La Fon, 2008). The primary objective of equivocal death analysis is to shed light on the complex interplay of psychological, social, and environmental factors that contribute to fatal outcomes, improve our understanding of mental health issues, inform prevention strategies, and provide closure for grieving families (Lauterbach & Vrana, 2001).

According to Ogloff and Otto (1993), psychological autopsies are conducted for three primary purposes: research, clinical practice applications, and litigation. A discussion of suicide will follow, but researchers involved in suicide conduct may conduct an EDA to understand mental states and the circumstances surrounding the death. Information gained in this way can improve suicide prevention programs as well as therapeutic interventions (Ogloff & Otto, 1993). Clinical practice applications involve using knowledge gained from an EDA in therapeutic interventions with family and friends of the deceased (Lauterbach, et al., 2001).

EDAs are typically used as a forensic decision-making tool, particularly in civil cases where a question (frequently asked by insurance companies) remains whether the decedent's death was due to an accident, foul play, or suicide. Many life insurance

policies, for example, do not compensate a family if the death is determined to be suicide, and companies will, at times, have an EDA conducted to determine the cause of death. In other legal contexts, EDAs can be conducted to determine a decedent's testamentary capacity, to establish legal culpability on the part of another individual or company, whether the decedent was being harassed on the job, and cases involving worker's compensation decision (La Fon, 2008).

How a Psychological Autopsy (PA) is Performed

The concept of profiling is based on applying psychological principles to explain the behavioral and individual characteristics of an individual. In this regard, a psychological autopsy conducted as an approach to profiling entails obtaining the most accurate information about a suspect from close relationships, considering that it is performed in cases where the suspect is deceased (Petherick & Brooks, 2020). Descriptively, PA involves exploring the circumstances leading to and related to the death of a person by reconstructing his/her thoughts, actions, and feelings before death using information collected from a range of sources related to the person. The information includes interviews with close relationships, death and medical records, police, suicide notes, and forensic data (Saxena & Saini, 2017). The value of PA is most significant when the intentions of the deceased are unclear, requiring further analysis to determine. The investigator utilizes personality, psychological, and social theories to lop an integrated profile of the deceased state of mind, characteristics, and most probable actions leading to the death.

Operational Criteria. The role of a PA is to help in determining the possible intention and characteristics of the deceased and relating it to an occurrence of crime as a way of establishing their involvement in it (Petherick & Brooks, 2020). Significantly, the situation presents significant challenges because the primary individual with information is dead and the investigators must rely on information provided by those who know the suspect.

Classification. Specific protocols are relevant to the process of obtaining information from other parties and witnesses, outlined in a standardized 16-criteria model. These are determining the deceased's details including occupation status, marital status, sexual orientation, and age; details of the death, historical information including any suicidal tendencies; and family historical information related to the death, such as mental health or suicidal issues (Petherick & Brooks, 2020). They also include the deceased's personality characteristics and lifestyle, responses to stress and other emotional triggers, and disequilibrium periods; recent emotional experiences within the last year, such as tensions and pressures; and the intervention of behavioral factors such as drug abuse and alcoholism to his death.

Additionally, investigators determine the person's social relationships, life aspirations, and dreams, any significant lifestyle changes before the death, any changes in the victim's regular routines before the death, lethality rate, the reaction of those interviewed to the news about the death, suicidal tendency assessment, and any other special features or comments from the sources. These 16 primary methods facilitate the generation of a profile to reconstruct the events leading to the death.

Investigative Value of Suicide Notes. Suicide notes are significant in revealing the state of mind and intention of the victim. Often, the deceased leaves the note to trigger certain emotional responses from survivors who encounter it. In some cases, the victim may desire to bring closure to the cause of death by providing information explaining the reason for their decision to terminate their lives (Petherick & Brooks, 2020). In other cases, the victim leaves the suicide note to trigger positive or negative emotions among people. However, experts claim that suicide notes reveal the relationships of the victims rather than their intentions for terminating their lives (Canbolat, 2018). They regard them as acts of communication based on their perspective guided by grounded theory. Seven distinct themes are outlined in research on suicide notes namely acknowledgment of the end of a relationship, concern for others, relationship reconciliation, explanations, negative relationships, positive relationships, and instructions. Nevertheless, the application of evidence-based methods may lead investigators to determine factors leading to death based on the suicide note left by the deceased.

Evaluation. PA is a viable and reliable approach to investigating factors leading to suicide, but with significant drawbacks. Primarily, it relies on the accuracy of the information provided by individuals close to the deceased through interviews, which subjects it to factors such as investigative approach limitations and recall biases (Bhushan et al., 2023). In this regard, the success and quality of the information rely on the reliability of the informants and the use of approaches that enhance the accuracy of the collected information. Notably, recall biases are unintended and occur from various

factors, including repeated questioning of the informant, external influence by the questions asked by investigators, the passage of time, and the informant's memory. Therefore, minimizing the effect of these factors enhances the accuracy of the PA.

Standardization. A PA is a retrospective and validated approach to investigating a suicide but is indirect in that it relies on information from parties other than the victim. For this reason, researchers emphasize the proper utility of the information obtained from informants who had a close relationship with the deceased. Researchers apply various standardization methods to enhance the consistency of using a PA in various situations. The standardizations include specific categories of information collected for the PA, and methodological standards. The most prevalent information categorization standards include Shneidman's 16 criteria and a later modification of the criteria into a 26-category model by Young (Posa et al., 2023). These categorizations provide a standardized information collection method to enhance the consistency of PA. Additionally, methodological standardizations involved include the "psychological autopsy structured on individual cases (PASIC)," which seeks to personalize the PA to specific cases, and the "facial action coding system (FACS," which focuses on the approach of coding of information during analysis (Posa et al., 2023, p. 5). Other methodological standards exist that collectively seek to provide a uniform approach to investigating and deriving results for better reliability and consistency of PA.

Despite its potential benefits, the EDA approach also faces several limitations and challenges. One significant limitation is the reliance on retrospective data, which may be subject to recall bias or incomplete information. The accuracy and reliability of the

gathered data heavily depend on the memories and perceptions of the individuals involved, which can introduce subjective elements into the investigation (Snider et al., 2006). Additionally, the complexity of mental health issues and the numerous factors involved make it challenging to establish causal relationships between specific events or circumstances and the outcome. An additional challenge is the emotional toll that an PA can have on investigators and family members. Engaging in such investigations requires mental health professionals and other involved parties to manage their emotional well-being and seek appropriate support throughout the process (Snider et al., 2006).

Methods and Methodology

The process of conducting a PA requires a multidisciplinary approach, involving mental health professionals, forensic experts, law enforcement agencies, and individuals with expertise in suicidology or psychopathology. There remains no established or standardized process to be followed by those who conduct them. According to La Fon (2008), each PA is unique, and sources and available resources will be different in each case.

According to La Fon (2008), the United States Military is one of the major consumers of psychological autopsies and each branch is required to conduct an PA for every equivocal death on either base property or to military personnel. For this purpose, the following criteria were developed by the US Army to provide a standardized definition of suicide to assist those conducting an PA

(A) *Self-inflicted*. There is evidence that death was self-inflicted. Pathological (autopsy), toxicological, investigatory, and psychological evidence and statements

of the decedent or witnesses may be used for this determination. Department of the Army (2023)..

(B) *Intent.* There is evidence (explicit and/or implicit) that at the time of injury, the decedent intended to kill self or wished to die and that the decedent understood the probable consequences of his or her actions. The following are considered.

(1) Explicit verbal or nonverbal expressions of intent to kill self.

(2) Implicit or indirect evidence of intent to die such as the following:

(a) Preparations for death, inappropriate to or unexpected in the context of a decedent's life.

(b) Expressions of farewell desire to die, or acknowledgment of impending death.

(c) Expressions of hopelessness.

(d) Efforts to procure or learn about means of death or rehearse fatal behavior.

(e) Precautions to avoid rescue.

(f) Evidence that the decedent recognized high potential lethality of means of death.

(g) Previous suicide attempt.

(h) Previous suicide threat.

(i) Stressful events or significant losses (actual or threatened).

(j) Serious depression or mental disorder.

Information is gathered largely from third-party sources which can include medical records, autopsy reports, police reports, interviews with family members, friends, acquaintances, and co-workers, and examining personal diaries, emails, or social media activity. In addition, psychological/psychiatric, educational, military, and employment histories are scrutinized and it is important to consider the decedent's behavior over the previous 24, 48, and 72 hours before the suicide (Department of the Army, 2023). Mental

health professionals assess the deceased person's psychiatric history, including any prior diagnoses, treatments, medications, or hospitalizations, which can help identify if any preexisting mental health conditions contributed to the events leading up to the death.

Investigators should also examine social relationships, family dynamics, financial stressors, employment, and any other contextual factors deemed relevant. Following the gathering of information and examining all relevant and contextual factors, the investigator is expected to complete a comprehensive narrative that explores the potential psychological factors contributing to the death. The narrative should also render a professional determination as to the manner of death: natural, suicide, accident, homicide, or undetermined (La Fon, 2008). This analysis aids in identifying patterns, risk factors, and potential interventions for similar cases in the future.

Benefits and Ethical Considerations

A PA provides a structural framework for decision-making on the cause of death in circumstances where such a determination is difficult. In this regard, it presents an ethical option of determining the cause of death, which allows the bereaved to find a resolution about the death and accord the deceased appropriate respect and dignity (Puranik et al., 2015). It provides clarity to family members, medical practitioners involved, and other relevant parties, which facilitates any post-death plans, including burial and organ donation arrangements. Specifically, a PA may assist in establishing the legal time of death, which influences other related factors such as inheritance, eligibility for organ donation where such an arrangement existed before death, and wealth distribution based on the deceased will.

Given these factors, ethical considerations of a PA include obtaining informed consent from patients or their designated decision-makers as a way of upholding the deceased's autonomy. Additionally, there is a need to protect the privacy of the patient or deceased to ensure the confidentiality of their sensitive data (Ludwig et al., 2021). The medical practitioners involved in the PA should ensure they address any existing conflicts of interest that could affect the fairness and objectivity of the procedure. Factors such as the deceased religious and cultural values should be upheld by involving and seeking the guidance of family members in some processes (Ludwig et al., 2021). It is worth noting that the PA ought to be transparent and accountable, making it necessary to develop approaches to addressing disputes or conflicts that may arise in the process.

Crime Scene Profiling (Criminal Investigative Analysis)

Crime scene profiling is a valuable investigative tool employed by law enforcement agencies to analyze and interpret evidence left behind at crime scenes. According to Petherick and Brooks (2020), the practice involves drawing inferences about the characteristics and behaviors of unknown offenders based on the evidence collected. This process can include the identification of behavioral patterns/qualities identified at the scene, emotional tendencies, and/or cognitive dispositions which can provide investigators with valuable information (Petherick & Brooks, 2020). This type of profiling aims to provide investigators with insights that may help them narrow down potential suspects and ultimately lead to the resolution of the crime (Ressler et al., 1988).

The investigative process at a crime scene can yield both physical and psychological evidence to lead law enforcement to a suspect. Crime scene processing

involves experts in the fields of serology, ballistics, blood splatter analysis and fingerprint analysis to name a few and can be referred to as the "science" of the investigative process (Vecchi, 2009). The criminal investigative analysis process can be referred to as the "art" of the investigative process, relying on the skills of the investigator rather than scientific protocols and procedures (Vecchi, 2009).

Throughout the 1980s, studies were conducted on criminal activity, including homicide, sexual assault, kidnapping of a child and arson. Researchers found important information on distinguishing characteristics of these types of crimes and which subsequently formed profiling techniques utilized at the time by the Federal Bureau of Investigation (Hegarty, 2015). This information was then summarized in the Crime Classification Manual (CCM), first published in 1992 and reissued in 2006. An important component of the CCM pertains to the inclusion of crime scene characteristics for violent criminal activity. Along with characteristics which define the crime itself, a case study is also included which provides background information, victim characteristics, crime scene indicators and forensic findings (Bartol & Bartol, 2013).

An integral part of crime scene profiling involves the investigators looking for important clues within the crime scene itself, considering modus operandi; personation or a signature; and whether there was any evidence of staging, souvenir or trophy taking or psychological undoing (Petherick & Brooks, 2020). Modus Operandi (MO) refers to behaviors used by a perpetrator to not only ensure that the crime is completed, but also to protect his/her identity and provide a means of escape (Yu-Sheng et al., 2019). Personation or signature is defined as any behavior completed by a perpetrator that goes

beyond the crime characteristics (Hazelwood & Warren, 2003). Signature can be described as the "calling card" of the offender and becomes a unique combination of behaviors by the offender over the course of time and offenses (Hazelwood & Warren, 2003). Signature can assist law enforcement when they are attempting to link two or more crimes. For example, during a home invasion, a burglar may leave a threatening note or "violate" a personal item such as a diary.

Crime scene staging attempts to manipulate and intentionally alter the crime scene prior to law enforcement arriving on the scene (Su, 2022). There can be several reasons for a staging, one of which is to steer the investigators away from the most logical suspect or to protect the victim from unwanted attention and embarrassment (Turvey, 2011). Trophy and/or souvenir taking are typically encountered in violent crime scenes. A trophy is an item taken from the crime scene which represents the offender's triumph over the victim whereas a souvenir is an item taken by the offender to remind him/her of the victim and to remember the incident (Turvey, 2011).

Lastly, psychological undoing is a behavioral pattern wherein the perpetrator attempts to "undo" the crime scene (Turvey, 2011). For example, the perpetrator might pose a victim in a more natural state following the killing.

It is important for the police community to understand how a crime scene reflects behavioral characteristics of an offender and the Federal Bureau of Investigation was instrumental in developing the "organized nonsocial offender and the disorganized asocial offender, long with an accompanying crime scene dichotomy, the organized versus disorganized (O/D) crime scene" (Bartol & Bartol, 2013).

Table 1

Profile Characteristics of Organized vs. Disorganized offenders as classified by the FBI in 1985

Organized	Disorganized
Average to above-average intelligence	Below-average intelligence
Socially competent	Socially inadequate
Skilled work preferred	Unskilled work
High birth-order status	Low birth-order status
Father's work stable	Father's work unstable
Sexually competent	Sexually incompetent
Inconsistent childhood discipline	Harsh discipline as a child
Controlled mood during crime	Anxious mood during crime
Use of alcohol with crime	Minimal use of alcohol
Precipitating situational stress	Minimal situational stress
Living with partner	Living alone
Mobility (car in good condition)	Lives/works near crime scene
Follows crime in news media	Minimal interest in news media
May change job or leave town	Significant behavior change

Note. Federal Bureau of Investigation (1985), p. 19.

Table 2

Crime Scene Differences Between Organized and Disorganized Offenders as classified by the FBI

Organized	Disorganized
Planned offense	Spontaneous offense
Victim a targeted stranger	Victim/location known
Personalizes victim	Depersonalizes victim
Controlled conversation	Minimal conversation
Crime scene reflects control	Crime scene random and sloppy
Demands submissive victim	Sudden violence to victim
Restraints used	Minimal use of restraints
Body hidden	Body left in view
Weapon/evidence absent	Weapon/evidence often present
Transports victim or body	Body left at death scene

Note. Federal Bureau of Investigation (1985), p. 19.

Linkage analysis is a method used by profilers and the law enforcement community to identify crimes that may be more or less likely to have been committed by the same perpetrator based upon behavioral characteristics and crime scene characteristics (Bartol & Bartol, 2013). Ding et al. (2020) utilized a two-step probability model in their attempt to link serial theft cases in China. Because the number of theft cases in China is increasing and continues to increase, linkage data and research is

utilized in an attempt to link perpetrators to serial theft crime. Ding et al. (2020) utilized a set of characteristics such as means, location, tools, and the stolen goods to link criminal activity with an identified or unidentified subject (Ding et al., 2020). Case linkage is an important area of crime scene profiling and obtaining characteristics at the crime scene and of the offender behavioral characteristics is an important component for profilers and law enforcement alike.

Geographic Profiling and Mapping

Geographic profiling (Rossmo, 2000) or geographical profiling (Canter, 2003) is premised on the fact that serial criminals may display crime location choice patterns that investigators may use to deduce the location of their next crime. Alternatively, the investigators may identify location patterns that they could use to determine the current location of the suspect. The practice of geographical profiling is scientific and entails the use of various analytical methods to identify crime location patterns (Willmott et al., 2021). As a result, law enforcement personnel can focus their search on a specific region, preventing the wastage of resources in conducting searches where the suspect is unlikely to be located. The information gathered can be important because suspects tend to commit crime near places where they engage in everyday activities such as work or shopping (Curtis-Ham et al., 2022). Geographic profiling can also assist in predicting where an offender might have an activity node (Knabe-Nicol & Alison, 2011; Rossmo, 2000).

Geographic Mapping

History

Geographic mapping has been applied in portraying crime locations since the early 1900s. Initial studies sought to determine crime locations in American cities and they established that most of the crimes occurred in poor urban settings and places with social disorganization (Weisburd et al., 2009). The mapping helped investigators identify areas that have a high probability of criminal activities and need more effort in the fight against crime. Gradually, geographic mapping became a tool for predicting future crime patterns and developing appropriate policing strategies to mitigate them.

Influences of Environmental Criminology. Crime data reveals a significant correlation between crime occurrence and geographical locations. Primarily, crime has a higher possibility of occurring among people with low income compared to the population with high income. In this regard, the economic level of a society is a significant predictor of crime (Lisowska-Kierepka, 2022). Consequently, crime is observed to occur in populations with high unemployment rates and low educational levels. Therefore, geographical environments have a significant role in determining the occurrence of crime in an area.

Contemporary Crime Mapping. Contemporary crime mapping focuses on providing a graphical presentation of the physical locations of crimes in a specific region. It entails using modern equipment to conduct statistical analysis of crime data to confirm the contributing factors and explore ways of addressing the crime (Lisowska-Kierepka, 2022). One of the most significant approaches used today is spatial analysis which

employs a geographic information system to visualize crime patterns, including the movement of criminals (Lisowska-Kierepka, 2022). Additional analytical tools include fractals and scale invariance, which reveal the complexity of spatial information and predict future crime patterns.

Geographic Profiling

Routine Activity Theory. The routine activity theory relates the occurrence of crime to specific activities and routines of people. It is based on the concept that a crime requires three conditions to occur, namely a motivated offender, a suitable target, and the absence of a guardian. In this case, the offender may be motivated by the gains he or she would obtain from the criminal act and will utilize a situation that presents an opportunity to perform the crime without a person who can hinder it (Lisowska-Kierepka, 2022). For example, a valuable ornament in a house could be a motivation to a thief, and the presence of the ornament in an unattended house presents a suitable opportunity for the crime. Finally, the absence of a guard or guardians close to the house ensures that the criminal will perform the act and exit the house before he is apprehended by any person. The lack of a suitable guardian may also exist in a situation where the thief has an easy way of escaping from the scene of the crime (Kennao et al., 2019). In this regard, understanding changes in people's routines and lifestyles would enable law enforcement to determine situations that could create an opportunity for crime.

Rational Choice Theory. The rational choice theory emphasizes the evaluation of the potential benefits and costs of an action by individuals before engaging in the acts. The theory recognizes that human beings are rational in nature and apply logical

reasoning to make decisions on actions (Keren, 2019). In this regard, the theory posits that criminals examine the rationality of a matter, its offense specificity, and situational factors before deciding to perform a crime. Therefore, controlling crime entails reducing the perceived benefits of a crime and increasing its perceived risks.

Distance Decay. Distance decay recognizes the closeness of factors to encourage and facilitate interaction. For instance, regions that are geographically close to each other are more likely to engage in economic trading activities or social exchange with each other compared to those that are far away. Likewise, distance affects other social activities, such as conveying information, and social engagements (Keren, 2019). Innovations, knowledge, news, and cultural values travel faster between societies that are located close to each other than those that are far apart. In the context of criminology, crimes are more concentrated in regions that offenders find to be easily accessible than those that are difficult to access (Kennao et al., 2019). Therefore, creating difficulties in accessing some areas limits the occurrence of crime in them.

Mental Maps. Mental mapping plays a role in helping security planners design crime prevention strategies based on the perceived risky and safe places of occupants of an area. They are cognitive representations of the environment in people's minds, including the location of specific facilities, risky areas, and safe areas (Lundrigan et al., 2022). In this case, they help people to navigate their surroundings. Notably, each person has a unique mental map that they use to decide areas of movement or operation when located in an area. In this manner, mental maps influence people's routine movements, activities, and behaviors (Lundrigan et al., 2022). They are viable tools for security

planners to project possible movements of people and plan for better security and crime prevention.

Geographic Hunting Patterns

Studies reveal that crimes occur in a non-random distribution across a specific time and space. Therefore, the analysis of geographic patterns of crime occurrence can lead to an understanding of an offender's behavior and potential future action (Lundrigan et al., 2022). For instance, research has revealed a correlation between the occurrence of rape and certain demographic, or demographic characteristics related to social disorganization and land use. Additionally, factors such as the relationship between the victim and rape perpetrator determine the place where it occurs (Lundrigan et al., 2022). Therefore, geographical factors influence the occurrence of crime and the place where they occur.

Basic Assumptions

Geographic profiling is scientific and entails the use of various analytical methods to identify crime location patterns. In this regard, crime prevention strategies can be drawn from the observation of certain geographic patterns of crime occurrence and identifying high-risk areas for increased security and implementation of crime prevention measures. Notably, geographical factors such as demographics and environmental issues influence the occurrence of crime. Therefore, geographical profiling is a significant part of criminal profiling that leads to the accurate determination of crime patterns and the identification of future crime locations.

In 2022, Curtis-Ham et al. researched a common problem in criminal investigations, which involves geographic profiling and prioritizing suspects who could have been the perpetrator of a crime or crimes (Curtis-Ham, 2022). The study tested the Geographic Profiling Suspect Mapping and Ranking Technique (GP-SMART), a new type of profiling method for prioritizing suspects in criminal investigations (Curtis-Ham et al., 2022). Geographic profiling tools allows law enforcement to sift through several suspects quickly and efficiently and GP-SMART can be a useful “tool in the toolbox” of criminal investigators to support analysis in police investigations (Curtis-Ham et al., 2002).

Psychological Profiling

The term psychological profiling has evolved over the last thirty (30) years in its theories, methods and even what it is to be called, initially being defined by Fay in 1988 as "[a] description of the personality and characteristics of an individual based on an analysis of acts committed by the individual". It has referred to offender profiling and criminal profiling, to name a few, but remains a valuable tool for criminal investigations to identify and/or narrow a suspect or pool of suspects. For purposes of this discussion, I will refer to psychological profiling as the "gathering of data on a *known* individual or individuals, such as background investigations, observations, psychological tests, personality inventories, risk assessment instruments and interviews with that person or with those who know him or her” (Bartol & Bartol, 2013).

Historically, psychological profiling has been used in a variety of ways, beginning in World War II by members of the United States Office of Strategic Services (OSS) to

identify the thought tendencies of Adolph Hitler (Ault & Reese, 1980). In 1943, a 281-page report was authored by Walter Langer in hopes that a profile might be of assistance in gaining insights into Hitler's motivations. Psychological profiling has often been used by the military and the intelligence community, but the focus here is on those tools used to identify and predict behaviors. Two similar procedures are the threat assessment, and risk assessment/violent risk assessment, both of which involve the prediction of whether or not a specific individual will be violent towards others at some point in time.

A threat assessment is a process to determine the credibility and seriousness of a threat – the probability of it being carried out. It is primarily concerned with predicting future violence or other undesirable actions directed at specific individuals or institutions *after an expressed threat has been communicated*" (Benincasa, et al., 2023). Many case studies have been conducted, including those within school districts, those outside of school districts where an individual threatens to commit a crime of violence, and those threats involving political or well-known individuals. In 2023, Richard Parfitt published the case study of Christina Grimmie, a murder that occurred two (2) days before the Pulse Night Club massacre on June 12, 2016. Miss Grimmie, an up-and-coming young singer (she had participated in the 2014 version of The Voice) was murdered during a meet and greet at an Orlando theater by a 27-year-old obsessed fan. She had millions of followers and fans on social media and did not appear to be controversial in any way. Social media has left celebrities vulnerable since its inception over 25 years ago. "Celebrities and other public figures now participate directly in their public intimacy more than ever before,"

and "often, the entirety of their lives is laid bare for public consumption" (Meloy & Amman, 2016).

The killer, Kevin James Loibl, grew up in a dysfunctional and abusive family and he was five (5) years older than Grimmie. He indicated to friends within the year before the murder that Grimmie "was a Christian" and that he "helped him see the world differently" (Parfitt, 2023). Approximately two months before the murder, Loibl began to change his behaviors and began altering his appearance in an attempt to appeal to Grimmie when they finally were able to meet. Friends were so concerned about these behaviors that they reported their concerns to managers at their place of employment.

When Loibl arrived at the theater, he was carrying two pistols and other weapons but was never searched before entry. As he waited in line at the Meet and Greet, he finally approached Grimmie, hugged her, and fired three times, striking Grimmie once in the head and twice in the chest. As he was pursued by Grimmie's brother and others, Loibl pulled a second weapon and fired a fatal shot into his head (Parfitt, 2023). The motive was not pursued by law enforcement agencies because the perpetrator was identified, and the suspect was now dead.

In 2021, Meloy and Hoffmann established an eight warning behaviors typology of patterns of behavior that can be observed that may precede certain targeted behaviors. Of these eight warning behaviors, Loibl displayed several behaviors that may have been missed by those who knew him. Not all behaviors will be discussed here, but several stand out as important components to address in the completion of a threat assessment. The first, *pathway warning behavior* is behavior by the suspect which addresses research,

planning, and/or preparation which was part of Loibl's behavior pattern before the implementation of his plan (Parfitt, 2023). In addition, Loibl displayed certain *fixation warning behaviors*, which indicated a preoccupation with his victim. The more Loibl became preoccupied with Grimmie, the more he became secluded socially and at his workplace.

In 2023, a retrospective threat assessment was completed by Cowan Lankford as it related to the Virginia Beach Municipal Center Mass Shooting which occurred on May 31, 2019, at approximately 4:00 p.m. EST. Seventeen people were shot, 12 of whom were killed by a 40-year-old black male who worked at the facility. Following his rampage, the suspect was shot and killed by members of SWAT. For the study, the authors utilized a valid threat assessment tool – the Workplace Assessment of Violence Risk-21, Version 3 (WAVR-21 V3) to conduct this retrospective analysis (Cowan & Lankford, 2023). This assessment is particularly helpful when assessing workplace violence risk.

Investigators who originally studied the suspect concluded that "they did not uncover any indications of violent tendencies" and "we may never know why he committed this heinous act" (Cowan & Lankford, 2023). Cowan and Lankford's findings suggested that at least twelve (12) risk factors for violence were present in this mass shooter and that a significant threat of violence was present before the attack occurred. The twelve risk factors determined to be present were as follows:

1. Motives for Violence – Assessment Result: **Prominent**

2. Homicidal Fantasies, Violent Preoccupations or Identifications – Assessment Result – **Prominent**

3. Weapons Skill and/or Access – Assessment Result: **Prominent**
4. Preattack Planning and Preparation – Assessment Result: **Prominent**
5. Current job or Academic Problems – Assessment Result: **Prominent**
6. Extreme job or Academic Attachment – Assessment Result: **Present**
7. Loss, Personal Stressors, and Negative Coping – Assessment Result: **Present**
8. Entitlement and Other Negative Traits – Assessment Result: **Prominent**
9. Anger Problems – Assessment Result: **Present**
10. Irrationally Suspicious or Bizarre Beliefs – Assessment Result: **Prominent**
11. Increasing Isolation – Assessment Result: **Prominent**
12. History of violence, Criminality, and/or Conflict – Assessment Result: **resent**

The research and evaluation conducted by Cowan and Lankford (2023) concluded that the perpetrator lacked "sufficient stabilizers and buffers against violence" (Cowan & Lankford, 2023). In addition, significant information was present which placed this subject as a “high level of concern” for an attack.

In addition to physical attacks, threat assessments are conducted when anonymously written threats of harm and violence are received. In 2022, van der Vegt et al. (2022) studied this very issue. These types of threats are particularly worrisome because the author of such threats desires to hide their identity and are increasingly common due to online communications (van der Vegt, et al. 2022). Threat assessment

experts were consulted and were asked to read the communication and to provide their thoughts on the possible characteristics of the author. There was a consensus within the expert group on several issues, including that advice on threats should be practical and that practitioners in the field should allow for uncertainty in the determinations (van der Vegt et al., 2022).

With the increase in school shootings since the Columbine High School massacre in 1999, many professionals were driven to develop a psychological/risk/threat profile of a school shooter. The development of such a profile is a long way off because of the difficulty in determining who is at risk for committing such a crime.

In 2002, in cooperation between the United States Secret Service and the Department of Education, the Safe School Initiative was completed in response to the Columbine school shooting in 1999. The Initiative studied 37 targeted school shootings between the years 1974 and 2000 and is presented in five (5) chapters. Findings were categorized into five (5) major areas: characterizing the attacker, conceptualizing the attack, signaling the attack, advancing the attack, and resolving the attack. The contributors to the Initiative determined that most attacks that were studied were designed to harm a specific, pre-selected target. The Initiative further concluded that ten (10) findings that constituted background knowledge were most important in determining and evaluating the level of threat:

1. “Incidents of targeted violence at school rarely were sudden, impulsive acts.

2. Before most incidents, other people knew about the attack's idea or the plan to attack.

3. Most attackers did not threaten their targets directly before the attack.

4. Most attackers engaged in some behavior before the incident that caused others concern or indicated a need for help.

5. Most attackers had difficulty coping with significant losses or personal failures. Furthermore, many had considered or attempted suicide. Most attackers had a history of extreme depression or desperation.

6. Many attackers felt bullied, persecuted, or injured by others before the attack.

7. Most attackers had access to and had used weapons before the attack.

8. In many cases, other students were involved in some capacity.

9. Despite prompt law enforcement responses, most shooting incidents were stopped by means other than law enforcement intervention.

10. Currently, there is no accurate or useful profile of students who engaged in targeted school violence." (Safe School Initiative, p. 11-12).

To prevent school violence, Jackson and Viljoen (2022) looked at school threat assessment practices, perceived impact, and challenges impacting schools today. Because of the difficulty in determining feasible policies, the FBI recommended schools across the United States use threat assessment as a means of preventing violence (Jackson & Viljoen, 2022). While some schools have developed their models, many have followed existing models in their attempts to prevent school violence.

In 2023, Jackson and Viljoen continued their research into school threat assessments and reviewed the current models available to school districts across the United States (See Table 3 – School Threat Assessment Models). Research focused on several models including the Comprehensive School Threat Assessment Guidelines Model, Virginia's Department of Criminal Justice Services Model, the U.S. Secret Service Model, the Student Threat Assessment System Model, and the Violence Threat Risk Assessment Model. The authors concluded that the models all have similarities which recommends that school districts establish multidisciplinary teams to conduct assessments and to respond to threats in an individualized manner (Jackson & Viljoen, 2023). But, where research exists, it is often limited, and overall, the Comprehensive School Threat Assessment Guidelines model has the strongest research.

Violent risk assessments are one of the most common assessments conducted by forensic psychologists and can be used to evaluate individuals in a variety of potentially violent situations, including domestic disturbances, juvenile crime and violence, prison violence and workplace violence (Huss, 2009). A risk assessment can be defined as a "test conducted by professionals to determine the likelihood of a specific event or behavior occurring or reoccurring during a specified time period" (Huss, 2009). As was the case with threat assessments, the act of attempting to predict behavior with risk assessments is unpredictable at best and many practitioners forego the assessments entirely.

In the behavioral science and mental health fields, there are two (2) types of risk assessments available to practitioners: clinical and actuarial. In the clinical assessment

setting, a professional conducts an interview with the subject, observes the subject, and then makes a prediction as to the subject's present and/or future behavior (Hall, 2008). The clinical risk assessment has been shown through research to be unreliable and subjective, the results of which are quite uncertain (Hall, 2008).

Because of the uncertainty with clinical assessments, the actuarial risk assessment was developed to make these types of assessments more accurate and predictive. It involves the use of valid instruments and/or statistical models to predict the likelihood of violent future events occurring (Gardner et al., 1996). One of the best instruments examines dynamic and static risk factors in prediction. Static risk factors, such as parental criminality, are those factors that are historical and do not change over time (Gardner et al., 1996). In contrast, dynamic risk factors (i.e., employment status or substance use) can change over time and situation (Gardner et al., 1996).

In 2023, Cook and Vargen undertook a systematic review to develop a framework for the risk assessment of violent extremism. As pointed out by the authors, evidence-based violence risk assessment has taken a significant and positive turn over the past 30 years and many instruments have been developed and validated to appraise the risk of violence (Cook & Vargen, 2023). For example, some instruments have been developed for use with sexual offenders, including the Rapid Risk Assessment of Sexual Offense Recidivism (RRASOR), Static-99, Sex Offender Need Assessment Rate (SONAR), and the Minnesota Sex Offender Screening Tool-revised (MnSOSt-R) (Bartol & Bartol, 2013). The authors, however, identified an area where a conspicuous gap exists: the lack of assessment instruments for assessing risk for extremis terroristic violence (Monahan,

2012). The article outlined two (2) studies to identify the framework for the risk of Group-based violence and emphasized the need for future research to pursue ongoing research around violent extremism and other forms of Group-based violence (Cook & Vargen, 2023).

Logan and Sellers (2021) addressed the challenges faced by mental health practitioners who work and continually work with those individuals whose violent activities may be ideologically motivated. The authors identified three (3) ongoing challenges faced by the practitioners in dealing with violent extremism. "First, how can practitioners engage in good practice in risk assessment and management when the evidence for such practice in the violent extremism field is limited? Second, how can a mental health practitioner establish and understand the role of an extremist ideology in a client in their care and differentiate it from motivational drivers that may result in broadly similar kinds of actual, attempted, or threatened violence? And third, how can practitioners and their services respond to the risks posed in ways that recognize and balance the needs of both the client and those multiple other agencies dedicated to public protection?" (Logan & Sellers, 2021).

Logan and Sellers (2021) state that more research and guidance are limited in this area, and links need to be established between mental disorders and violent extremism. In addition, motivational drivers for violence can be difficult to discern, especially in areas of violent extremism. Lastly, trying to attempt to manage the risks of violent extremism in individuals with co-occurring mental issues needs multiple agency cooperation (Logan & Sellers, 2021).

Suspect Based Profiling

Racial Profiling

The practice of racial profiling involves using a person's racial features such as skin color, language, perceived race, or nationality to determine if the person is a suspect in a crime (Glaser, 2014). The practice is controversial because it often leads to racial bias where individuals are subjected to excessive law enforcement procedures without specific evidence of involvement in crime (Glaser, 2014). The practice is criticized for its contravention of the need to protect public safety and the right to fair treatment where all people are equal. Countries around the world have developed laws to prohibit racial profiling and instead expanded efforts to train law enforcers on ethical practices that uphold the equality of all people when investigating crime.

Terrorism

Profiling terrorism suspects entails using observational techniques to assess people to identify those who may be involved in terrorism in a situation of high alert. Law enforcers and security personnel use the practice to prevent and combat terrorism (Van Dongen et al., 2022). Specifically, they analyze the behavioral patterns of individuals systematically, including travel plans and history, communication, and other related factors to identify people who may be planning terrorist acts (Van Dongen et al., 2022). Terrorism profiling relies extensively on intelligence and is proactive in that it seeks to prevent terrorism rather than apprehend perpetrators after the crime has occurred. However, it is still applicable in situations where acts of terrorism have occurred and the suspects are not apprehended.

Passenger Profiling

Passenger profiling involves observing the behavioral factors of passengers to identify those who have engaged in or are planning to conduct a crime. Law enforcers often apply it at border entry points and other security gateways to prevent the movement of criminals into an area (Van Dongen et al., 2022). It involves examining a passenger's travel history, behavioral patterns, documents, and demographics to identify those that relate to a specific watch list of suspected criminals or reveal an intention to commit a crime or terrorist act (Posa et al., 2023). The application of passenger profiling is dynamic, including a broad range of circumstances, such as serial killings, mass shootings, terrorism, and robberies.

Behavioral Observation Techniques

These include approaches that law enforcers use to examine and interpret an individual's actions, behaviors, or reactions to specific occurrences, such as crime scenes, terrorist acts, or interviews. Examples of behavioral observation techniques include modus operandi, victimology, crime scene analysis, statement analysis, criminal biography, and signature behavior (Posa et al., 2023). These are essential because they enable investigators to understand offenders and identify people who are likely to have engaged in specific criminal acts.

Detecting Deception

Deception detection techniques encompass a wide range of methods aimed at identifying signs of falsehood or deception in statements given by suspects or witnesses, behavior, and communication. They include voice analysis, micro-expressions, nonverbal

cues, eye-tracking techniques, lie-detector devices, and statement analysis (Logan & Sellers, 2021). Other advanced approaches include cognitive load theory, where suspects are analyzed for displaying cognitive overloading, which is an indicator that the person is lying (Posa et al., 2023). It is worth noting that the approaches used in deception detection are not foolproof because sometimes individuals may exhibit signs that could be interpreted as lying when they are speaking the truth (Martineau et al., 2023). Therefore, investigators often use them to support other close evidence and reduce the probability of erroneous detection of falsehood.

New Approaches

As technology advances and professional practices grow, newer profiling techniques emerge. The proliferation of big data resulting from the use of the internet for communication and interaction has resulted in data-driven profiling methods and behavioral analytics. Some of the most common data-driven profiling methods include transaction analysis, travel pattern analysis, and social media analysis (Martineau et al., 2023). Behavioral analytics is often used in cyber security investigations, identifying insider threats, fraud detection, and threats within organizations (Martineau et al., 2023). Additionally, investigators may utilize sentiment analysis to examine social media content to identify individuals experiencing stress or expressing radicalization. Approaches of profiling and crime investigation are bound to increase as new technologies emerge.

Experts/Expert Testimony

Defining what an expert is can vary and depends on not only the context but also the field of expertise. A common definition of an expert is an individual who has a high level of skill, knowledge, or experience as it relates to a specific subject or field and who is recognized by their peers or society at large. The following definitions highlight the key elements of the definition, including high level of knowledge, specialization in an area and recognition by others of that specialization and/or knowledge.

The National Academy of Sciences, in its publication "Reference Manual on Scientific Evidence" describes an expert as "a person with special knowledge, skill, experience, training or education who is qualified to testify in a particular area of expertise" (National Academy of Sciences, 2011).

The Oxford English Dictionary defines an expert as "a person who is very knowledgeable about or skilled in a particular area, activity or subject" (Oxford English Dictionary, n.d.).

In the legal context, Black's Law Dictionary defines an expert as "a person who has special knowledge, skill, or experience that qualifies him or her to testify as an authority or specialist" (Black's Law Dictionary, n.d.).

Definitions reflected above will assist the researcher in this study when identifying subjects as experts in their respective fields.

Gaps in the Literature

Criminal profiling is a growing field in which experts are focusing on advancing it to make it reliable and accurate. Considering advancements in technology and social

activities, approaches incorporate a broad range of crime scene examinations, material analysis, and the application of various categorization models. Some of these approaches are not scientifically formulated, raising concerns about their accuracy and reliability. Examining literature reveals a breadth of knowledge on the subject but significant inadequacies in approaches to conducting reliable profiling and accommodating emerging technological environments (Logan & Sellers, 2021; Martineau et al., 2023; Posa et al., 2023; Van Dongen et al., 2021). Notably, profiling may involve a wide range of investigative and analytical approaches that may involve psychological and other fields of study. These include approaches of interviewing suspects, placing publications of crime, prioritizing subjects for investigations and the use of resources, analyzing statements, and addressing witnesses and victims.

The legitimacy of applying current profiling approaches in legal processes is a major factor that requires more studies. Current methods entail multiple factors that may complicate their joint application in the process, which may interfere with profiling legitimacy and authenticity as a criminal investigative process. In this regard, the literature reveals gaps in ascertaining the ethical application and legal admissibility of profiling methods, which is a significant concern to experts and policymakers. The literature demonstrates that the subject requires additional studies to make it more reliable and effective in the fight against crime.

Summary and Conclusions

The study of crime has been a major focus by researchers in recent years as they strive to develop credible tools and approaches to mitigating it. Primary approaches have

focused on identifying tools that can aid law enforcement in investigating, apprehending, and subjecting criminals to the legal process. The concept of profiling is based on applying psychological principles to explain the behavioral and individual characteristics of an individual. Typical approaches to profiling measure an individual's demographic and emotional characteristics, cognitive functions, and behavioral tendencies based on specific features of the crime scene. Diverse literature reveals a significant growth in profiling as a practice since its inception in the mid-1900s. To date, diverse approaches exist with substantial effectiveness in investigating and solving crime. However, shortfalls exist that limit their application in legal procedures and ascertain their validity in some situations. Some of the approaches, such as the falsehood detection, rely on indirect methods whose accuracy is questionable. Still, there is a need to develop accurate methods of profiling to aid in its reliability and effectiveness as a tool to investigate, prevent, and solve crime.

Chapter 3: Research Method

Introduction

This study examined the practice of profiling techniques in criminal cases, specifically focusing on psychological autopsy (equivocal death analysis), crime scene profiling (criminal investigative analysis), geographic profiling, suspect-based profiling, and psychological profiling. To fulfill this purpose, the study was guided by the following research question:

Research Question 1: What are the primary techniques involved in geographic profiling, crime scene profiling, suspect-based profiling, psychological profiling, and psychological autopsies?

The study involved interviews of ten (10) experts in the field of profiling in criminal cases. Additional data was drawn from secondary sources, including online scholarly databases. The data was examined and analyzed qualitatively to derive results based on the research question.

Research Design and Rationale

This research involved a qualitative design that entailed collecting and analyzing non-structured data. It emphasized drawing information from a broad aspect of the data, including the author's implications, sentiments, and opinions, apart from numerical information (Creswell & Creswell, 2018). In this regard, the approach facilitated a holistic examination of data to obtain rich information that would aid in answering the research questions. The qualitative design became the most preferred for this study

because the research questions required obtaining and examining a holistic aspect of the data from respondents and secondary data. It is worth noting that the research was exploratory, which necessitates an examination of a broad range of factors on the subject of study to distinguish the pertinent ones that provide information related to the research question.

The research also employed the social learning theory that relates behavioral aspects of society members to the influence of environmental factors. It recognized the role of cultural expressions of society members in causing the development of specific behaviors in an individual (Akers, 2006). The subject of concern in this study was profiling, in which the criminal behavior of individuals was a significant factor. In this regard, the influence of the social environment in causing criminal behavior was an aspect of interest in the study.

The research design also entailed a thematic analysis where specific themes of the subject guided the data exploration. Significantly, there was a need to identify aspects of the data related to geographic profiling, crime scene profiling, suspect-based profiling, psychological profiling, criminal paraphilia profiling, and psychological autopsies (Logan & Sellers, 2021). Therefore, the analysis involved a thematic qualitative research design rooted in social learning theory. Researchers broadly apply the thematic analysis of qualitative research that encompass multifaceted subjects, as where specific themes were significant in answering the research questions (Nowell et al., 2017). The application of the thematic analysis was broad, including comparing the cause-and-effect relationships of variables and relating aspects of the data to specific outcomes (Nowell et al., 2017).

Given these factors, the thematic approach was appropriate in establishing the various profiling aspects, identifying underlying protocols and concepts, and establishing their effectiveness in the profiling practice. In this manner, it facilitated a holistic and elaborate exploration of the subject and defying relevant information related to the research questions (Nowell et al., 2017). Furthermore, the approach allowed the researcher to gain insights into the subject of discussion rather than "yes" or "no" responses or the reliance on predetermined positions to derive study results.

Role of the Researcher

In this study, the researcher identified appropriate research methods and data, gathered the data, analyzed it, and interpreted it to answer the research questions. Considering that the research was qualitative, the researcher was responsible for identifying the relevant information that would benefit the research from the collected data. The researcher cultivated a cordial relationship with respondents where the data was sought from field participants. Additionally, the researcher applied appropriate search methods to collect a secondary data sample representing the entire research field (Creswell & Creswell, 2018). In qualitative research, the role of the researcher is critical in determining aspects of the information that are relevant to the research question and analyzing them in a non-biased manner to derive reliable and accurate results (Thurairajah, 2019). For this research study, I applied a purposeful sampling method to obtain participants from the fields of forensic psychology, forensic science, and law enforcement. The expert's identities remained anonymous throughout the entirety of the study.

Consequently, I interviewed them via Zoom after contacting them through the LinkedIn professional site and obtaining their consent to participate via email. The interview utilized non-structured and semi-structured information that was the most appropriate instrument for data collection (Creswell & Creswell, 2018). I then searched the ProQuest, Science Direct, Springer, and Google Scholar databases online to obtain various documents, including research papers, state agency reports, and nonprofit organization reports related to the subject of study. I sorted the documents to identify those aligned with the research question before qualitatively analyzing the data, using a thematic approach to derive the study results. The researcher took substantive measures to prevent bias and any other form of adverse effect that could adversely affect the study results. Additionally, the researcher had no personal relationship with any of the participants involved in the study, thereby eliminating the chances of bias in the data collected. For this reason, the data collected in this research accurately represented the conditions in the sample field.

Methodology

Data collection and thematic analysis are ongoing processes that required detailed notetaking from start to finish when interviewing subjects. As I proceeded through the interviews, I diligently recorded ideas and potential themes while interacting with the data. Note-taking was an essential component in analyzing data obtained from participant interviews. I closely followed the six phases of thematic analysis set forth by Braun and Clarke. The first step in the thematic analysis process is to become familiar with the data. Familiarization comes from reading and rereading transcripts, transcribing information,

listening to audio or video recordings, and jotting initial ideas. Second, I began to develop some initial codes. The third step in the process was to search for themes in the data. The fourth step included a more refined analysis of the themes and the development of a thematic map. In the fifth step, the themes were more refined and defined. The sixth step consisted of developing the final report, which relayed the analysis findings.

Participant Selection Logic

The respondents in this research constituted various experts in profiling, making them authoritative entities to provide reliable information that would aid the study. Purposeful sampling allows researchers to obtain participants in their target population (Creswell, 2018). In this case, the respondents provided information regarding criminal profiling and the inherent subsections, including equivocal death analysis (psychological autopsy), crime scene profiling (criminal investigative analysis), geographic profiling, subject-based profiling, and psychological profiling.

Instrumentation

Creswell and Creswell (2018) emphasized the importance of the researcher as the primary determinant of the accuracy of a study. Notably, the researcher plays the essential roles of identifying appropriate data, identifying the research approaches to use, collecting the data, analyzing it, and drawing conclusions based on the research questions. There is a need for the researcher to conduct each role with keenness and to take necessary measures to avoid factors that would interfere with the accuracy of the research. In this case, I applied a uniform research process involving proper data

collection, sorting, coding, analysis, and interpretation of results to avoid bias and inaccuracies.

I interviewed adult participants who voluntarily agreed to engage in the study. Individual interviews were conducted via Zoom and were recorded using the same platform. Each interview was guided by a semistructured interview protocol relating to participants' experiences and expertise in their respective profiling fields. The nature of the interview questions allowed me to ask follow-up questions for further clarification and to obtain additional information pertinent to the questions asked. According to Robinson, (2023), semistructured interviews provide deep, rich, individualized, and contextualized data that is important when conducting qualitative research.

Procedures for Recruitment, Participation, and Data Collection

To collect data for this study's research question, I implemented the same recruitment, participation, and data collection procedures. I collected data from ten experts in the following fields of profiling: psychological autopsy (equivocal death analysis), crime scene profiling (criminal investigative analysis), suspect-based profiling, psychological profiling, and geographic profiling. Participants were selected based on the professional and academic information provided on their LinkedIn profiles, which served as indications of their expertise within their fields.

Data Collection

I, as the primary researcher, served as the main instrument for data collection. The data collected involved primary primary data in the form of semistructured interviews. These interviews were conducted via the Zoom teleconferencing platform. Prior to

conducting the interviews, I obtained participants' informed consent via the LinkedIn messaging system or via email after providing them with an information flyer about the study. After conducting interviews, the Zoom audio file was transcribed, proofread for accuracy, and provided to participants to review for additional accuracy. All interview audio and transcripts were encrypted and saved on a password-protected computer. In addition, each Zoom interview was secured by requiring a password to join the meeting.

Data Analysis Plan

Thematic analysis is a qualitative analytic method that is commonly applied within the field of psychology and was adopted as the main analytical technique for this study. It is an approach that entails identifying prevalent themes of a subject, drawing data from the sources based on these themes, and answering the research questions (Braun & Clarke, 2006). Consequently, it involves analyzing the data to establish how the themes are applied and related to the subject of study.

For this research, the data collected was examined for its relevance to the themes and analyzed using handwritten notes taken during the interview and previously collected tape recordings. Specifically, I examined each interview transcript to identify prevalent opinions and explanations regarding profiling methods, protocols, and concepts to deduce those that were common and reflected the practice across diverse settings. Finally, I documented the findings in line with the research question.

Issues of Trustworthiness

Credibility

The issue of credibility is essential in establishing trustworthiness. Credibility refers to the truth of the data or the participant's views and the interpretation and representation of them by the researcher (Cope, 2014). A qualitative study is considered credible if the description of human experiences is immediately recognized by individuals who share the same experiences (Cope, 2014). The credibility of qualitative inquiry depends on four distinct but related elements: systematic, in-depth fieldwork that yields high-quality data, systematic and conscientious analysis of data, the credibility of the inquirer, which depends on the training, experience, and status of self, and readers' and users' philosophical belief in the value of the qualitative research (Patton et al, 2015).

To enhance the credibility of this research study, I encouraged the participants to speak openly and expand upon the answers they provided. I used questions that encouraged the participants to explain their thoughts rather than provide simple "yes" or "no" answers. I also recorded each interview session to ensure I could review them at any evaluation stage to ascertain the information contained. As I examined the data, I watched for repeated concepts and cases of contradiction and sought to deduce the respondent's position based on responses to other questions. I examined each response for bias elements to ensure I addressed them in the analysis process.

Transferability

The transferability of research is vital in determining its application in other settings worldwide. It is transferable if its results are applicable in a different setting

(Creswell & Creswell, 2018). Transferability significantly depends on the quality of the data collected and the approaches used in its analysis and determination of results. In this case, there was a need to ascertain that the sample of respondents used and data collected from the databases accurately represented the entire study field. Consequently, there was a need to establish that the study field represented diverse settings worldwide to which transferability applied (Carminati, 2018; Creswell & Creswell, 2018; Maxwell, 2021). It is worth noting that the transferability of results determines the breadth of settings to which they can be applied.

Dependability

The most widely accepted definition of the term "dependability" by most researchers is "the stability of findings over time" (Korstjens & Moser, 2018, p. 121). In addition, the authors note that the dependability of a study is mainly achieved using an audit trail, which emphasizes transparency above all other criteria. In this study, achieving dependability entailed documenting the entire research process and retrieving the information later for reference and review. Critically, there was a need to establish an audit trail of all procedures undertaken, the parties involved in the process, and the sequence of events as they occurred in the research (Korstjens & Moser, 2018). Additionally, relevant theories applied in the analytical steps were documented, and the results of each step were noted to ensure the process was transparent and verifiable.

Confirmability

The conformability of research implies the capacity of other researchers to confirm the processes and findings of research (Korstjens & Moser, 2018). It relates to

the way the research process data and findings to unite and give a consistent result. In this case, collecting and analyzing the data was straightforward for other researchers. Consequently, they can achieve similar results if they apply the data and research process in a study. Conformability is enhanced by undertaking clear and documented steps where the outcomes for each step are reviewed for accuracy before proceeding to the next steps. Achieving conformability also involves identifying biases and addressing them in the research process. For this study, there was a need to ensure that information from respondents and secondary sources was accurately captured in the data collection and analysis process, eliminating any bias that may have been in the data by excluding any information that appeared to reveal the respondent's skewed perception of the questions.

Intracoder Reliability

Encoding data is vital in the research process because errors introduced at this stage could interfere with the reliability and accuracy of the results. In this case, measures to ensure intercoder reliability included using a meticulous manual approach to coding the data, counterchecking each coding, and documenting it for additional review in case of questionable outcomes. The possibility of merging or excluding some codes in the analysis was high, and there was a need to provide sufficient time to ensure the process was careful and accurate. Since the researcher was the only coder involved, errors in the coding process were significantly minimized, enhancing the intracoder reliability.

Ethical Procedures

Research involves collecting and analyzing data from other sources, including human participants or documents. In both cases, ethical concerns arise because of the risk

of subjecting the source of data to adverse experiences, misrepresenting their information, or causing retribution resulting from their involvement in the research. In this regard, the researcher ensured that collecting and analyzing data did not infringe on the respondent's or contributor's rights or subject them to any form of negative experience. In this case, the researcher obtained consent from participants, communicated to them about the safety measures undertaken to ensure the confidentiality of any sensitive information and assured them of safety from any adverse experience (Creswell & Creswell, 2018). Likewise, there was a need to accurately retrieve data from secondary sources to ensure that the study correctly represents the original authors of the documents used. By conducting an accurate and reliable study, the credibility of all participants and contributors to the study was upheld.

This study was conducted diligently, considering the guidelines Walden University's Institutional Review Board provided. More importantly, the study was founded on interviews with respondents with various expertise in Criminal Profiling and its subcategories. This group was not considered a vulnerable population and thus did not need safeguards to prevent exploitation.

Summary

In Chapter 3, I outlined the methodology of the proposed qualitative study. Initially, the purpose of the study and research questions were restated, followed by a discussion of the study design. Within this section, the role of the researcher was discussed, as well as different aspects of the methodology. As part of the study methodology, information was provided, including participation selection logic,

instrumentation, and a plan for analyzing the data collected by the researcher. Also discussed in Chapter 3 were issues of trustworthiness, reliability, transferability, dependability, confirmability, and intracoder reliability, ending with a focus on any potential ethical concerns related to the research study proposed.

Chapter 4: Results

Introduction

The purpose of this study was to examine the practice of profiling techniques in criminal cases. This study sought to aid in improving the practice of profiling by identifying current shortfalls and devising ways of improving them. It focused on distinguishing between malpractices that have created uncertainty in the admissibility of current methods to legal procedures and affirming the potential of profiling as a vital tool in fighting crime. The research questions that the following analysis addressed is as follows:

RQ1: What are the primary techniques involved in geographic profiling, crime scene profiling, suspect-based profiling, psychological profiling, criminal paraphilia profiling, and psychological autopsies?

To provide data that allowed for the answering of this research question, interviews were conducted with 10 experts in criminal profiling. This chapter presents the results of the thematic analysis of these 10 interviews according to Braun & Clarke's (2006) six-step coding procedure. The seven themes generated by this analysis will be used to answer the above research question and to provide insights into the intersection of criminal profiling with admissibility of evidence in a legalistic and prosecutorial prospective, which will be addressed in greater detail in Chapter 5. This chapter is structured as follows. First, an overview of the research setting is provided. Second, a demographic overview of the sample of participants is provided. Third, the data collection procedures implemented in this study are provided. Fourth, an overview of

how Braun & Clarke's coding procedure was applied is given. Evidence of trustworthiness in this study will then be discussed before providing a report of the results of the thematic analysis. A summary concludes the chapter.

Setting

The research setting for this study was completely via electronic means. Participants were contacted and recruited online (mainly leveraging the LinkedIn professional site). All interviews were facilitated using the Zoom conferencing platform. Each interview was conducted via a secure, password-protected Zoom session. No personal or organizational factors can be reported that might influence the interpretation of the following results.

Demographics

A total of 10 experts in criminal profiling were recruited for this study. Table 3 below provides an overview of the participants. Participant identifiers were utilized to preserve confidentiality. These individuals had diverse law enforcement and profiling backgrounds. The majority of participants were females (i.e., 60% or 6 out of 10). Although I had intended to recruit two participants from each of the following sub-specializations: geographic profiling, crime scene profiling, suspect-based profiling, psychological profiling, criminal paraphilia profiling, and psychological autopsy, participants with specialization in only three of the subfields were able to be recruited, to wit: geographic profiling, crime scene profiling, and psychological profiling. The professional and academic background of the participants were varied. Some participants had a background in law enforcement while others' careers were mainly in academia. The

majority of participants acted as consultants and expert witnesses. Table 3 below provides additional background into the background of this study's participants.

Table 3
Participant Demographics

Participant ID	Sex	Profiling Specialization	Professional Background	Length of Interview
P1	Female	Psychological	Worked for the FBI's Behavioral Analysis Unit (BAU)	41:48
P2	Female	Psychological	Worked in law enforcement for the police department of a large Northeast US city	50:10
P3	Male	Psychological	Worked in law enforcement and police training for a Southeast US state	28:56
P4	Male	Crime Scene	Owner of a private criminal risk assessment consultancy	51:55
P5	Female	Geographic	Academic background in psychology and freelance profilers	34:50
P6	Female	Crime Scene	Received an international training in profiling. Taught extensive and switched to consulting.	1:00:08
P7	Female	Crime Scene	33 year career in law enforcement before obtaining	32:04

			a PhD in psychology and switching careers to teaching profiling	
P8	Male	Geographic	Has extensive background in defense and antiterrorism studies and now provides consultation in environmental criminology.	31:01
P9	Male	Crime Scene	PhD in Sociology and career is mostly in academia. Works as a private consultant on liability and criminal behavior.	51:55
P10	Female	Geographic	Background in neuroscience and is an expert in blood splatter analysis and applying quantitative methods to profiling.	43:33

Data Collection

The 10 participants were recruited using LinkedIn and were screened based on the professional and academic information provided on their profiles**.** The messaging system

of LinkedIn was utilized to contact participants who were provided with an informational flyer about the study. After agreeing to participate in the study, participants were sent via email a secure, password-protected Zoom link. All interviews were recorded on Zoom and were guided by an interview protocol. After interviews were completed, the interview audio was transcribed using the rev.com service. All interview transcripts were carefully proofread for any transcription errors, and all participants were provided the opportunity to review the interview transcripts for additional accuracy.

Recruitment and interviews took place over an approximately four-month period beginning in December 2024 and ending in March 2025. Interviews ranged in length between 32 minutes to over one hour. After the transcripts were finalized, they were then uploaded to a spreadsheet in Google Drive to begin Braun & Clarke's coding procedure, which is described in detail in the following section. No particularly unusual circumstances arose during data collection, however recruitment took longer than expected due to scheduling difficulties with participants. In addition, the majority of participants who were contacted either did not respond or did not wish to be interviewed thus not allowing for recruitment of experts in all five sub-specializations.

Data Analysis

Phase 1: Data Familiarization

For this phase of analysis, I carefully read each interview transcript several times taking notes on initial themes that seemed to emerge. The purpose of this phase is to become intimately familiar with the responses that my participants gave. At each reading, I carefully revised my notes to reflect additional insights or nuances I uncovered, which

assisted with starting the open coding process. After several rounds of reading, I wrote a high-level summary of each interview to characterize how that participant contributed to the study. I also considered the point where data saturation was reached (i.e., when new codes and themes no longer emerged from additional data). Data saturation was reached by the tenth interview as no additional insights seemed to emerge from this interview.

Phase 2: Generating Codes

For this phase of analysis, I engaged in what is called "open coding", which involved breaking each interview into the smallest meaningful unit of data and assigning it a label. According to Vollstedt & Rezat (2019), open coding "focuses on the conceptualisation [sic] and categorisation [sic] of phenomena through an intensive analysis of the data" (p. 86). The granularity of each code differed in each interview, but the string of data to which a code was assigned ranged from stretch of a few words to multiple sentences. Each interview was coded individually and a second round of open coding was conducted to reduce the number of codes associated with larger strings of data to increase the granularity and richness of the analysis. Table 4 below illustrates the final set of codes that were used to generate themes.

Table 4

Final Set of Codes

Code Name	N of References	N of Participants Contributing to Code
deep reading of case material	12	6
leveraging expertise of others	12	5

use of mapping technology in geographic profiling methodology	12	2
leveraging data to draw patterns	11	4
evidentiary value	10	5
behavioral determinants	10	4
maintaining crime scene integrity	10	1
pathological determinants	9	3
life course persistence	8	3
taxonomizing crime scenes	8	3
establishing foreseeability	8	2
balancing academics and practice	6	4
synergy between practice and academics	6	3
academic training	5	5
crime scene analysis skills	5	5
condition of body	5	3
threat assessment is retrospective	5	3
different levels of threat assessment	4	4
using logic/mathematics to uncover patterns	4	4
balancing threat assessment with prosecutional success	4	3
fleshing out conflicting determinants	4	3

contribution of law enforcement skillset	4	3
methodology for analyzing significance of crime scene	4	3
quantifying crimes	4	3
ideological determinants	4	2
media protocols	4	2
motive as determinant	4	2
profiling requires diverse skills	4	2
protocols for integrating technology	4	2
writing sound case methodology	4	2
breadth of knowledge	3	4
sexual determinants	3	3
household determinants	3	3
physicality of crime scene	3	3
visualizing crime scenes	3	3
crime scene analysis from victim and offender perspectives	3	2
evidence validity	3	2
legal protocols	3	2
photographic evidence	3	2
profiling protocols	3	2
using behavior to model criminality	3	2
gap analysis	2	2

network analysis	2	2
socioeconomic determinants	2	2
evidence collection protocols	3	1
geographic analysis methodology	3	1
in-person crime scene analysis	3	1
methodology for creating mental maps	3	1
pathway to violence	2	1
victim vulnerability as determinant	2	1
biological determinants	2	1
using DNA	2	1
analyzing spatial aspects of suspect escape	2	1
being detailed oriented	2	1
leveraging geographic analysis techniques	2	1
protocols for maintaining objectivity	2	1
modus operandi as determinant	1	1

Phase 3: Searching for Themes

After the codes presented in Table 4 were finalized, I then started to group the codes to form initial themes that could be used to answer the study's research question.

To facilitate this grouping process, I engaged in what is called “axial coding.” This type of coding provides a framework for elucidating “relationships between concepts and categories that have been developed in the open coding process” (Vollstedt & Rezat, 2019, p. 87). This phase of analysis yielded five initial themes, to wit: i) the interdisciplinary aspect of profiling, ii) the determinants of criminality, iii) use of data in profiling, iv) role of crime scene analysis, v) importance of case files.

Phase 4: Reviewing of Themes

After reviewing these themes *vis-à-vis* the final set of codes, I noticed that a group of codes relating to the procedural aspects of profiling and the role of profiling in threat mitigation did not align with the initial five themes discussed above. Accordingly, I grouped those two sets of codes into two additional themes relating to protocol and methodology and threat mitigation. At this point, the names of the themes were tentative and once all codes had been grouped via axial coding into the final set of seven themes, I was able to assign each theme a descriptive title and a definition, which are described in the following section.

Phase 5: Defining Themes

Table 5 below illustrates the final seven themes that emerged from the thematic analysis. The table includes the theme name, definition, and the codes that were grouped together to form these themes. According to Braun & Clarke (2006), a key test for determining if further theme requirement is being able to describe the scope and content of each theme in a few sentences (p. 22). The definitions provided in Table 5 exhaustively encapsulate the essence of what the profiling experts expressed in regard to

the techniques they leverage in their work. Therefore, no further coding or theme refinement was necessary.

Table 5

Theme Definitions and Associated Codes

Theme	Theme Definition	Associated Codes
Importance of Establishing Protocols and Rigorous Methodology	To ensure profilers have the data needed, protocols for maintaining crime scene integrity and the application of technologies relating to geographic profiling are required	use of mapping technology in geographic profiling methodology maintaining crime scene integrity profiling protocols geographic analysis methodology methodology for analyzing significance of crime scene media protocols methodology for creating mental maps legal protocols evidence collection protocols protocols for integrating technology protocols for maintaining objectivity leveraging geographic analysis techniques writing sound case methodology
Understanding Determinants of Criminality	Criminality is linked to various factors that are predictors of criminal behavior	pathological determinants establishing foreseeability behavioral determinants

		life course persistence
		ideological determinants
		motive as determinant
		sexual determinants
		household determinants
		socioeconomic determinants
		pathway to violence
		victim vulnerability as determinant
		biological determinants
		modus operandi as determinant
Quantifying Criminality to Build Models	Effective profiling requires using data, logic, mathematics, and scientific approaches to model and predict criminal behavior.	leveraging data to draw patterns
		quantifying crimes
		gap analysis
		network analysis
		using behavior to model criminality
		using logic/mathematics to uncover patterns
		analyzing spatial aspects of suspect escape
		using DNA
Profiling Requires a Multidisciplinary Approach	Effective profiling requires access to a depth and breadth of knowledge stemming from	leveraging expertise of others
		balancing academics and practice

	working with other experts/consultants, and balancing the application practice and academics	academic training contribution of law enforcement skillset breadth of knowledge profiling requires diverse skills synergy between practice and academics
Rigorous Crime Scene Analysis Provides Profiling Insights	Deep understanding of the nature of crime scenes, combined with a comprehensive analysis of physical evidence and the circumstances surrounding the crime, allows profilers to infer behavioral patterns and psychological traits	evidentiary value crime scene analysis skills taxonomizing crime scenes condition of body in-person crime scene analysis crime scene analysis from victim and offender perspectives physicality of crime scene visualizing crime scenes being detailed oriented
Profiling Plays a Central Role in Threat Mitigation	Insights from profiling informs threat assessment and mitigation, but also underlines difficulties due to the retrospective nature of threat assessment	threat assessment is retrospective balancing threat assessment with prosecutional success different levels of threat assessment
Deep Reading of Case Files is Paramount	Effective profiling requires an in-depth understanding of case files including photographic evidence, autopsy reports, witness testimony, and forensic reports.	engaging with case material photographic evidence evidence validity

Phase 6: Reporting

Braun & Clarke (2006) suggest crafting a "story" for each theme that expounds upon the relationship each theme has to the research question of the study. Accordingly, in the "Results" section of this chapter, I present a narrative based around verbatim quotations from each participant that illustrate how these themes provide insights into the profiling techniques they implement in their work. I present the themes in order of the number of codes that make up each theme.

Evidence of Trustworthiness

Credibility

To ensure the credibility of this study, I first had to ensure the credibility of the participants I recruited. This involved ensuring that they were indeed experts in profiling and had the requisite educational and professional background to provide insightful responses to the interview questions. This vetting process involved screening participants' LinkedIn profiles and establishing communication with them ahead of the interviews to discuss the nature of the study and the alignment of their background and expertise with the study's purpose and research questions.

Transferability

In addition to ensuring participants had the requisite academic and professional background, I also ensured they represented the diversity that is displayed in the field of criminal profiling. Given the broad spectrum of profiling techniques and schools of thought I purposefully recruited candidates who came from academia, law enforcement, and private consultation to increase the transferability of the findings of this study.

Transferability was also ensured by recruiting participants who had backgrounds in the various sub-field of criminal profiling.

Dependability

The dependability of this study was strengthened via the use of "audit trails," which are essential in maintaining transparency. This process involved diligently documenting the recruitment process, ensuring participants had a full understanding of the study's purpose, and obtaining informed consent. This process involved all of the actual data for the study. All interviews were guided by an interview protocol to ensure consistency between participants. A final element of the audit trail was member checking in which participants were offered the opportunity to review their interview transcripts for accuracy.

Confirmability

Confirmability of the data collected in this study was maintained first by the aforementioned member checking process. In addition, confirmability was enhanced through the use of a rigorous and academically-accepted thematic analysis protocol. The specific protocol applied was Braun and Clarke's (2006) six-stem thematic analysis process. Built into this process is constant reviewing and refining of codes and themes to ensure that all units of means in participant responses were represented in the following results. Part of this coding process all entailed being mindful of my own biases as a former prosecutor and possessing a specific and contextual knowledge of criminal profiling.

Results

Theme 1: Importance of Establishing Protocols and Methodology

The first theme that emerged from the thematic analysis underlined the central role of rigorous protocols and methodological precision in profiling practice. Participants expressed a shared concern that without structured procedures, profiling efforts (particularly in crime scene and geographic profiling) risk becoming speculative. thus jeopardizing legal permissibility as evidence. This theme encapsulates various procedural dimensions, including maintaining crime scene integrity, using validated geographic analysis techniques, and creating robust methodologies for interpreting criminal behavior and spatial data.

Participant P1 discussed the necessity of relying on repeated behavioral indicators across multiple cases to ensure reliability. She stated, “From a behavioral indicator standpoint, there are certain things that you look for, and those patterns need to be seen over multiple instances to be valid.” This observation reflects a broader concern with the evidentiary credibility of behavioral cues and the need to avoid premature conclusions based on isolated incidents. Her comment underscores the importance of methodological consistency in behavioral profiling to ensure that patterns used for inference are empirically grounded.

In a similar vein, Participant P8 articulated the procedural foundation of his profiling strategy by stating, “If I wanted to condense it, it'd be those three things: victimology, behavioral indicators, and linkage analysis. That’s what ties it together, and that’s what holds up in court.” His remarks suggest an analytical triad that supports

profiling judgments but also its centrality in producing court-admissible results. The emphasis on legal standards suggests that profiling must be defensible both analytically and judicially, which adds a normative layer to methodological rigor.

The importance of data verification emerged prominently in discussions about geographic profiling. Participant P4 cautioned that "the problem with geographic profiling, although the algorithm works, is when you try to plot data that isn't verified or validated—it becomes guesswork." This caveat speaks to the essential role of data accuracy in enhancing the value of geographic algorithms and echoes a broader concern that even scientifically sound tools are susceptible to misuse in the absence of proper input standards.

P4 further stated, "linkage analysis, all of those things go into geographic profiling, but there has to be a system behind it that's more than a profiler's gut feeling," emphasizing the need for profiling practices to be grounded in structured methodology rather than intuitive interpretation. His reflection captures a tension frequently cited by participants: the distinction between experience-based insights and standardized, replicable procedures. This need for codified practice was also illustrated in his discussion of site specificity, where he remarked, "But you have a third [dimension], and that's the site specificity—what is the function of this site to the offender? That's part of the crime scene interpretation." This suggests that crime scene analysis is conceptualized not just as a physical evaluation but as a behavioral inquiry into offender motivations and decision-making patterns.

These perspectives affirm that protocols and methodology are not auxiliary to profiling; they are core techniques essential for ensuring analytical integrity and legal defensibility. Whether maintaining crime scene integrity, interpreting spatial relationships through validated algorithms, or assessing behavioral indicators over time, each dimension of the profiling process relies on the implementation of clearly defined and repeatable procedures. This theme addresses this study's research question by illustrating how crime scene and geographic profilers employ methodologically grounded practices to produce reliable outcomes. Moreover, it supports the broader purpose of this study by identifying a major area for improvement: the need to institutionalize rigorous, standardized protocols. Doing so will not only reduce current shortfalls but also affirm the legal and operational value of profiling in contemporary criminal investigations.

Theme 2: Understanding Determinants of Criminality

The second theme that emerged from the analysis involved identifying and interpreting the underlying determinants of criminal behavior. Participants generally converged on the observation that criminality is rarely the result of a singular cause and is instead shaped by interacting psychological, situational, and socio-environmental factors. These determinants must be carefully assessed by profilers in order to construct accurate behavioral models and support investigative leads.

Participant P1 reflected on the need to approach offenders' motivations through a lens of complexity and nuance. She remarked, "I think we can say with extreme confidence is that there's almost never a single motivator. It's a cocktail of different factors—psychological, personal, situational—and some of them are more dominant than

others depending on the case." Her comment illustrates a foundational assumption shared among profiler, namely: that effective profiling demands unpacking the layered motivations behind criminal acts, rather than assigning static categories to offenders.

Expanding upon this, P1 also noted that "oftentimes we found that it was mixed motivation, and the offender didn't even always understand why they committed the crime in the way they did." This observation points to the profiler's role in identifying unconscious or latent drivers of behavior, many of which may not be readily articulated by the offenders themselves. Profilers, therefore, must work not only with explicit evidence but also with inferred or contradictory cues that require interpretive depth.

Participant P2 spoke to the practical application of this understanding during case analysis. She explained, "I was able to pull out psychological tools to understand that what looked like a sexual crime at first actually had more to do with humiliation and power." This insight reflects how profilers must often revisit assumptions about motive and reconstruct them based on behavioral indicators and psychological context. P2 also emphasized the importance of discriminating between superficially similar offenders: "Differentiating between people who have a fantasy life that never goes anywhere and those who act on it was crucial to deciding how serious a threat they were." Her experience reinforces that behavioral manifestation, not just internal psychology, determines how risk and culpability are evaluated.

Participant P10 added a methodological perspective to this process by highlighting the need for comprehensiveness. She stated, "The only way to do that is to list as many factors as possible and see what aligns. That includes childhood trauma,

employment history, any signs of narcissism or sadism, relationship breakdowns—everything." This quote supports the idea that profiling determinants is fundamentally about pattern detection across multiple domains. It also indicates that effective profiling requires casting a wide net initially before narrowing down on dominant factors that shape offender behavior.

Collectively, these reflections reveal that criminal profiling is not about identifying one cause of criminality, but rather about discerning the relevant combination of causes that give rise to the behaviors observed in a given case. Profilers must recognize when motivations are overlapping, when psychological and situational drivers conflict, and when certain determinants carry more explanatory power than others. This theme supports the study's research question by identifying how profilers approach criminality through a multidimensional framework that integrates psychological insight, behavioral cues, and contextual evidence. Moreover, it aligns with the study's broader purpose by addressing how improved recognition of determinants can reduce malpractice and strengthen the evidentiary foundation of profiling. In doing so, it contributes to the professionalization and legal defensibility of profiling techniques used in criminal investigations.

Theme 3: Quantifying Criminality to Build Models

The third theme that emerged from the data involved how effective profiling relies on the quantification of criminal behavior through the application of data, logic, mathematics, and scientific reasoning. Participants repeatedly highlighted the importance

of using measurable indicators to model patterns of behavior, forecast risk, and communicate findings in terms that are replicable and legally persuasive.

Participant P1 described how her team employed network analysis to frame offender behavior relationally. She explained, “So what’s the best way for us to talk to this victim? Well, let’s understand who else she’s connected to. That’s where the pattern emerged-connections between the victims, the timing, and the offender’s messages.” Her account illustrates how profiling can transition from a qualitative (and rather subjective) reading of victimology to a structured network model that maps social interactions and sequences of behavior.

Quantification of offender activity was further discussed by P1, who recalled, “On average, they were experiencing three and a half triggers per month before the behavior peaked-things like job loss, arguments, or substance relapses. We logged each one.” This example reflects a deliberate effort to convert psychological and situational data into trackable metrics. By operationalizing behavioral triggers into countable data points, the profiling process shifts from interpretive speculation to empirically grounded modeling.

Participant P4 discussed the intellectual reasoning styles used to develop predictive models, explaining that “deductive thinking or inductive thinking—if you could use that together with abductive thinking, then you're probably farther ahead.” This combination of logical approaches reflects the methodological pluralism inherent in profiling and the necessity of flexible yet structured thinking to connect behavioral cues to offender typologies. Participant P8 reinforced this approach, stating, “I approach it from deductive reasoning… other times, inductive, for example,” indicating that different

investigative contexts demand different forms of thought and logicality to model criminal behavior accurately.

For some profilers, mathematics is not only a tool but a preferred language for capturing and conveying behavioral patterns. Participant P6 noted, “And for me the crime scene speaks, and for me, I dunno, my college was mathematic and physics. So I prefer to express myself in mathematics.” This quote illustrates the natural convergence between quantitative orientation and crime scene interpretation, where profiling becomes a process of identifying measurable relationships between spatial, temporal, or behavioral variables.

Participant P10 added a scientific dimension to this theme by stating that “behaviors, just like any other kind of evidence, have properties—they can be measured, timed, categorized, and connected.” Her comment aligns with the broader idea that behavioral data, when systematically analyzed, possesses the same evidentiary value as physical forensic evidence. It suggests that behavioral profiling is capable of achieving both scientific credibility and courtroom relevance when expressed in quantifiable terms.

Taken together, these perspectives illustrate how modern profiling extends beyond qualitative interpretation into the realm of formal modeling. Quantifying behavior not only enhances the precision of the profile but also aids in its admissibility and persuasive power within investigative and prosecutorial contexts. Through network mapping, trigger tracking, and logical inference, profilers transform abstract human behaviors into structured, testable constructs. This theme aligns closely with the research question by identifying the analytical techniques used in profiling, specifically those that

rely on scientific and quantitative reasoning. This theme also upholds the study's purpose by demonstrating how structured models and measurable indicators can reduce ambiguity in profiling practice, promote legal credibility, and increase the utility of profiling as a crime-fighting tool.

Theme 4: Profiling Requires a Multidisciplinary Approach

The fourth theme that emerged from the profiler interviews underscores that effective profiling is inherently multidisciplinary, drawing on collaborative insight, specialized expertise, and a balance between academic knowledge and practical experience. Participants consistently emphasized that no single profiler can fully account for the complexities of a case in isolation; rather, the most accurate and legally defensible profiles arise from leveraging a diverse array of perspectives and educational/training backgrounds.

Participant P1 described her casework as part of "an extremely small group working cases, not only domestically but internationally," which included linguists, forensic psychologists, and behavioral analysts. She explained that "I always had at least two other agent profilers working with me on the case file, and we'd be bouncing ideas off each other constantly." Her reflection highlights the embedded nature of collaboration within profiling units, as well as the epistemological value of combining different lenses when making behavioral inferences.

Participant P4 echoed this view by asserting that "sometimes I think we just need someone with a different lens, someone outside of profiling, to help interpret what's in front of us." This comment reflects a humility shared by many participants: the

recognition that disciplinary blind spots can be mitigated through dialogue with professionals from law enforcement, forensic science, psychology, and even nontraditional fields. Profiling is thus framed not as a siloed activity, but as one that thrives on interprofessional discourse.

Participant P5 elaborated on this point, noting the importance of intellectual humility and openness to peer input. She remarked, “The humility aspect’s important to really listening to a forensic anthropologist or crime scene analyst who sees something I don’t. If you can’t do that, you’re going to miss things.” Her comment reinforces that technical expertise alone is insufficient. Profilers must also cultivate and maintain continuous professional development that support interdisciplinary learning. In her view, it is not only about being trained in diverse methodologies, but also about respecting others’ training as equal contributors to the profiling process. She also acknowledged the complementary roles of practitioners and academics in advancing profiling efficacy, saying, “I really respect someone like you because you bring academic knowledge that’s often missing when you’ve been in the field too long.”

Participant P9 added another perspective on the interdisciplinary nature of profiling by emphasizing the diverse skillset required. “I may [be a] profiling wizard,” he explained, “but because when you go to learn about profiling, you have to learn really so many other things.” His remark illustrates that profiling demands a synthesis of competencies ranging from sociology and criminology to behavioral science, legal studies, and data interpretation. According to P9, academic training alone can be insufficient unless paired with more applied learning. He reflected that “when my

degree's in sociology, there was so much at a higher abstract level, middle range or grand theory, it wasn't very useful until I started getting into criminal justice courses and honed in on things." This transition from theory to application exemplifies how profiling becomes more effective when grounded in both academic and operational frameworks. He also highlighted the reciprocal relationship between theory and practice, stating, "So the two feed into each other and support each other—the practical and the academic." His comments align with a recurring theme across interviews: the synergy between scholarly foundations and field-based expertise strengthens both the theoretical clarity and practical accuracy of profiling.

These perspectives affirm that modern criminal profiling is a collective and multidisciplinary endeavor. Its success depends not only on the profiler's interpretive skill but also on their ability to coordinate with specialists across fields and to integrate knowledge from both theory and practice. This multidisciplinary approach enhances the accuracy of behavioral assessments, bolsters the credibility of profiles used in court, and contributes to continuous learning within the profession. This theme aligns closely with the study's research question by showing that collaboration and cross-disciplinary expertise are fundamental profiling techniques. It also reinforces the study's broader purpose by identifying a key area for strengthening profiling outcomes, namely: fostering structures and cultures that support interdisciplinary partnerships and reciprocal learning between academics and practitioners.

Theme 5: Rigorous Crime Scene Analysis Provides Profiling Insights

The fifth theme centers around the idea that crime scenes serve as rich sources of behavioral and psychological data when examined with rigor, precision, and interpretive depth. Participants emphasized that detailed observation of the scene, physical evidence, and victim-offender dynamics allows profilers to move beyond surface-level conclusions and infer nuanced aspects of offender behavior, intent, and emotional state.

Participant P2 highlighted the behavioral implications embedded in the physical layout of a crime scene. She noted, “I had found that that is a lot more rare—like finding a body in a way that actually fits cleanly into a motivational or symbolic category. But when you do, it says a lot.” This comment reflects the view that while many crime scenes are ambiguous, distinct patterns in the condition, positioning, or treatment of the victim can offer deep insight into an offender’s emotional state or symbolic intention.

Participant P6 discussed her eclectic approach to crime scene interpretation, illustrating that even unconventional forensic strategies can reveal offender habits. She explained, “I study a little bit of garbology [garbage analysis], I've done it in several cases—it helps to know if they’re messy, methodical, do they double back, do they cover their tracks.” Her comment demonstrates that behavioral inference can be drawn from minor environmental details, reinforcing the idea that crime scene interpretation extends well beyond immediate physical evidence to include subtleties of spatial behavior and environmental manipulation.

Participant P7 reflected on how a scene can be compromised or misunderstood when investigators approach it without behavioral awareness. She stated, “You get to a

crime scene and you want to collect all the evidence, but it's not just about that—it's about what was moved, what was touched, what was left behind, and what's missing. All of that tells a story." Her observation points to a forensic logic in which the absence of something may carry as much interpretive weight as its presence. For P7, the crime scene is a communicative space, where silence, disorder, or absence may signal aspects of offender decision-making.

Participant P9 added a behavioral taxonomy to the conversation, explaining, "And then of course there's mixed. So what does that tell us? It tells us this person has conflicting behavioral traits—organized in some ways, but impulsive in others." His insight reveals that crime scenes are often contradictory, requiring profilers to balance multiple interpretive frameworks to assess whether the offender demonstrates control, confusion, or calculated improvisation. Profiling thus becomes a form of interpretive synthesis where conflicting cues must be reconciled into coherent behavioral models.

Participant P10, with her background in neuroscience, reinforced the scientific foundation of crime scene analysis, describing how specific forensic disciplines contribute to behavioral insight. She shared, "And that also includes bloodstain pattern analysis, obviously, which we used in a case to tell that the victim was dragged—so we knew the primary scene wasn't the same as where the body was found." This technical finding provided a behavioral implication: that the offender intended to conceal or stage the scene. Her comment illustrates how physical forensics are often intertwined with psychological inference, as movement, concealment, or redirection imply specific motives or strategic thinking on the part of the offender.

Collectively, these perspectives make clear that crime scene analysis is not a strictly procedural task but is also a form of behavioral reasoning. When approached with attention to detail, interpretive logic, and contextual awareness, crime scenes become narrative spaces that allow profilers to derive meaningful insights into offender identity, emotional regulation, and cognitive patterns. This theme contributes directly to the study's research question by identifying crime scene interpretation as a primary profiling technique. It also supports the study's broader purpose by showing that weaknesses in profiling arise not only from methodological gaps but also from insufficient engagement with the behavioral nuances embedded in physical evidence. Promoting rigorous, interdisciplinary analysis of crime scenes enhances both investigative outcomes and the legal robustness of profiling findings.

Theme 6: Profiling Plays a Central Role in Threat Mitigation

The sixth theme explores the critical function of profiling in threat mitigation and assessment while acknowledging the inherent challenges in making proactive assessments based on retrospective patterns. Participants widely recognized that profiling offers crucial insights into an offender's risk potential, behavioral escalation, and possible future actions, yet they also noted that the utility of such assessments is often constrained by the timing, availability, and interpretability of information.

Participant P1 captured this tension clearly, stating, "Threat assessment is extremely difficult because you're trying to stop something before it happens, but most of our data comes after the fact." Her comment underscores the backward-looking nature of many profiling tools, which rely on past behaviors to predict future risk—a method that is

invaluable, yet also fraught with interpretive limitations. This paradox lies at the heart of threat mitigation: it must be forward-facing while drawing on rearward data.

Participant P4 echoed this concern, explaining, “The threat assessment that I do would be retrospective… it’s not just about predicting what they might do, it’s about understanding what they've already done and how that maps onto risk factors.” Here, the emphasis is on building a behavioral map that accounts for previous actions and identifying how those behaviors align with known trajectories of escalation. Retrospective analysis allows profilers to categorize risk levels and intervene preemptively, but the insight comes only once a pattern has begun to emerge.

P9 similarly observed that “the threat assessment that I do would be retrospective in the sense that you’re analyzing a timeline of behavior after the client or offender has already started down a particular path.” His reflection illustrates how profiling supports threat mitigation by reconstructing the behavioral evolution of an individual, which involves detecting cues of intent, stress, and disruption that may signal imminent action.

Beyond the timing issue, participants also noted the practical complexity of aligning threat assessment with prosecutorial or legal action. Participant P3 remarked, “I got a case now where it's in another state where the behavior is obviously escalating, but law enforcement says their hands are tied until something actually happens.” His experience points to a systemic gap between behavioral risk identification and legal thresholds for intervention. Profiling may flag high-risk individuals, but unless those risks manifest as concrete criminal acts, mitigation strategies may be limited by jurisdictional and legal boundaries.

P4 further emphasized this dilemma, stating, “When something bad happens and it winds up going to court, everybody wants to know—why didn’t someone catch this? But often, it’s because the behavior wasn’t enough yet to trigger legal action.” His perspective highlights the reactive nature of many threat assessment systems, in which warning signs may be evident but insufficiently actionable under existing policy frameworks.

These participant insights reveal a dual reality: profiling is indispensable in identifying, contextualizing, and prioritizing threats, yet it also operates within reactive systems that limit preemptive intervention. Profilers must not only interpret behavior but also understand how legal, procedural, and ethical boundaries shape their ability to act on risk assessments. This theme directly contributes to the study’s research question by illustrating how threat mitigation constitutes a central profiling function—particularly in cases of violence escalation or pre-incident intervention. It also supports the study’s broader purpose by revealing how current profiling practices can be strengthened through better integration with legal systems and clearer thresholds for proactive engagement.

Theme 7: Deep Reading of Case Files is Paramount

The seventh and final theme emphasizes that effective profiling depends on a thorough, methodical reading of case files, specifically: particularly photographic evidence, autopsy reports, witness statements, and forensic documentation. Participants widely agreed that these documents serve not only as factual repositories but also as interpretive tools that allow profilers to verify behavioral assumptions, cross-check inconsistencies, and generate investigative hypotheses grounded in evidence.

Participant P5 explained that her profiling process typically begins with careful examination of visual and textual records. She shared, “Normally I'm looking at photographs or doing walk-throughs if I can, but if not, I study the file—everything from what the responding officer noted to where blood was found, to what people said in their interviews.” Her description illustrates the immersive and comprehensive nature of effective case file review. The profiler does not rely on one piece of information but instead integrates multiple data points into a holistic understanding of the case.

Participant P7 provided further insights into this process by explaining how photographs become central once foundational details are reviewed. She stated, “So once it gets through those basics, photo documentation and forensic summaries are what I go to next. I’m trying to see whether what the file says matches what the scene actually looked like.” This approach reflects a form of cross-validation where the profiler checks the internal consistency of the narrative against physical and visual evidence. For P7, photographs are not only illustrative but evidentiary—they either corroborate or complicate the stated facts of the case.

She further emphasized the need to reconcile physical and testimonial data, noting, “Does the physical evidence match with what I’m reading in the interview notes? Because if it doesn’t, that tells me something is off—whether it’s witness memory, reporting bias, or something more sinister.” Her reflection underscores that deep reading of case materials is not passive; it is an active interrogation of the alignment, or misalignment, between sources.

P10 added that reviewing autopsy and forensic reports also supports behavioral inferences. She explained, “So in that, my finding would be that the offender is demonstrating control, because the victim’s injuries were targeted and not frenzied. That came through not in the interview, but in the medical report.” This quote supports that critical psychological conclusions may emerge not from overt behavior or statements, but from subtle, scientifically documented evidence such as wound patterns or cause of death analysis. It also illustrates that deep reading of case files enables the profiler to move beyond surface impressions and access latent behavioral patterns.

This theme shows that case file analysis is not simply a preliminary step in the profiling process. Rather, it is a central method of behavioral validation. Profiler accuracy depends on the ability to detect patterns, verify behavioral assumptions, and evaluate discrepancies between accounts, all of which require a close reading of every available document. The process is both investigative and interpretive, demanding a balance of forensic literacy, critical thinking, and behavioral insight. This theme directly supports the study’s research question by identifying case file review as a core profiling technique. It also aligns with the broader study purpose by reinforcing the importance of methodological rigor and evidentiary integrity in developing defensible profiles. In profiling, insight is often embedded in the details and only those who read carefully will be able to make revealing connections that others would miss.

Summary

The thematic analysis of the 10 expert interviews revealed seven core themes that illuminate how profiling is practiced and understood across crime scene, psychological, and geographic subfields. These themes highlight the importance of methodological rigor, interdisciplinary collaboration, data-driven modeling, and detailed case file analysis in constructing reliable profiles. Participants generally were in agreement that effective profiling integrates both scientific and behavioral insights, while also acknowledging the constraints imposed by retrospective threat assessment and legal standards. Together, these findings illustrate profiling as a multidimensional practice shaped by both academic theory and field-based, real-life experience. In the following chapter, these results will be used to directly answer the study's research question and to evaluate the extent to which current profiling techniques support both investigative accuracy and legal admissibility. Chapter 5 will also explore how these practices can be strengthened to reduce methodological shortfalls and affirm profiling's role as a legitimate tool in contemporary criminal justice proceedings.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this study was to examine the practice of profiling techniques in criminal cases. This study sought to aid in improving the practice of profiling by identifying current shortfalls and devising ways of improving them. It focused on distinguishing between malpractices that have created uncertainty in the admissibility of current methods to legal procedures and affirming the potential of profiling as a vital tool in fighting crime.

The purpose of this chapter is to summarize the findings presented in Chapter 4 about the protocols and practices utilized by criminal profilers within their specific subspeciality. In this qualitative research study, I sought to answer the following research question:

RQ1: What are the primary techniques involved in geographic profiling, crime scene profiling, suspect-based profiling, psychological profiling and psychological autopsies?

Data was collected through the use of semistructured interviews until data saturation was achieved. Upon completion of data collection, all of the interviews were transcribed, coded and then analyzed. Data analysis revealed seven major themes: importance of establishing protocols and rigorous methodology, understanding determinants of criminality, quantifying criminality to build models, profiling requires a multidisciplinary approach, rigorous crime scene analysis provides profiling insights, profiling plays a central role in threat mitigation and deep reading of case files is

paramount. I will further address the findings of the emergent themes. I will also discuss the limitations of the research, offer recommendations for further research, consider the study's implications for positive social change, and provide a conclusion to the study.

Interpretation of the Findings

Profiling is a vital process in criminal investigations that facilities the proper identification of offenders in the fight against crime. Broadly defined, profiling encompasses techniques analysts use to identify the conduct, mental condition and personality of known and unknown criminal offenders. Finding viable techniques and protocols to investigate crime has been a significant focus of researchers on crime and related issues. Accordingly, the need to apply profiling techniques in tracking criminals to identify and apprehend them has increased in recent years as serial offenders continue to manifest (Petherick & Brooks, 2021).

Several themes emerged from the research including the importance of establishing protocols and methodology, understanding determinants of criminality, quantifying criminality to build models, profiling requires a multidisciplinary approach, rigorous crime scene analysis provides profiling insights, profiling plays a central role in threat mitigation and a deep reading of case files is paramount.

The first theme that emerged from the analysis was the importance of establishing protocols and methodology. Previous research into the areas of criminal profiling that were studied did not provide any specific and/or consistent modality utilized by profilers within their specific fields. This research affirms that protocols and methodology are core techniques essential for ensuring analytical integrity and legal defensibility and further

supports the broader purpose of this study by identifying a major area for improvement: the needs to institutionalize rigorous, standardized protocols. If profiling within contemporary criminal investigations is to be valued both legally and operationally, these shortfalls need to be reduced.

The importance of interpreting underlying determinants of criminal behavior was identified as the second theme in this research. For those operating in the criminal justice system, we understand that criminality is rarely the result of a singular cause and is, instead, numerous causes that help explain the behaviors observed in a particular case. It is, therefore, critical to recognize when motivations are overlapping and when certain determinants carry more power than others in explaining the behavior.

Third, the research determined that effective profiling relies on the quantification of criminal behaviors. The participants spoke about the importance of quantifying behavior not only enhances the precision of the profile but also aids in its admissibility and persuasive power within investigative and prosecutorial contexts. If profiling is to be found credible and admissible evidence in a court of law, these structured models and measurable indicators can help reduce ambiguity and promote legal credibility.

Fourth, it is clear from the participants that profiling requires a multidisciplinary approach in order to be effective. That was a particular emphasis on the issue that no single profiler can fully account for the complexities in isolation but rather a defensible profile should arise from diverse backgrounds. The research participants affirmed that modern criminal profiling should be looked at as a collective and multidisciplinary

endeavor. For an effective profile, specialists from across fields should be coordinated to integrate knowledge both in theory and practice.

The fifth theme revealed that rigorous crime scene analysis can provide insights into the profile. Crime scenes are rich sources of behavioral and psychological data and a legally defensible profile should include detailed observations of the scene, physical evidence and victim-offender dynamics. Crime scene analysis is not simply a behavioral task but rather a form of behavioral reasoning. The findings from this study confirm that crime scenes become narrative spaces that give profilers insight into offender identity, emotional regulation and cognitive patterns.

The sixth theme explores the critical function of profiling in threat mitigation and assessment. Many participants pointed out that most of their data comes after the fact which makes it difficult to stop something before it happens. Profiling tends to be and operate within a reactive system that limits preemptive intervention. Accordingly, profilers must not only interrupt behavior but also understand how legal, procedural and ethical boundaries can shape their ability to act on threat and risk assessments.

Lastly, a deep reading of case files is paramount. Participants widely agreed that documents contained in the case file not only serve as factual repositories but also as interpretive tools that allow profilers to verify behavioral assumptions, cross check inconsistencies and generate investigative hypotheses. Case file analysis is essential in development of behavioral validation and accuracy of a profile depends on the ability to detect patterns, verify behavioral assumptions and evaluate discrepancies between accounts. Overall, the study highlights the seven themes and the connection of each to

each other in developing profiles which are legally defensible and admissible in a court of law.

Limitations of the Study

Limitations in a qualitative research design are characteristics that may impact or influence the interpretation of the findings. It is important, therefore, to acknowledge the study's limitations as it can be connected to suggestions for further research.

One limitation of this study lies in the sample size. In qualitative research, the challenge lies in selecting a robust enough sample size to provide meaningful findings. (Creswell & Creswell, 2018). The sample size for this research study was ten (10) participants and this can be a limitation in terms of transferability. To avoid these issues, I attempted to obtain data saturation. To gain saturation, I continued to obtain data until saturation was reached. The ten participants consisted of men and women, of varying ages and professional and education backgrounds.

Another limitation of this study is the use of interviews in the data collection process. The issue of truthfulness is a known drawback of this method and participants may withhold information out of fear of how they may be perceived. However, in this study, the individuals interviewed were all professionals within their field of knowledge and expertise and it did not appear that the information being obtained was either dishonest nor was it distorted. The interviewees were not being asked to provide personal experience but rather professional experiences as they related to there fields of expertise.

The presence of bias may always be present as a clear limitation in most studies of this type. Creswell and Creswell (2018) have stated that researchers carry unseen

biases into an interview which can influence the way data is interpreted. In order to avoid bias, I took detailed notes during the interview as well as the data analysis process and referenced these notes to make certain the information obtained was accurate.

An additional limitation related to the difficulty in gathering evidence and obtaining experts in the respective fields of inquiry. Many of those individuals contacted did not respond and therefore it was difficult to locate experts in each of the subcategories of profiling discussed within this study. This resulted in a lengthy recruitment period and a delay in gathering evidence.

Lastly, purposeful sampling was relied upon in selecting participants. Participants who know that they have been chosen for a particular purpose may influence data collection but this study relied on purposeful sampling and the participants in the study were identified and selected based upon their knowledge and experience around a particular topic.

Recommendations

Results from this research study indicated a series of potential research projects that could prove to be invaluable to the area(s) of criminal profiling. This work focused on protocols and techniques of criminal profiling and its subspecialities could be gathered to make profiling legal defensible and, therefore, admissible in a court of law. As the law stands currently, courts are hesitant to allow certain types of profiling to be admitted and much more is needed to solidify their legal status.

Although certain types of profilers, including crime scene analysts and geographic profilers employ methodologically grounded practices to produce reliable outcomes, a

broader purpose of this study identified a major area of improvement: the need to institutionalize rigorous, standardized protocols. By doing this, a reduction in current shortfalls could be created and the legal and operational value of profiling in contemporary criminal investigations could be affirmed.

Additionally, findings obtained within this study suggest that criminal profiling is not about one cause of criminality; rather it is about discerning the relevant combination of causes that give rise to behaviors in a particular case. By further improvement in recognition of determinants of behavior can strengthen the evidentiary foundation of profiling and can lend itself to legal defensibility of profiling techniques. Also identified as an area for further research is the study identified a key area for strengthening profiling outcomes: fostering structures and cultures that support interdisciplinary partnerships and reciprocal learning between academics and practitioners. As part of this concept, further research into promoting rigorous, interdisciplinary analysis of crime scenes will enhance both investigative outcomes and the legal robustness of profiling findings.

Certainly AI as it relates to criminal profiling and the subcategories discussed herein should be researched and addressed. Perhaps AI can assist in profiling by leveraging advanced technologies such as natural language processing. In addition, AI could enhance the accuracy and efficiency of profiling, helping to identify psychological risk factors and analyzing complex data. As with any use of AI, ethical concerns should be raised in researching this issue.

Lastly, gaining insight into how threat and risk mitigation constitutes a central profiling function – particularly in cases involving violence escalation or pre-incident intervention – is a further and continued area of research.

Implications

The findings of this study have begun the outline for criminal profiling and the subspecialties: geographic profiling, crime scene profiling, suspect-based profiling, psychological autopsies and psychological profiling. While there is an enormous amount of literature and documentation on crime profiling generally, I identified a gap in the literature and research regarding what protocols and techniques of each specialty interact with other and how they can be used within the criminal justice system by law enforcement. Further research, therefore, is necessary to gain further insight into these patterns and how they can be used by academics and professionals to create a legally defensible profile for use by law enforcement and the court system. The theoretical foundation utilized in this study was social learning theory. Social learning theory was appropriate because it has been called the dominant theory of crime and delinquency and has been important in the desire to understand why individuals engage in criminal behavior before implementing the tools of criminal profiling. This becomes even more important when looking at the themes generated by this study and in particular looking at more than one cause or motivation for criminal behavior as suggested by the participants in this study.

The thematic coding revealed seven themes on the examination of profiling techniques in criminal cases. Interviews of ten participants were conducted and themes

were developed which suggests that there are certainly common protocols used but also differences in how profilers engage in their craft. Improving how profiles are conducted may provide avenues to educate not only law enforcement but academics and professionals which can lead to quicker apprehension of serial offenders. Data which emerged in this research study provided themes which could further contribute to the professionalization and legal defensibility of profiling techniques used in criminal investigations.

Conclusion

The study sought to answer the following question:

RQ1: What are the primary techniques involved in geographic profiling, crime scene profiling, suspect-based profiling, psychological profiling and psychological autopsies?

The purpose of this study was to examine the practice of profiling techniques in criminal cases, remembering that reliable and legally admissible profiling methods are vital to the fight against crime, especially serial offenses. Seven themes were developed which could aid in improving the practice of profiling by identifying shortcomings and devising ways to improve them through continued research. This study appears to be the first to evaluate techniques used by a variety of experts in profiling and future research could replicate this study by interviewing more participants in a variety of profiling techniques. The findings of this study could be beneficial for not only academics and professionals, but also law enforcement in investigation of cases. The seven themes revealed by the thematic analysis provide insights in how to educate professionals in the

criminal justice system in the diverse techniques utilized by profilers and how they intersect with prosecuting offenders.

References

Akers, R.L. & Jensen, G.F. (2006). Empirical status of social learning theory: past, present, and future. In F.T. Cullen, J.P. Wright, & K.R. Blevins (Eds.), *Taking stock: The status of criminological theory: Vol. 15. Advances in criminological theory* (pp. 37-76). Piscataway, NJ: Transaction.

Akers, R.L. & Krohn, M.D. (2019). Social learning theory and explanations of crime. *Handbook of Crime Correlates, Second Edition*, 179-196.

Akers, R.L. & Sellers, C.S. (2004). *Criminological theories: Introduction, evaluation, and application*. Los Angeles, CA: Roxbury.

Akers, R.L. (1998). *Social learning and social structure: A general theory of crime and deviance*. Northeastern University Press.

Akers, R.L., & Jensen, G.F. (2003). *Social learning theory and the explanation of crime: A guide for the new century.* Advances in criminological theory. New Brunswick, NJ: transaction. https://doi.org/10.1177/009430610403300653

Ali, S. (2021). Criminal minds: profiling architects of financial crimes. *Journal of Financial Crime, 28(2)*, 324-344. https://doi.org/10.1108/JFC-11-2020-0221

American Heritage Dictionary (n.d.).

Ault, R. & Reese, J.T. (1980). A psychological assessment of crime profiling. *FBI Law Enforcement Bulletin, 49*(3), 22-25.

Bandura, A. (1977). *Social learning theory*. Prentice-Hall.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual review of Psychology*, *52*(1), 1-26.

Bandura, A. (2011). Social cognitive theory of mass communication. In J. Bryant & M.B. Oliver (Eds), *Media effects: Advances in theory and research* (3rd ed., pp. 94-124). Routledge.

Bandura, A., Ross, D., & Ross, S.A. (1961). Transmission of aggression through imitation of aggressive models. *Journal of Abnormal and Social Psychology*, *63*(3), 575-582. https://doi.org/10.1037/h0045925

Barr, F., & Mavropoulou, S. (2021). Curriculum accommodations in mathematics instructions for adolescents with mild intellectual disability educated in inclusive classrooms. *International Journal of Disability, Development & Education, 68*(2), 270-286. https://doi.org/10.1080/1034912X.2019.1684457.

Barreda, D.S. (2020). The application of Newton and Swoope's geographical profile to serial killers. *Journal of Investigative Psychological Offender Profiling, 18*, 68-78. https://doi.org/10.1002/jip.1566

Bartol, C.R. & Bartol, A.M. (2013). *Criminal and Behavioral Profiling*. SAGE Publications Ltd.

Benincasa, C., Wachsmuth, W., Bolante, R. & Bailey, T.D. (2023). Special issue on cultural responsiveness in threat assessment. *Journal of Threat Assessment and Management, 10*(2), 75-79. https://doi.org/10.1037/tam0000209

Bhushan, D., Yadav, J., Rozatkar, A. R., Moirangthem, S., & Arora, A. (2023). The psychological autopsy: An overview of its utility and methodology. *Journal of Neurosciences in Rural Practice, 14*, 447–452. https://doi.org/10.25259/jnrp_144_2023

Binti Mustaffa, M., Md Said, M. H., Bin Drs Nasrul, M. A., Bin Hassan, M. S., Rajamanickam, R., & Dahlan, N. K. (2022). Criminal profiling then and now: Prospect and challenges in Malaysia. *Academic Journal of Interdisciplinary Studies*, *11*(1), 80-97. https://doi.org/10.36941/ajis-2022-0007

Black's Law Dictionary (9th Ed. 2009).

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.

Braun, V., Clarke, V. & Hayfield, N. (2022). "A starting point for your journey, not a map": Nikki Hayfield in conversation with Virginia Braun and Victoria Clarke about thematic analysis. *Qualitative Research in Psychology, 19*(2), 424-445. https://doi.org/10.1080/147800887.2019.1670765

Bulman, P. (2014). Solving cold cases with DNA: The Boston Strangler case. *NIJ Journal, 273*, 48-51.

Burgess, R.L. & Akers, R.L. (1966). A differential association-reinforcement theory of criminal behavior. *Social Problems*, *14*(2), 128-147. https://doi.org/10.2307/799032

Canbolat, F. (2018). A qualitative research on suicide notes: Mental representations in suicide notes of men (thesis). Middle East Technical University.

Canter, D.V. (2003). *Mapping murder: The secrets of geographic profiling*. Virgin Books.

Canter, D.V. (2004). Offender profiling and criminal differentiation. *Legal and Criminological Psychology*, *9*(1), 23-46. https://doi.org/10.1348/135532500167958.

Canter, D.V. & Hammond, L. (2007). Prioritizing burglars: Comparing the effectiveness of geographical profiling methods. *Police Practice and Research, 8*(4), 371-384. https://doi.org/10.1080/15614260701615086.

Carminati, L. (2018). Generalizability in qualitative research: A tale of two traditions. *Qualitative Health Research, 28*(13*)*, 2094-2101. https://doi.org/ 10.1177/1049732318788379.

Carpar, E., Balaban, O.D. & Karamustafalioglu, N. (2025). Assessment of Malingering and Clinical Characteristics among Arrest Offenders by Profiling Psychopathic Traits. *Journal of Forensic Psychology Research Practice*, 1-18. https://doi.org/10.1080/24732850.2025.2456726.

Cavanagh, J.T., Carson, A.J., Sharpe, M. & Lawrie, S.M. (2003). Psychological autopsy studies of suicide: A systematic review. *Psychological Medicine*, *33*(3), 395-405. https://doi.org/10.1017/S0033291702006943

Chifflet, P. (2015). Questioning the validity of criminal profiling: An evidence-based approach. *Australian & New Zealand Journal of Criminology, 48*(2), 238-255. https://doi.org/10.1177/0004865814530732.

Cole, S.A. & Lynch, M. (2006). The social and legal construction of suspects. *Annual Review of Law and Social Science, 2*(1), 39-60. https://doi.org/10.1146/annurev.lawsocsci.2.081805.110001

Collins, H. & Evans, R. (2007). *Rethinking Expertise*. University of Chicago Press.

Conner, K.R. & Cox, C. (2008). Confronting the challenges of conducting research with suicide decedents: Insights and common pitfalls. *Suicide and Life-Threatening Behavior, 38*(6), 674-692.

Cook, A.N. & Vargen, L.M. (2023). The empirical grounding of a framework for the risk assessment of violent extremism and other forms of group-based violence. *Journal of Threat Assessment and Management, (10)*1, 57-73. https://doi.org/10.1037/tam0000189.

Cope, D.G. (2014). Methods and meanings: Credibility and trustworthiness in qualitative research. *Oncology Nursing Forum, 41*(1), 89-91.

Cowan, R.G. & Lankford, A. (2023). The Virginia Beach Municipal Center Mass Shooting: A retrospective threat assessment using the WAVR-21. *Journal of Threat Assessment and Management*. https://doi.org/10.1037tam0000203.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications, Inc.

Cullen, F.T., Agnew, R. & Wilcox, P. (Eds.) (2014). *Criminological theory: past to present*. Essential readings. Oxford University Press.

Curtis-Ham, S., Bernasco, W., Medvedev, O.N. & Polaschek, D.L.L. (2022). A new geographic profiling suspect mapping and ranking techniques for crime investigations: GP-SMART. *Journal of Investigative Psychology & Offender Profiling, 19*(3), 03-117. https://doi.org/10.1002/jip.1585.

Department of the Army (1923). Retrieved from ACE, Suicide Prevention for the Army by the Army | Article | The United States Army

Ding, N., Ma, M. & Zhai, Y. (2020). Serial theft case linkage based on a two-step cumulative probability model. *Journal of Investigative Psychology and Offender Profiling, 18*(1), 3-17. https://doi.org/10.1002/jip.1564

Douglas, J.E., Burgess, A.W., Burgess, A.G. & Ressler, R.K. (1988). *Crime classification manual*. Lexington Books.

Douglas, J.E., Burgess, A.W., Burgess, A.G., & Ressler, R.K. (2006). *Crime classification manual: A standard system for investigating and classifying violent crimes* (2nd ed.). John Wiley & Sons.

Elliott, D.S. & Menard, S. (1996). *Delinquent friends and delinquent behavior: temporal and developmental patterns*. In D.J. Hawkins (Ed.), Delinquency and crime: Current theories (pp. 28-67). Cambridge University Press.

Ericsson, K.A., Prietula, M.J. & Cokely, E.T. (2007). The making of an expert. *Harvard Business Review*.

Gardner, W., Lidz, C.W., Mulvey, E.P. & Shaw, E.C. (1996). A comparison of actuarial methods for identifying repetitively violent patients with mental illnesses. *Law & Human Behavior 20*, 35-48.

Gerring, J. (2017). Qualitative Methods. *Annual Review of Political Science, 20*(1), 15-36. https://doi.org/10.1146/annurev-polisci-092415-024158.

Glaser, B. G. (1965). The constant comparative method of qualitative analysis. *Social problems*, *12*(4), 436-445. https://doi.org/10.2307/798843

Glaser, J. (2014). Causes of racial profiling. *Suspect Race*, 42–68.

Greenburg, M.M. (2011). *The mad bomber of New York: The extraordinary story of the manhunt that paralyzed a city*. Sterling/Union Square

Greiwe, T., & Khoshnood, A. (2022). Do we mistake fiction for fact? Investigating whether the consumption of fictional crime-related media may help to explain the criminal profiling illusion. *SAGE Open*, *1.* https://doi.org/10.1177/21582440221091243

Gurguis, C.I., Lane, S.D., Leung, E., Schmitz, J.M., Walss-Bass, C. & Meyer, T.D. (2025). Personality Factors associated with Manner of Death: A Psychological Autopsy Study. *Journal of Psychiatric Research,* 184, 522-527. https://doi.org/10.1016/j.jpsychires.2025.03.2019

Hall, H.V. (2008). *Forensic psychology and neuropsychology for criminal and civil cases*. CRC.

Hazelwood, R.R. & Warren, J.I. (2003). Linkage analysis: Modus operandi, ritual, and signature in serial sexual crime. *Aggression and Violent Behavior, 8(6)*, 587-598. https://doi.org/10.1016/S1359-1789(02)00106-4

Hegarty, A.M. (2015). Crime Classification Manual: A standard system for investigating and classifying violent crimes, 3d ed. *Journal of the American Academy of Psychiatry and the Law, 43*(1), 124-126.

Hirschi, T. (1969). *Causes of delinquency.* University of California Press.

Holmes, R.M. & Holmes, S.T. (1996). *Profiling violent crimes: An investigative tool* (2nd ed.). Sage Publications.

Horsley, S. (2014). The method in their madness: chaos, communication, and the D.C. snipers. *Journal of Communication Management, 18*(3), 295-318. https://doi.org/10.1108/JCOM-01-2010-0003.

Huss, M.T. (2009). *Forensic Psychology: Research, Practice and Applications*. Blackwell.

Jackson, J.R. & Viljoen, J.L. (2022). Preventing school violence: A survey of school threat assessment practices, perceived impact, and challenges. *Journal of Threat Assessment and Management.* https://doi.org/10.1037/tam0000187.

Jackson, J.R. & Viljoen, J.L. (2023). Preventing School violence: A review of school threat assessment models. *Journal of Threat Assessment and Management*. https://doi.org/10.1037/tam0000204

Johal, G., Appleby, L. & Turnbull, P. (2024). Is there still a place for psychological autopsy in suicide research? A literature review of methodological limitations and recommendations for future development. *International Review of Psychiatry*, *36*(4-5), 494-502. https://doi.org/10.1080/09540261.2024.2378075

Kapardis, A. (2024). An overview of offender profiling. *International Journal of Police Science & Management*, *26*(4), 429-433. https://doi.org/10.1177/14613557241298825.

Kayes, D.C. (2017). Experiential learning and its critics: Preserving the role of experience in management learning and education. *Academy of Management Learning & Education*, 1(2). https://doi.org/10.5465/amle.2002.8509336.

Kennao, P., Lal, D., & Kesharwani, L. (2019). Crime scene mapping using differential GPS and geospatial techniques for simulated outdoor crime scenes. Arab Journal of Forensic Sciences & amp; Forensic Medicine, *1*(10), 1387–1396. https://doi.org/10.26735/16586794.2019.028

Keppel, R.D. & Birnes, W.J. (2007). *Signature killers*. HarperCollins.

Keren, G. B. (2019). The journey to Crime & Distance Decay. Krav Maga Boston. https://www.bostonkravmaga.com/blog/criminology/environmental/the -journey-to-crime-and-distance-decay.html.

Kerere, J., Cornell, D., Maeng, J. & Huang, F. (2025). Student Attacks following a School Threat Assessment: Statewide Trends in Student and Case Characteristics. *Journal of Threat Assessment and Management*. Advanced Online Publication. https://doi.org/10.1037/tam0000249

Khabibah, S.U., Ula, M. & Mahojwala, G. (2022). Psychological autopsy: Future implementation in Indonesia? *Forensic Science International: Mind and Law, 3*, 100107. https://doi.org/10.1016/j.fsimi.2022.100107.

Knabe-Nicol, S. & Alison, L. (2011). The cognitive expertise of geographic profilers. In L. Alison & L. Rainbow (Eds.). *Personalizing offender profiling: Forensic and investigative psychology in practice*. Routledge.

Knabe-Nicol, S. & Alison, L. (2024). Existing Understanding of Geographic Profiling Principles within UK policing. *Cogent Social Sciences*, *10*(1). https://doi.org/10.1080/23311886.2024.2313275.

Kocsis, R.N., Hayes, A.F. & Irwin, H.J. (2002). Investigative experience and accuracy in psychological profiling of a violent crime. *Journal of Interpersonal Violence, 17*(8), 811-823. https://doi.org/10.1177/0886260502017008001

Kocsis, R.N. & Palermo, G.B. (2020). Clothes don't maketh the man nor a criminal profiler an expert witness. *International Journal of Offender Therapy and Comparative Criminology, 64*(12), 1317-1340. https://doi.org/10.1177/0306624X20909218

Korstjens, I. & Moser, A. (2018). Series: Practical guidance to qualitative research. *European Journal of General Practice, 24*(1), 120-124. https://doi.org/10.1080/13814788.2017.1375093

La Fon, D.S. (2008). The psychological autopsy. In B.E. Turvey (Ed.), *Criminal Profiling: An introduction to behavioral evidence analysis* (3rd ed., pp. 419-429). Amsterdam: Elsevier/Academic Press.

Lauterbach, D. & Vrana, S. (2001). The psychological autopsy: A roadmap for the study of psychological factors in medical conditions. *Journal of Psychosomatic Research, 49*(6), 403-414.

Lefebvre, V.A. (2019). Social learning theory. *In The International Encyclopedia of Media Literacy* (pp. 1-10). Wiley-Blackwell.

Li, Y.S. & Qi, M.L. (2019). An approach for understanding offender modus operandi to detect serial robbery crimes. *Journal of Computational Science, (36)*. https://doi.org/ 10:1016/jocs.2019.101024.

Lisowska-Kierepka, A. (2022). How to analyze spatial distribution of crime? crime risk indicator in an attempt to design an original method of spatial crime analysis. Cities, 120, 103403. https://doi.org/10.1016/j.cities.2021.103403

Logan, C. & Sellers, R. (2021). Risk assessment and management in violent extremism: a primer for mental health practitioners. *The Journal of Forensic Psychiatry & Psychology, 12*(3)*,* 355-377. https://doi.org/10.1080/14789949.2020.11859591.

Ludwig, C., Graham, I.D., Lavoie, J., Gifford, W. & Stacey, D. (2021). Ethical considerations for engaging frail and seriously ill patients in research: Sub-analysis of a systematic

review. *Research Involvement and Engagement, 7*(1). https://doi.org/10.1186/s40900-021-00254-5.

Lundrigan, S., Weir, R., Newton, A., Agudelo, K., & Dhami, M. (2022). Patterns and predictors of stranger rape locations. European Journal on Criminal Policy and Research. https://doi.org/10.1007/s10610-022-09535-5

Marshall, T.C. (2017). Geographic profiling. In R.N. Kocsis (Ed.), *Criminal profiling*: *International Theory, Research and Practice*. Wiley.

Martineau, M., Spiridon, E., & Aiken, M. (2023). A comprehensive framework for cyber behavioral analysis based on a systematic review of Cyber Profiling Literature. Forensic Sciences, *3*(3), 452–477. https://doi.org/10.3390/forensicsci3030032

Maxwell, J.A. (2021). Why qualitative methods are necessary for generalization. *Qualitative Psychology, 8*(1), 111-118. https://doi.org/10.1037/qup0000173.

Meloy, J.R. & Amman, M. (2016). Public figure attacks in the United States, 1995-2015. *Behavioral Sciences and the Law, 34*(5), 622-644. https://doi.org/10.1002/bs1.2253.

Meloy, J.R., Hoffmann, J. Guldimann, A. & James, D. (2011). The role of warning behaviors in threat assessment: An exploration and suggested typology. *Behavioral Sciences and the Law, 30*(3), 256-279. https://doi.org/10.1002/bsl.999.

Menting, B., Lammers, M., Ruiter, S. & Bernasco, W. (2020). The influence of activity space and visiting frequency on crime location choice: Findings from an online self-report survey. *The British Journal of Criminology, 60*(2), 303-322. https://doi.org/10.1093/bjc/azz044.

Monahan, J. (2012). The individual risk assessment of terrorism. *Psychology, Public Policy, and Law, 18*(2), 167-205. https://doi.org/10.1037/a0025792.

Mundy, C.L. & Cioe, J.D. (2019). Exploring the relationship between paraphilic interests, sex, and sexual and life satisfaction in non-clinical samples. *Canadian Journal of Human Sexuality, 28*(3), 304-316. https://doi.org/10.3138/cjhs.2018-0041

Nassaji, H. (2020). Good qualitative research. *Language Teaching Research, 24*(4), 427-431. https://doi.org/10.1177/1362168820941288.

Nowell, L.S., Norris, J.M., White, D.E. & Moules, N.J. (2017). Thematic Analysis. *International Journal of Qualitative Methods, 16*.

Ogloff, J.R.P., & Otto, R.K. (1993). Psychological autopsy: Clinical and legal perspectives. *Saint Louis University Law Journal*, *37*, 607-644.

Oxford English Dictionary (1st ed.)

Parfitt, R. (2023). Christina Grimmie, the forgotten Murder. How do we detect and stop deranged fans: A case study for threat assessment. *Journal of Threat Assessment and Management,* 10(1), 18-31.

Patton, D., Sodhi, A., Affinati, S., Lee, J. & Crandall, M. (2015). Post-discharge needs of victims of gun violence in Chicago: A qualitative study. *Journal of Interpersonal Violence,* 34(1), 135-155. https://doi.org/10.1177/0886260516669545.

Petherick, W., & Brooks, N. (2020). Reframing criminal profiling: A guide for integrated practice. *Psychiatry, Psychology and Law*, *28*(5), 694–710. https://doi.org/10.1080/13218719.2020.1837030

Pinizzotto, A.J. (1984). Forensic Psychology: Criminal Personality Profiling. *Journal of Police Science and Administration, 12*(1), 637-644.

Posa, F., Leone, J., Rondinelli, V., Sclavi, F., & Posa, M. (2023). Psychological Autopsy Structured on Individual Cases: Methodological Considerations for A New Protocol. Medical Research Archives, *11*(4). https://doi.org/10.18103/mra. v11i4.3719

Pritchett, S. & Moeller, K. (2022). Can social bonds and social learning theories help explain radical violent extremisms? *Nordic Journal of Criminology*, *23*(1), 83-101. https://doi.org/10.1080-2578983X.2021.1889133

Puranik, D., Paul, P. & Krishnamurthy, R. (2015). Application of equivocal death psychological autopsy for investigation: A case study. *International Journal of Indian Psychology,* 2(2). https://doi.org/10.25215/0202.063.

Reference Manual on Scientific Evidence (2011). *National Academy Press*. Washington, D.C.

Ressler, R.K., Burgess, A.W., & Douglas, J.E. (1988). *Sexual homicide: Patterns and motives*. Lexington Books.

Ribeiro, R. A., & Soeiro, C. B. (2021). Analysing criminal profiling validity: Underlying problems and Future Directions. *International Journal of Law and Psychiatry*, *74*, 101670. https://doi.org/10.1016/j.ijlp.2020.101670

Riggio, R.E. (2017). Social learning theory. *In The Oxford Handbook of Personality and Social Psychology* (pp. 256-272). Oxford University Press.

Robinson, O.C. (2023). Probing in qualitative research interviews: Theory and practice. *Qualitative Research in Psychology, 20(3)*, 382-397. https://doi.org/10.1080/14780887.2023.2238625

Rodre, S., Sturup, J. & Masterman, T. (2024). Crime-scene and Offender Characteristics in Conventional and Nonconventional Stranger Homicides in Sweden. *Medicine, Science and Law*, 65(2); 98-112. https://doi.org/10.1177/00258024241255779.

Rossmo, D.K. (2000). *Geographic profiling*. CRC Press.

Rossmo, D.K. (2021). Dissecting a criminal investigation. *Journal of Police and Criminal Psychology, 36*. 639-651. https://doi.org/10.1007/s11896-021-09434-1.

Rossmo, D.K. & Velarde, L. (2008). Geographic profiling analysis: Principles, methods, and applications. In S. Chainey & L. Thompson (Eds.), *Crime mapping case studies* (33-43). John Wiley & Sons, Ltd.

Rossmo, D.K. & Wheeler, A.P. (2024). The Journey-to-Crime Buffer Zone: Measurement Issues and Methodological Challenges. *Journal of Criminal Justice*, *95*. https://doi.org/10.1016/j.jcrimjus.2024.102272.

Saxena, G., & Saini, V. (2017). Psychological autopsy – a way to revealing the enigma of equivocal death. International Journal of Forensic Sciences, *2*(2). https://doi.org/10.23880/ijfsc-16000123

Schunk, D.H. (2016). *Learning theories: An educational perspective* (7th ed.). Pearson.

Shneidman, E.S. (1981). The psychological autopsy. *Suicide and Life-Threatening Behavior, 11*(4), 325-340.

Snider, J.E., Hane, S. & Berman, A.L. 2006). Standardizing the psychological autopsy: Addressing the Daubert Standard. *Suicide and Life-Threatening Behavior,* 36(5), 511-518. https://doi.org/10.1521/suli.2006.36.5.511.

Snook, B., Cullen, R.M., Bennell, C., Taylor, P.J., & Gendreau, P. (2016). The criminal profiling illusion: What's behind the smoke and mirrors? *Criminal Justice and Behavior*, 42(1), 1096-1116. https://doi.org/10.1177/0093854808321528

Snook, B., Eastwood, J., Gendreau, P., Goggin, C., & Cullen, R.M. (2017). Taking stock of criminal profiling: A narrative review and meta-analysis. *Criminal Justice and Behavior*, *44*(2), 145-160. https://doi.org/10.1177/0093854806296925

Spaaij, R. (2012). *Incidence and evolution in understanding lone wolf terrorism*. SpringerBriefs in Criminology; Springer. https://doi.org/10.1007/978-94-007-2981-0_4.

Stephan, U, Patterson, M., Kelly, C. & Mair, J. (2016). Organizations driving positive social change. *Journal of Management, 42*(5), 1250-1281. https://doi.org/10.1177/0149206316633268.

Su, S. (2022). Crime Scene Staging: A denial of justice. *Georgetown Journal of Legal Ethics, 35*(4).

Sutherland, E.H. & Cressey, D.R. (1974). *Criminology* (8th ed.). Uppincott.

Thurairajah, K. (2019). Uncloaking the researcher: Boundaries in qualitative research. *Qualitative Sociology Review, 15*(1), 132-147. https://doi.org/10.18778/1733-8077.15.1.06.

Turvey, B.E. (2011). *Criminal profiling: An introduction to behavioral evidence analysis*. *Academic Press, P.* (2022). Assessment procedures in anonymously written threats of harm and violence. *Journal of Threat Assessment and Management, 9*(1), 1-16. https://doi.org/10.1037/tan0000168.

Van der Kemp, J.J. (2021). The modus via of sex offenders and the use of geographical offender profiling in sex crime cases. In N. Deslauriers-Varin & C. Bennell (Eds.), *Criminal Investigation of sexual offenders: Techniques and challenges* (33-48). Springer International Publishing. https://doi.org/10.1007/978-3-030-79968-7_4.

Van Dongen, T. van, Wentworth, M., & Arkhis, H. R. (2022). (rep.). Terrorist Threat Assessment 2019-2021. International Center for Counter-Terrorism. Retrieved October 17, 2023, from https://www.icct.nl/sites/default/files/2022-12/Terrorist-Threat-Assessment-2019-2021.pdf.

Vecchi, G.A. (2009). Principles and approaches to criminal investigation, Part One. *The Forensic Examiner*. 8-13.

Vollstedt, M., & Rezat, S. (2019). An introduction to grounded theory with a special focus on axial coding and the coding paradigm. *Compendium for early career researchers in mathematics education*, *13*(1), 81-100. https://doi.org/10.1007/978-3-030-15636-7_4

Weisburd, D., Bruinsma, G. J. N., & Bernasco, W. (2009). Units of analysis in geographic criminology: Historical Development, critical issues, and open questions. Putting Crime in Its Place, 3–31. https://doi.org/10.1007/978-0-387-09688-9.

Willmott, D., Hunt, D. & Mojtahedi, D. (2021). Criminal geography and geographical profiling within police investigations – A brief introduction. *Internet Journal of Criminology*.

Yin, R.K. (2016). *Qualitative Research from Start to Finish*, *2nd edition*. The Guilford Press

Young, T.J. (1992). Procedures and problems in conducting a psychological autopsy. *International Journal of Offender Therapy and Comparative Criminology*, *36*, 43-52. https://doi.org/10.1177/0306624X9203600105

Zimmerman, B. J. & Schunk, D.H. (2011). Self-regulated learning and performance. An introduction and an overview. In B.J. Zimmerman & D.H. Schunk (Eds.), Handbook of self-regulation of learning and performance (pp. 1-12). Routledge.