1. OFFENDER PROFILING: THE TRUTHS

1.1. Introduction
1.2. Approach to offender profiling in the USA
1.3. Statistical analysis and offender profiling
1.4. Accuracy of profiles
1.5. US versus UK approaches: general evaluation
1.6. Perception of accuracy of profiles
1.7. Nature of personality
1.8. Similarity of offenders
1.9. Science and profiling
1.10. References

1.1. INTRODUCTION

There are so many films, like "Silence of the Lambs" and television programmes with detectives who have "special abilities" to apply to catching the criminal (usually the serial killer). As exciting as these programmes are, they often have little to do with the reality of criminal detection using offender or criminal profiling. "It is interesting to note that all of these popular portrayals of profiling are somewhat inaccurate because they suggest that profiling is a magical skill somewhat analogous to a precognitive psychic ability" (Muller 2000 p234). Media interest has created the situation where there is "a gross disparity between profiling's reputation and its actual capabilities" (Kocsis 1999).

Offender profiling can be used because a crime or crime scene reflects things about the offender, it is assumed. It is a form of "psychological fingerprint". Ressler et al (1988) pointed out that "men are motivated to murder by their way of thinking. Over time their thinking patterns emerged from or were influenced by their life experiences" (p34). For example, if an individual experienced severe childhood abuse, they may as adults turn to fantasy for gratification as played out in their offences. "When the actual offence is not as perfect as the fantasy, the individual will continue to offend until it becomes perfect (which is unlikely to happen) or he is apprehended" (Muller 2000).

Canter (1989) talked of crime as an "interpersonal transaction". For example, David Berkowitz (figure 1.1) (known as the "Son of Sam" killer) ¹ in New York city who shot his victims without any direct contact with them.

¹ Details of crimes at, for example, http://www.charliemanson.com/crime/berkowitz.htm.
lived an isolated existence. The "psychological fingerprint" is easier to see when there are a series of crimes: serial murder, rape and sexual assault, burglary, arson, or nuisance/obscene phone calls.

(Source: US Federal Gov; in public domain)

Figure - Photograph and police sketch of David Berkowitz in 1977.

Offender profiling has no universally accepted definition, and varies in its use in the USA and the UK. However, Douglas and Burgess (1986) defined it as "an investigative technique by which to identify the major personality and behaviour characteristics of the offender based upon the analysis of the crime(s) he or she has committed" (p1). Table 1.1 summarises some other definitions used.

In the main, it involves the statistical analysis of crime data, behavioural science (including psychology), and detection expertise.

- It is "a technique for identifying the major personality and behavioural characteristics of an individual based upon an analysis of the crimes he or she has committed" (Douglas et al 1986).
- It "focuses attention on individuals with personality traits that parallel traits of others who have committed similar offences" (Pinizzotto and Finkel 1990).
- The "process of inferring distinctive personality characteristics of individuals responsible for committing criminal acts" (Turvey 1999).
- Assumes that the "interpretation of crime scene evidence can indicate the personality type of the individual(s) who committed the offence" (Rossmo 2000).

Table 1.1 - Some definitions of offender profiling.
1.2. APPROACH TO OFFENDER PROFILING IN THE USA

In the USA, offender profiling has been well developed over the last thirty years \(^2\) by the Behavioural Science Unit at the FBI \(^3\) (which was opened in 1972). The FBI prefers to use the term "criminal investigation analysis" (CIA) or "crime scene analysis". When applied to murder cases, the profiler will be given a vast amount of information to assimilate (table 1.2) \(^4\).

- Crime scene details: including photographs, and the medical examiner's report.
- Details of the victim ("psychological autopsy").
- Geographical profiling of the area where the crime(s) committed; eg: type of housing in the neighbourhood; average income of residents.

Table 1.2 - Information given to a profiler after a murder.

Pinizzotto and Finkel (1990) outlined five steps in the profiling process:

i) Assess the type of criminal behaviour with reference to who committed similar acts previously;

ii) Analyse crime scene;

iii) Study background of victim as well;

iv) Establish motives of parties involved;

v) Generation of characteristics or "psychological make-up" of the offender.

The aim of offender profiling is not to provide the specific identity of the offenders, as in fiction, nor will the profiler necessarily be involved in the actual investigation. The aim is to give the police parameters in their search for suspects. These parameters might include gender, educational level, or whether the offender has previous criminal convictions. It is about helping to narrow down the field of many suspects. A series of murders could produce a list of hundreds of possible suspects.

---

\(^2\) The requests for profiling to the FBI rose from approximately 600 per year in 1986 to over 1200 by 1996 showing its increasing popularity among police forces in the USA (Dowden et al 2007).
\(^4\) The characteristics and typologies have been incorporated into “The Crime Classification Manual” (Ressler et al 1992).
The most important distinction in a murder is that of organised/disorganised. The crime scene will give clues to which one, and thus whether the offender is organised or disorganised (table 1.3). Clearly different types of suspects will be investigated in each case. Wilson et al (1997) preferred to see organised and disorganised as two ends of a continuum.

<table>
<thead>
<tr>
<th>ORGANISED</th>
<th>DISORGANISED</th>
</tr>
</thead>
<tbody>
<tr>
<td>MURDER SCENE</td>
<td></td>
</tr>
<tr>
<td>- Planned</td>
<td>- Spontaneous</td>
</tr>
<tr>
<td>- Victim probably stranger</td>
<td>- Victim known by offender</td>
</tr>
<tr>
<td>- Control of victim used</td>
<td>- Little control</td>
</tr>
<tr>
<td>- Body hidden or attempt</td>
<td>- Body not hidden or no attempt to hide</td>
</tr>
<tr>
<td>to hide</td>
<td></td>
</tr>
<tr>
<td>- Evidence hidden or removed</td>
<td>- No attempt to hide or remove evidence</td>
</tr>
<tr>
<td>eg: weapon used</td>
<td></td>
</tr>
<tr>
<td>MURDERER</td>
<td></td>
</tr>
<tr>
<td>- More-than-average</td>
<td>- Less-than-average</td>
</tr>
<tr>
<td>intelligence</td>
<td>intelligence</td>
</tr>
<tr>
<td>- Controls own behaviour</td>
<td>- Uncontrolled behaviour</td>
</tr>
<tr>
<td>eg: does not show anger in everyday life</td>
<td></td>
</tr>
<tr>
<td>- Socially competent</td>
<td>- Socially incompetent</td>
</tr>
<tr>
<td>- Follows murder on news</td>
<td>- Does not follow on news</td>
</tr>
<tr>
<td>- Limited change in behaviour after crime</td>
<td>- Major change in behaviour</td>
</tr>
<tr>
<td>eg: leaves town</td>
<td></td>
</tr>
</tbody>
</table>

(After FBI 1985)

Table 1.3 - Some of the main characteristics of organised and disorganised murder scenes and murderers.

It may be small details that the profiler provides that can make the difference. For example, in the capture of Arthur Shawcross \(^5\) in 1990 in the Rochester area of New York state. The FBI profiler believed that the killer returned to the dead victims to re-experience the pleasure of the killing. The FBI surveillance of the eleventh female victim of Shawcross caught him masturbating near the body (quoted in Brewer 2000).

\(^5\) Details of crimes at, for example, http://www.trutv.com/library/crime/serial_killers/predators/shawcross/life_1.html.
1.3. STATISTICAL ANALYSIS AND OFFENDER PROFILING

The most important technique for profilers is the use of statistics. This is far from glamorous, but hours in front of the computer screen looking for patterns can be very helpful. The collection of data on crimes is thus crucial. For example, in the USA, the FBI set up the Violent Crime Apprehension Program (ViCAP) computer database on murders in 1995. While the Derbyshire police have responsibility for the CATCH'EM (Central Analytical Team Collating Homicide Expertise and Management) database of all child murders in the UK for the last thirty years.

Statistical analysis allows predictions about the killer, and the establishing of patterns. For example, from CATCH'EM, the statistics show that if the victim is male and under sixteen years of age, then in 83% of cases the offender is single. Or if there has been sexual interference with the child's body before the murder, in only 1-2% of cases is the killer the parent(s) or guardian(s) (quoted in Brewer 2000).

The creation of patterns and groupings of offenders have been used for serial murder and rape (Rossmo 1997; table 1.4); sexual assaults (Canter and Heritage 1990; table 1.5); and arson (Canter and Fritzon 1998; table 1.6).

1. Victim search method - how offender obtains victim.

a) Hunter or marauder - looks for particular type of victims near offender's own home. 87% of British serial rapists lived within "offence circle" (Canter and Larkin 1993). The "offence circle is the geographical clustering of the crimes. David Canter has developed a computer programme ("Dragnet") to look at the geographical patterns of crimes. This process is known as geographical profiling ("Mapping Murder" 2002)

b) Poacher or commuter - looks for particular victim away from own home. 51% of US serial rapists lived outside their "offence circle" (Reboussin et al 1993).

c) Troller - opportunistic encounters with victims.

d) Trapper - offender works in a job that allows them the opportunity to meet victims; eg: Gerald Schaeffer, who it is believed killed over thirty women, was a US police officer.

---

6 This is a database of violent crimes and homicides, sexual assaults, missing persons and unidentified human remains (FBI no date).

7 The application of computer software using "circle theory" for 79 US serial killers identified 87% of offenders in 25% of locations (Coffey and Canter 2000). While a computer system called "Criminal Geographic Targeting" (CGT) plots the distance between crimes to produce a "jeopardy surface" which is the probability of areas where the offender lives (Billingham, Brewer et al 2008).

2. Victim attack method - when and where victim is attacked.

a) Raptor - attacks victim on meeting wherever.

b) Stalker - follows victim, and attacks when feels time/situation is right.

c) Ambusher - attacks when victim in situation controlled by offender; eg: offender's home.

Table 1.4 - Victim search and victim attack methods used by serial murderers and rapists.

How female victim treated by male sexual attacker (based on victim statements of 66 UK sexual assaults).

a) Victim as person - conversation during attack; compliments her appearance; attacker mistakenly believes sexual assault is forming relationship, and may ask to see them again; no disguise used.

b) Victim as object - control of victim with blindfold and gagging; offender disguised; woman seen as dangerous by offender.

c) Victim as vehicle - violence (both physical and verbal) used and demeaning comments; attack is reflection of offender's anger.

Table 1.5 - Examples of characteristics of three different types of sexual assaults.

42 offender variables summarised into four patterns of arson (based of 175 arson cases in England).

a) Arson as "expressive object" - serial targeting of particular types of public buildings; prior convictions for arson; offender remains or returns to scene of crime.

b) Arson as "expressive person" - arson as an attempt to restore emotional equilibrium, reduce distress, or attention-seeking; endangers lives; targets residential property; use of multiple ignition points; may even use arson as suicide.

c) Arson as "instrumental person" - specific target after dispute between offender and victim; threats given beforehand.

d) Arson as "instrumental object" - opportunist; empty property targeted; group together rather than individual arsonist.

Table 1.6 - Example of the characteristics of four types of arson.
1.4. ACCURACY OF PROFILERS

The USA approach to offender profiling is classed as a "top-down" approach: interviewing criminals in prison and using that information to understand criminal behaviour. This has included asked convicted murders to profile unsolved murders; eg: Ted Bundy was asked to help with a profile of the at the time unsolved forty-nine (probably) "Green River Murders". He was no help ("Catching the Killer" 2001).

The UK approach is more "bottom-up": working with details and building up specific associations between offences and the offender's characteristics (Boon and Davies 1992).

Many of the famous cases, particularly featured on television documentaries, show the successes of offender profiling. David Canter, in the UK, has had famous successes with his profiles of the "Railway Rapist" (John Duffy) (though subsequently there has been the conviction of an accomplice, David Mulcahy, for the crimes; "Witness and Truth: Railway Murders" 2001), and the serial rapist of elderly women, Adrian Babb, in Birmingham (both in the 1980s) (details of the cases in Canter 1994).

However, there are some who are critical of profiling generally:

The cerebral sleuth relying solely on his acute powers of observation and deductive reasoning to identify an elusive and much feared serial rapist or murderer, is of immediate and obvious appeal. The seduction is such that many profilers have begun to believe their own press (Grubin 1995 p262).

But how to accurately evaluate profilers other than through anecdotes? Three methods have been tried – surveys, experiments, and historical analysis. Here are examples of each of these methods.

1. Surveys

Copson (1995) set out to find how useful the police themselves found offender profilers. A survey was sent out to 48 UK police forces. A large number of police forces (82.6%) did find the profiler "operationally useful", but usually in small ways. The main help was in "furthering understanding of the offender" (60.9%), and rarely with the actual identification of the offender (2.7%). The problem was that many different types of profilers had been used: from psychiatrists to...
therapists. In other words, not always specialists in the field. The British Psychological Society (BPS) has now set up a register of qualified forensic psychiatrists that the police can use.

Studies like this do not have a representative sample of profiles, and they depend on the subjective opinion of investigators after conclusion of a case.

After the event, the "Barnum effect" or confirmation bias can make it appear that the profiler was more accurate than they really were. The "Barnum effect" is the tendency to make general statements which are widely applicable (eg: offender is male between 16-35 years old). The confirmation bias is where information that proved correct is selectively recalled, and the remainder, usually incorrect, is forgotten.

2. Experiments

Pinizzotto and Finkel (1990) compared the accuracy of four trained FBI profilers, six police detectives with profile training, six detectives without such training, and twelve undergraduates using hypothetical cases. The participants were given the information from imaginary sexual assaults. The two trained profiler groups were slightly better at profiling the offenders than the two non-trained groups. The three police groups were better at drawing more information from the crime scene than the undergraduates.

3. Historical analysis

Holmes (1989) analysed FBI cases from 1981, and found that profilers contributed to 17% of arrests.

The ultimate question with using offender profilers relates to what is required of them. To add some information or to identify the offender? The latter is probably asking too much. As Bartol (1999) says: "profiling is probably at least 90% an art and speculation and only 10% science" (p239).

1.5. US VERSUS UK APPROACHES: GENERAL EVALUATION

The FBI's attitude was that "degrees and academic knowledge" were not "nearly as important as experience.
and certain subjective qualities" (Douglas and Olshaker 1997 quoted in Muller 2000). While Canter (1994) noted that "a doctor is not expected to operate on hunch and intuition".

Canter and Alison (2000) felt that FBI profiling was based upon subjectivity and intuition despite its claims otherwise. Depending upon offenders to recall their actions and thoughts has the risk of recall bias, deception, and/or impression management, as well as generalisation issues from a small, statistically unusual population. Offender typologies are open to criticisms over reliability and validity (Gregory 2005).

Francis et al (2004), using solved cases, found that statistical modelling of specific characteristics in hard-to-solve homicides in the UK was more accurate than the similarity or frequency of similar victims/crimes. Statistical modelling was better at predicting the relationship between offender and victim, the ethnic origin of the offender, and age of the offender, but not at predicting previous criminal record or not.

The UK and USA approach is often presented as academics versus practitioners. Generally, "practitioners are primarily concerned with the detailed features of the case at hand, while academics attempt to understand global patterns and global trends" (Alison et al 2004 p72).

Academics argue that practitioners "in providing practical advice to investigations, commonly do not specify which (if any) behavioural, correlational or psychological principles they rely on. Thus it is difficult to distinguish between these purportedly inductive processes from intuition or subjective opinion" (Alison et al 2004 p73).

The strengths of the UK approach based in academic research is that the findings can be scrutinised and debated as with any scientific field (Gregory 2005). However, analysis of statistical data does depend upon official police records which are not necessarily perfect (Coleman and Norris 2000).

In terms of the use of profiling, there is a difference between establishing factual patterns of behaviour and reporting the offender's motivation. Alison et al (2002) argued that the latter is more risky and thus less reliable.

Alison et al (2004) called for a coming together of academics and practitioners in this field rather than "competing" under different names like inductive/deductive or statistical/clinical.
1.6. PERCEPTION OF ACCURACY OF PROFILES

Many statements within profiles are ambiguous or vague (e.g., offender has poor social skills), and are unverifiable (e.g., offender will have fantasised about offence for weeks beforehand). Alison et al. (2003a) suggested that 24% of statements within profiles were the former and 55% the latter. Thus a "'creative interpretation' on the part of the recipient might account for favourable assessments of offender profiles, rather than objective measurable assessments" (Alison et al. 2003b p186).

Alison et al. (2003b) investigated the willingness of individuals to make such "creative interpretations" in two experiments. In study 1, 46 police officers from the UK were divided into two groups. They were given details of a real crime in the UK from the 1970s that involved the murder and rape of a young boy, followed by a specially designed profile that was open to interpretation (table 1.7).

Then half the police officers were given a description of the genuine offender and half a fictional description of an offender completely opposite to the profile (table 1.8). On a seven-point scale (1 = very inaccurate to 7 = very accurate), the officers were asked to rate the accuracy of the profile. The mean accuracy rating was the same for both groups (5.3 out of 7). Specific aspects of the profile were reported as accurate by the participants (table 1.9).

Study 2 used thirty-three more police officers and thirty "forensic professionals" (individuals who worked in the criminal justice system, like probation officers). They were all given details of a murder and mutilation of a young woman in the USA and a genuine profile from the FBI used at the time (table 1.10). Half of the participants were told about the genuine offender and half about a fictional offender who had the opposite characteristics.

The mean accuracy rating of the profile was 5.4 (out of 7) for the genuine offender and 5.2 for the fictional offender. Table 1.11 gives two examples rated as accurate by participants.
1. The offender is an inappropriately immature man for his years. He is psychologically and emotionally retarded for his age.

2. The first thing to note is that the victim and offender spent some time in the car. Much of the discussion between them and the events that ensued began with a sequence of interactions in the car.

3. In terms of the relationship between the offender and the victim I would say that it is built on artifice. The offender is certainly not a blood relation but there is a twisted form of intimacy — a presumption on the part of the offender that it is his inalienable right to subject a submissive partner to sex and degradation.

4. In this offence I would say that the offender is using the victim to express his own frustrations and anger. This may have taken the form of frustration in that the implication of having intercourse may have resulted in the victim being an object simply to remove — just chattel to be disposed of.

5. Although the act of strangulation served the offender's convenient removal of the victim, this act represents a powerful symbol of the extension of sexual dominance over the victim. The offender, at this point will have felt virulent and powerful. He will have revelled in the distorted self-belief that this relationship affords him an inner world that allows him to escape and otherwise meagre existence.

6. Following from this the offence will have represented an escape from a humdrum, unsatisfying life — a momentary event that has, in a distorted way, allowed him to try and satisfy otherwise unfulfilled aspirations. In terms of his generalised sexuality he clearly feels homosexual relationships are beneath him and indeed he may even have an actively homophobic attitude. However, this inner secretive life is internally satisfying because it is something that only he knows about.

(Source: Alison et al 2003b p187)

Table 1.7 - Offender profile used in study 1 by Alison et al (2003b).

<table>
<thead>
<tr>
<th>GENUINE OFFENDER</th>
<th>FICTIONAL OFFENDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 year-old male</td>
<td>38 year-old male</td>
</tr>
<tr>
<td>Stranger to victim</td>
<td>Stepfather of boy</td>
</tr>
<tr>
<td>Offered boy lift in truck</td>
<td>Assaulted on many previous occasions</td>
</tr>
<tr>
<td>Claimed sexual intercourse consensual, but panicked afterwards and murdered him</td>
<td>This time &quot;got carried away and lost control&quot;</td>
</tr>
<tr>
<td>Failed exams recently and &quot;dumped&quot; by girlfriend</td>
<td>Unemployed truck driver</td>
</tr>
<tr>
<td>Strong repressed homosexual urges</td>
<td>History of alcoholism and depression</td>
</tr>
<tr>
<td>No previous convictions</td>
<td>Two previous convictions for sexual offences on young boys</td>
</tr>
<tr>
<td>No unhappy upbringing or violence in family</td>
<td>Abused by own stepfather</td>
</tr>
</tbody>
</table>

Table 1.8 - Main details of offenders given in study 1 by Alison et al (2003b).
Table 1.9 - Two aspects of profile rated as accurate by police officers in study 1 of Alison et al (2003b).

<table>
<thead>
<tr>
<th>ASPECT OF PROFILE</th>
<th>PROFILE SAID</th>
<th>GENUINE OFFENDER</th>
<th>FICTIONAL OFFENDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship between offender and victim</td>
<td>&quot;not a blood relation but there is a twisted form of intimacy&quot;</td>
<td>Stranger (10)*</td>
<td>Stepfather (12)</td>
</tr>
<tr>
<td>and victim (60% said accurate)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation of offender (45% said accurate)</td>
<td>&quot;using victim to express his own frustrations and anger&quot;</td>
<td>Guilt (6)</td>
<td>Anger (11)</td>
</tr>
</tbody>
</table>

(* number in brackets = number of participants who rated as accurate)

Table 1.10 - Offender profile used in study 2 by Alison et al (2003b).

(Source: Alison et al 2003b p195)
(\* number in brackets = number of participants who rated as accurate)

Table 1.11 - Two aspects of profile rated as accurate by participants in study 2 of Alison et al (2003b).

"Individuals appear to selectively attend to 'hits' in the profile with relatively less attention to misses or the fact that the profile is sufficiently ambiguous to potentially refer to quite different individuals" (Alison et al 2003b p192).

1.7. NATURE OF PERSONALITY

The FBI approach is accused of relying on out-dated theories of personality and the consistency of human behaviour (Alison and Barrett 2004).

Offender profiling depends on the consistency and patterns of behaviour. Put another way, that there are fixed personality characteristics that individuals show. Do individuals show the same behaviour in serial offences?

"Naive trait approaches" assume behaviour consistency across situations (offences), and that features of the situation are evidence of underlying characteristics, which show themselves in everyday life (figure 1.2).

FEATURES OF CRIME SCENE BEHAVIOUR
eg: use of restraints

↓

UNDERLYING PERSONALITY TRAIT
eg: need for control

↓

MANIFESTATION OF TRAIT IN EVERYDAY LIFE
eg: controlling trait in family relationships

(After Alison et al 2002)

Figure 1.2 - Assumption of "naive trait approaches" to offender profiling.
"Many statements contained within offender profiles tend to attribute behaviours to underlying, relatively context-free dispositional constructs within the offender" (Alison et al 2002 p117). Thus traits are viewed as stable and determining behaviour.

However, traits are not directly observable and must be inferred from observation leading to a tautological situation. "If a crime is particularly violent, this leads to the conclusion that the offender is particularly aggressive. Similarly, aggressive offenders commit any given crime in a particularly violent way. Thus, traits are both inferred from and explained by behaviour" (Alison et al 2002 p117).

The tendency to infer stable traits from situations despite the fact that studies do not find behaviour consistency across situations, Bem and Allen (1974) called "the personality paradox". General studies of consistency in personality traits and behaviours across situations find low correlations (less than 0.30 or 30% consistency) (Alison et al 2002). On the other hand, individuals are not completely inconsistent between situations.

Tickle et al (2001) admitted that:

Fluctuation in the expression of traits is expected: personality traits seem to be stable over time, but they do undergo slight state fluctuations in the short term. In other words, traits provide a basic personality framework which remains stable in the long term and allows patterns of responses to be established. There exists, however, a range of behaviours and other trait expressions that occur within this framework of stability (p246).

Wetherell and Maybin (1996), taking a social constructionist position, argued that the personality is the product of social situations. It is "the sum and swarm of participation in social life" (Bruner 1990), and thus tends to change based on the situation.

Most people are not predictable in the sense of doing exactly the same thing, except sufferers from conditions that have rigidity of behaviour like obsessive-compulsive behaviour and autism. On the other hand, individuals do show some degree of consistency across situations. For example, self reporting scales of 1-5 tend to find stability because individuals who choose one extreme are unlikely to choose the other extreme next time. Maybe a change from 4 or 5 to 3. Or individuals may select the middle position each time.

It is possible to look for core and peripheral behaviour patterns shown by individuals across
situations. Core behaviour patterns are the same or similar across situations because such behaviours are key to the individual, like the pleasure of the experience. Peripheral behaviour patterns vary and it does not matter to the individual if they are the same across situations. How much of behaviour and which behaviours are core or peripheral will vary between individuals (figure 1.3).

![Figure 1.3 - Two possibilities for core and peripheral behaviour patterns.](image)

Offender profiling will vary in its success for individuals A and B in figure 1.3. In the case of individual A, little behaviour shows consistency across situations. If the core behaviour pattern is the offending behaviour, then profiling will be very effective in pinpointing specifics of the crime, but if the core behaviour pattern is not involved in the offending behaviour, profiling is of limited use. Individual B has more consistent behaviours across situations, and profiling may be useful in finding the patterns in serial offences.

1.8. SIMILARITY OF OFFENDERS

Another key assumption of offender profiling is that offenders who show similar crime scene behaviours will have similar personality characteristics and/or socio-demographic features (known as "homology assumption"; Mokros and Alison 2002).

Mokros and Alison (2002) tested this idea using data on 100 British male stranger rapists (producing 139 cases of sexual assault) based around 28 variables (table 1.12) from a police database (collected between 1974 and 1995).
Table 1.12 - Offence behaviour variables used by Mokros and Alison (2002).

Details of the socio-demographic backgrounds of the offenders and previous convictions on fifteen categories of other offences were collated (table 1.13).

After sophisticated statistical analysis\(^{10}\), the researchers concluded that there was no similarity in socio-demographic characteristics and previous convictions, and variables of the rape situation.

Mokros and Alison (2002) discussed a number of issues related to their findings:

i) In many cases the "homology assumption" has no theoretical basis as to why they should be similarities between offenders.

ii) Some aspects of crime scene behaviour may be better predictors of offender characteristics than others. The question is, then, which aspects of crime

---

\(^{10}\) Smallest Space Analysis (SSA) was used. It is a Multi-Dimensional Scaling (MDS) procedure which presents the correlations between variables as distances in a 3-D geometric space. The closer the two points in the geometric space, the higher the correlation between them.
scene behaviour.

iii) The "homology assumption" tends to ignore situational influences. For example, the use of violence during the rape could be a product of the individual (their preference for such behaviour), or the situation (eg: victim fights back or is perceived to fight back), or a combination of both (eg: perpetrator intoxicated and less inhibited about violence).

iv) The analysis was based upon witness statements collected by the police.

Table 1.13 - Socio-demographic categories and previous conviction categories used by Mokros and Alison (2002).

<table>
<thead>
<tr>
<th>Socio-demographic categories</th>
<th>Conviction categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at the time of the offence.</td>
<td>Theft and like offences</td>
</tr>
<tr>
<td>Ethnicity.</td>
<td>Burglary dwelling</td>
</tr>
<tr>
<td>Employment situation (ie: whether employed or unemployed).</td>
<td>Burglary non-dwelling</td>
</tr>
<tr>
<td>Labour type (ie: whether skilled or unskilled).</td>
<td>Violence minor</td>
</tr>
<tr>
<td>Education level.</td>
<td>Violence major</td>
</tr>
<tr>
<td>Qualifications.</td>
<td>Criminal damage simple</td>
</tr>
<tr>
<td>Whether the offender lives with someone or alone.</td>
<td>Damage endanger life</td>
</tr>
<tr>
<td>Marital status.</td>
<td>Public order/drunkenness</td>
</tr>
<tr>
<td>Imprisonment or detention prior to the index rape offence.</td>
<td>Motor vehicle crime</td>
</tr>
<tr>
<td>Criminal record.</td>
<td>Drugs possession</td>
</tr>
<tr>
<td></td>
<td>Drugs supply</td>
</tr>
<tr>
<td></td>
<td>Indecent exposure</td>
</tr>
<tr>
<td></td>
<td>Indecent assault</td>
</tr>
<tr>
<td></td>
<td>Rape of a female</td>
</tr>
<tr>
<td></td>
<td>Sex crime against a male</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Mokros and Alison 2002 p30)

1.9. SCIENCE AND PROFILING

The objective and scientific status of offender profiling is not aided by statements like this one by Ressler et al (1988): "Although some of the murderers in our study did not report fantasies in a conscious way, their descriptions of the murders they committed reveal hidden fantasies of violence" (quoted in Muller 2000).

Falsifiability is a key criteria for science. "If
one claims that a violent murder is a sign of violent fantasies - even if the murderer does not report any violent fantasies - then how is one to falsify the hypothesis that all murderers have violent fantasies?" (Muller 2000 p249).

Meta-analysis is commonly used to synthesise research literature in an academic field, but not for offender profiling (Dowden et al 2007). Dowden et al (2007) were not able to perform a meta-analysis, but they did produce a systematic review of academic articles between 1976 and March 2007. They collected 132 studies and each was coded in a number of ways (table 1.14) including statistical analysis employed, peer reviewed or not, and methodology (eg: case study, experimental study).

In terms of date of publication, 1996-2005 saw a dramatic increase in the number of articles compared to the twenty years before that. The most common articles were peer-reviewed general crime discussions about profiling (41% of sample) by psychologists with no statistical analysis (table 1.15).

1. Authors: Name of study authors.
2. Affiliation: Discipline of study authors.
   a. Psychologists (>75%).
   b. FBI agents (>75%).
   c. Sociologists (>75%).
   d. Criminologists (>75%).
   e. Forensic Psychiatrists (>75%).
   f. Police (>75%).
   g. Multidisciplinary.
   h. Other (please specify) (>75%).
3. Year: Date of publication.
5. Crime Type:
   a. Serial homicide.
   b. Rape.
   c. Arson.
   d. Homicide.
   e. Burglary.
   f. Child crimes.
   g. Unspecified.
   h. Mixed.
   i. Other.
6. Emphasis: Main emphasis of the article:
   a. Case study: An article that reviews one or several case studies.
b. Comparison study: An article that compares various groups in terms of their performance on a profiling task.

c. Theoretical piece: An article that presents theories about new directions in the field.

d. Evaluation study: An article that evaluates specific profiling methods/techniques.

e. Experimental study: An article that presents an experiment related to profiling (i.e., controlled conditions used to test specified hypotheses).

f. Basic assumption study: An article that tests any of the basic assumptions inherent in profiling (i.e., temporal stability, cross-situational consistency, structure in crime scene behaviours and/or background characteristics, etc).

g. Descriptive study: An article that describes in detail the process of profiling.

h. Literature review: An article whose sole purpose is to review, in detail, past studies done on profiling.

i. Discussion piece: An article with no real academic basis, but rather a brief discussion of past ideas, cases, techniques, or theories (there may be a fine line between this category and some literature reviews, but literature reviews are more focused).

j. Legal implications: An article dealing with any of the legal implications associated with profiling.

7. Statistical sophistication: Level of statistics employed in the study:

a. Zero statistics used.

b. Descriptive statistics used.

c. Inferential statistics used.

8. Peer Reviewed: Is the article from a peer-reviewed journal?

a. No.

b. Yes.

(Source: Dowden et al 2007 Appendix)

Table 1.14 - Coding guide used by Dowden et al (2007).

- Journal publishing most articles - "International Journal of Offender Therapy and Comparative Criminology".

- Discipline of authors - psychologists (34% of authors) followed by multi-disciplinary (28%) (figure 1.4).

- Crime type - unspecified (42% of articles) followed by homicide (20%).

- Most published authors - Richard Kocsis (18 articles), then David Canter (12).

- Type of article - discussion piece (29% of articles).

- Use of statistical analysis - none (57% of articles).

- Peer reviewed - yes (75% of articles).

Table 1.15 - Summary of main criteria of systematic review of 132 articles by Dowden et al (2007).
Despite the fact that offender profiling has become a standard investigative tool in many police jurisdictions, and is slowly finding its way into the courtroom, this review highlights several reasons for concern. For example, while the number of profiling-related publications has increased dramatically over the years, researchers investigating this phenomenon rarely publish multiple articles, and they are generally published across many different journals. In addition, the majority of papers published in the area are discussion pieces, despite the fact that the processes underlying offender profiling are still not well understood from a theoretical perspective. Furthermore, while researchers are submitting their work for peer review much more frequently now than they did in the past, the statistical sophistication of profiling studies is still sorely lacking, with over half of the studies published since 1995 including no statistical analyses at all (p52).

1.10. REFERENCES


Canter, D (1989) Offender profiling Psychologist 2, 12-16


Catching the Killers: Profiles of the Criminal Mind (2001) BBC Television


FBI (1985) Crime scene and profile characteristics of organised and disorganised murderers FBI Law Enforcement Bulletin 54, 8, 18-25


Mapping Murder (2002) Channel Five Television


