

Criminal Personality Profiling in the Investigation of Violent Crime: Recent Advances and Future Directions

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Criminal personality profiling is the process of analyzing various aspects of violent crime to derive a set of hypotheses about the characteristics of an unknown assailant. The ultimate goal of profiling is to assist in the successful apprehension and conviction of the perpetrator. Recent advances in the development of profiling as a forensic science are reviewed. While it is generally held that profiling is more art than science, there is evidence suggesting that greater scientific rigor can be attained. New methods of standardizing violent crime classification, the qualification of professional profilers as expert witnesses, and standard computerized data bases all point to the potential for a science of profiling. Future directions that may assist in expanding the empirical foundations of profiling are also discussed.

The technique of criminal personality profiling has been developing slowly as a viable investigative tool since the 1970s, when systematic study of the procedure began at the FBI's Behavioral Science Unit. Several different terms have been utilized to describe the technique and will be used interchangeably throughout this article; these include: psychological profiling, criminal profiling, and criminal personality profiling. Regardless of the descriptive label applied, profiling represents an educated attempt to provide law enforcement agencies with detailed information about the personal characteristics of an unknown individual who has committed a violent crime (Geberth, 1981). Data utilized to generate profiles are taken from clues found at the crime scene, as well as from information about the victim, forensic science reports, and witness statements.

Throughout recent history, famous literary figures have piqued the public's interest in the art of solving crimes with the skill of an expert profiler. Such masters as Agatha Christie's Hercule Peirot or Sir Arthur Conan Doyle's Sherlock Holmes are two such expert investigators who have long fascinated readers with their highly

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developed profiling skills. However, not until the last several years has criminal personality profiling developed into a legitimate area of scientific study. As a relatively new area of research, psychological profiling has been given only limited attention.

These are some good literature reviews of the processes and procedures utilized in constructing a detailed profile of an unknown assailant (Dietz, 1985; Douglas, Ressler, Burgess, & Hartman, 1986; Pinizzotto, 1984). However, little has been done in the way of published research on the utility, accuracy, and validity of profiling. The object of this article is to provide a brief overview of criminal profiling, a review of recent research findings and legal developments, and suggestions for further study to guide those who wish to pursue this area of forensic work.

PSYCHOLOGICAL PROFILING: A BRIEF OVERVIEW

The main purpose of profiling is to generate a composite of inferences about an unknown perpetrator that will assist in more rapid apprehension and prosecution (Geberth, 1981). Other objectives which may be subsumed under this overreaching goal include: (1) generating hypotheses which can be used to narrow investigative leads; (2) rendering suggestions for interviewing suspects in order to maximize information which might be obtained; and (3) assessing physical evidence which might be found in the possession of certain suspects (Holmes, 1989).

While all of these goals point to the potential value of profiling, the technique is not suitable for all crime scenes; applications are appropriate only in circumstances where particular features are present (Pinizzotto, 1984). Generally, crime scenes most suitable for profiling are those in which there is evidence of psychopathology on the part of the perpetrator. Examples of appropriate instances where profiling is most effective include crime scenes revealing evidence of sadistic torture, ritualistic behaviour (e.g., vampirism), evisceration, posturing of the body, staging, or acting out of fantasy. Cases involving mere destruction of property, assault, or murder during the commission of a robbery are generally unsuitable for profiling, since the personality of the criminal is not generally revealed in such crime scenes. Likewise, drug induced crimes lend themselves poorly to profiling because the true personality of the perpetrator is often altered.

Far from being a hodgepodge of best guesses about the personality of an unknown criminal, profiling has developed into a systematic process that follows a sequence of steps. The process of generating a behavioral and personality profile has been outlined in detail by other authors (Dietz, 1985; Douglas *et al.*, 1986). Despite different terminologies employed by various professionals, there are several widely recognized stages in generating a criminal profile. The first stage involves the collection of all investigative information from sources such as crime scene evidence, victim characteristics, forensic science information (e.g., autopsy and laboratory reports), police reports, witness statements, and photographs of the victim and crime scene. These data are then assimilated to classify the type of crime committed and assess various risk factors for the victim as well as the perpetrator that may have facilitated or hindered commission of the crime. Next, gathered data are used to reconstruct the crime and to generate a series of hypotheses as to the behaviour of the victim and perpetrator, method of victim selection, sequence of the crime or *modus operandi*, possible motives, and typology of the crime (e.g., organized vs.

disorganized; see Holmes, 1989). Throughout this entire process, hypotheses are constantly tested for their consistency with the available data and with other hypotheses which are taken as valid.

After the crime is assessed, a profile begins to form in which hypotheses as to the demographic and physical characteristics, behavioral habits, and personality dynamics of the criminal are generated. Again, each of these hypotheses is validated against the crime scene analysis, previously derived hypotheses, and any new evidence that is obtained. Once the profile is generated, it is then given to the investigation team and utilized to generate and narrow leads and to interview suspects.

Most profiles read like the typical psychological evaluation report, containing an array of useful information about an unknown individual. As Vopagel (1982) notes, the standard profile generally contains the following: (1) demographic information such as age range, race, degree of occupational skill, marital status, and socioeconomic level; (2) educational level and estimates of intellectual functioning; (3) legal and arrest history; (4) military background; (5) family characteristics; (6) habits and social interests; (7) residence in relation to the crime scene; (8) color, age, and type of vehicle; (9) personality characteristics, including possible forms of psychopathology; and (10) suggested interview techniques.

One of the more interesting aspects of criminal personality profiling is the specific way in which interpretive hypotheses are derived from crime scene data. Why particular significance is given to a piece of evidence is also of great interest. A number of very useful reviews and resources on this topic can be found elsewhere, with sound illustration through case examples (Douglas & Munn, 1992a, 1992b; Douglas *et al*, 1986; Holmes, 1989; Pinizzotto, 1984; Ressler & Shachtman, 1992).

CURRENT RESEARCH DEVELOPMENTS

A number of factors interfere with adequate empirical evaluation into the variables that contribute to the success or failure of profiling techniques. One reason for this lack of systematic research is that mental health professionals and law enforcement personnel often hold different attitudes, values, and priorities in their common efforts to help others (Dietz & Reese, 1986). Mental health professionals often scrutinize the techniques they employ through careful empirical investigation, while law enforcement professionals utilize deductive reasoning and street experience to guide their investigations.

Other factors also interfere with the systematic study of profiling techniques. Whereas mental health professionals may hold to the ideal of carefully designed research in guiding their work, law enforcement requires efficient and rapid results to increase the likelihood that an unknown criminal is quickly apprehended and brought to justice. Additionally, the types of crimes for which profiling is ideally suited involve evidence of bizarre behavior and serial occurrences which often span large geographical areas. Lack of coordination of data from crimes scattered over periods of time or long distances leads to inconsistent methods of classifying crimes, small samples from which an empirical study might be designed, and difficulties in managing the large amount of data that is frequently generated by just one case.

In response to some of these concerns, several projects have been undertaken and summarized elsewhere in some detail (Geberth, 1986; Holmes, 1989). Briefly,

these advances include the use of advanced computer technology to coordinate large data-bases in generating hypotheses used to construct a profile. Several states have developed their own computerized data-bases for violent crime, including the New York State Homicide Assessment and Lead Tracking System (HALT) and Michigan's Homicide Investigative Tracking System (HITS). The national computerized data-base is located at the FBI Training Academy in Quantico, Virginia under the Violent Criminal Apprehension Program (VICAP) operating through the National Center for the Analysis of Violent Crime.

Despite these technological advances that have become well established in the law enforcement field, psychological profiling remains poorly researched and not well understood. It is for this very reason that profiling is frequently referred to as art rather than science. More recently, however, some steps have been taken to correct these problems.

One such advance has been publication of the *Crime Classification Manual* (Douglas, Burgess, Burgess, & Ressler, 1992). This manual represents an attempt to create a uniform system for defining, investigating, and classifying major violent crimes, including homicide, arson, and sexual assault. This method of classification arose from criminal investigative research efforts at the FBI's Behavioral Sciences Unit. Such a taxonomy of crime is similar to the efforts taken in the mental health field to increase uniformity and reliability of psychiatric diagnosis with publication of the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III; American Psychiatric Association, 1980, 1987).

The *Crime Classification Manual* holds promise for greater uniformity in the manner in which violent crime is defined and studied. In the same way that innovations set forth in DSM-III generated rapid growth and renewed interest in researching psychopathology, the *Crime Classification Manual* may refine and improve the study of violent crime. It has yet to be determined whether this promise will be fulfilled.

Another recent area of study on criminal personality profiling is the examination of more accurate and useful methods of information processing. For example, Pinizzotto and Finkel (1990) investigated differences in information processing utilized by four groups of subjects (i.e., professional profilers, detectives, psychologists, and college students) in generating a comprehensive criminal profile for homicide and sex offenses. Results showed that while professional profilers did not process material from the crime scene and associated facts differently from the other three groups, they were more accurate for sex offenses, but not homicide cases. Moreover, professional profilers wrote longer and more detailed profiles and also recalled more details from crime scenes that were considered necessary and important to the profiling process. Greater accuracy was also revealed for the professional, non-student groups, with detectives obtaining greater accuracy than psychologists, who, in turn, were more accurate than students. In sum, the findings point to greater accuracy in profiling by those who have experience in the procedure and who have specialized training in both criminal investigation and human behavior.

From a methodological standpoint, this study by Pinizzotto and Finkel represents a sound first step in the journey toward unravelling questions as to how and why criminal profiling works effectively. While more careful study is required, research in this area is plagued by a number of methodological problems including small sample sizes of professional profilers, the "sanitizing" effect of having to conceal potentially important identifying details and crime scene data in materials utilized

in such analogue study, and the complexities involved in processes utilized to generate a profile. Taking the study of Pinizzotto and Finkel as a starting point, future studies must begin to resolve these issues. Continued efforts in analogue research methods and greater complexity in multivariate research design will undoubtedly help to move empirical efforts in appropriate directions. However, greater cooperation between behavioral scientists, clinicians, and law enforcement personnel will help as well.

Another area of potential value is the design of so-called "consumer satisfaction" studies, such as those often used in assessing the validity or utility of computerized psychological testing reports (Snyder, Widiger, & Hoover, 1990). Under this research paradigm, resulting profiles can be assessed for their accuracy and validity by those who make use of the profiles, namely criminal investigators and police agencies. In this way, researchers can ascertain what specific profiling information and which particular details are of most assistance in guiding the investigation.

LEGAL APPLICATIONS AND ISSUES

One trend in psychological profiling that speaks to its heightening status as a legitimate professional skill and science is the utilization of professional profilers as expert witnesses in criminal trials. According to the well established test for admissibility of expert testimony in *Frye v. United States* (1923), evidence should be generally accepted by the scientific community of which the expert claims membership. While the *Frye* test does not speak to the validity of such evidence, it does allow testimony which will assist the trier of fact in reaching a decision.

Clearly it can be argued that profiling has not yet attained the status of a full-fledged science, but rather remains an art developed through experience. As noted earlier, however, the past several years have seen noticeable movements towards creating a data-base and empirical approach for studying profiling more carefully. With this trend has come the use of experienced profilers from the FBI as expert witnesses in criminal court proceedings. As cited in Douglas and Munn (1992c), such testimony has been qualified and admitted into evidence in *Ohio v. Shelton*, *Louisiana v. Code*, and *Delaware v. Pennell*.

The primary purpose served in allowing expert testimony on profiling is to link several crimes to a single criminal defendant when the crimes involve serial offenses such as rape and homicide. Frequently, such perpetrators are skilled at changing their *modus operandi* (i.e., steps taken in carrying out a crime) to throw investigators off. For instance, a particular serial killer may in some instances utilize materials at the crime scene to tie up a victim while on other occasions use items brought to the scene. In addition, staging is a process whereby the perpetrator alters the crime scene in some manner (e.g., stages signs of a burglary to conceal homicidal intent) to redirect the investigation away from certain theories or leads. In these cases, signature evidence has been offered in the form of expert testimony by trained profilers to provide the trier of fact with information on the signature, or "calling card" facets of different crimes that may link them to a single defendant. As Douglas and Munn (1992c) point out, testimony has been offered in trials regarding a serial rapist's method of degrading victims prior to and during the rape, or a serial killer's

particular method of overkill at a crime scene, to show how signature aspects of a crime can link several cases to a single assailant.

Just as importantly, Douglas and Munn note how signature evidence might also be utilized in the appellate process to exonerate innocent persons previously found guilty. They note the case of one man who was of borderline intelligence, who was arrested for murder and pleaded guilty to receive a life sentence rather than face the death penalty. Signature aspects of subsequent crimes committed by a serial killer matched those of the crime to which this man had pleaded guilty. This evidence was later used to exonerate him, as the crime had been committed by a killer who utilized a particular "calling card."

While criminal profiling has not yet developed into a scientifically based procedure, it holds vast potential for new applications in the legal field other than its use in law enforcement. Through the admission of qualified expert testimony related to profiling, there exists the possibility that the trier of fact may reach a more valid and just decision.

THE FUTURE OF PROFILING

Throughout this article, it has been emphasized that criminal personality profiling is best conceptualized as an art and is only in the preliminary stages of its development as a scientific pursuit. Much of its slow growth can be traced back to the earlier cited issue of divergent values held by mental health and law enforcement professionals. If profiling is to develop into a science, there will need to be closer cooperation among members of these professions as well as greater efforts to link profiling to comprehensive theories of personality.

Clearly the FBI and other state-wide law enforcement agencies have led the way in profiling, as they have access to a large data-base on violent crimes across the country. Much of the research on profiling has taken place at the National Center for the Analysis of Violent Crime, but there is a noticeable lack of research and discussion provided in behavioral and social science journals. One noted profiler from the FBI has commented on the significant contributions made by mental health professionals, with whom he has consulted, who have taken an active interest in the study of aggression, criminal psychology, and psychopathology as they relate to profiling (Ressler & Schachtman, 1992). Thus, one suggestion would be for researchers in the behavioral sciences to become more actively involved in this area of study. Likewise, clinicians have much to contribute by consulting with local law enforcement agencies and offering their specialized skills in the pursuit of rapid and successful solutions to violent crimes.

Another possible direction that future study on profiling might take is the integration of comprehensive theories of personality (e.g., Millon, 1981, 1990) into profile development. One general aspect of personality theory well-suited to profiling is the use of such theory in the prediction of behavior, since theoretical hypotheses drawn from personality theory may be tested through careful study and, if validated, assist in both the explanation and prediction of behavior.

Though profiling continues to develop, its rapid progress has been hampered by uncertainty as to whether it lies in the realm of law enforcement, the behavioral sciences, or somewhere in between. Profiling certainly spans both fields. As any

emerging interdisciplinary field, criminal profiling will best be served by approaches which not only utilize the empirical and theoretical strengths of the behavioral sciences but also respond to the practical experience and needs of those in the law enforcement community.

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