

# [Offender profiling and case linkage in criminal investigations psychology essay](https://assignbuster.com/offender-profiling-and-case-linkage-in-criminal-investigations-psychology-essay/)

In recent years, there are more and more people have become increasingly fascinated by offender profiling because of the influence of media. An example of this is the well-known criminal profiling film The Silence of the Lambs, which is based on the Thomas Harris novel of the same name. Some television shows such as Millennium, Profiler and The X-Files are also based around the premise of criminal profiling. However, Hicks and Sales (2006) emphasize that these portrayals encourage the view of profiling as an art rather than a science though these profilers have academic backgrounds and law enforcement experience. The prevalence of offender profiling has grown over the past three decades (Snook, Eastwood, Gendreau, Goggin and Cullen, 2007), although studies suggest that 'profiles have been found to be most effective as an additional tool, not as a solution to specific crimes' (Wilson, Lincon and Kocsis, 1997: 2). Using offender profiling would appear to be more beneficial than relying solely on traditional methods of detection (Ainsworth, 2001). In addition, it is important for police detectives to know which crimes are connected in order to collate and compare the information between these related cases (Egger, 1984 as cited in Rossmo, 2000). This essay will discuss the underlying assumptions of both offender profiling and case linkage, and then argue the usefulness of these practices in criminal investigations.

Offender profiling has been defined by different authors using different terminologies such as specific profile analysis, psychological profiling, criminal profiling and criminal personality profiling. However, the underlying concept of definitions remains the same (Jackson and Bekerian, 1997). Beauregard, Lussier and Proulx (2005) state that offender profiling provides probable descriptive information about behaviours and personality of an offender by using crime scene characteristics in order to narrow the field of suspects and aid in apprehension efforts. Muller (2000) describes the information which the criminal profiler uses is often taken from the scene of the crime, and takes into account some factors such as the state of the crime scene, weapons, behaviours and words to the victim and the geographic patterns of crime. Davies (1992 as cited in Beauregard, Lussier and Proulx, 2005) emphasises that offender profiling is an investigative tool which focus on the analysis of offender's behaviour during the enactment of crime in order to infer some of the criminal's personal characteristics.

In Europe, offender profiling is defined as 'attempting to produce a description of the perpetrator(s) of a criminal offence on the basis of analysis of characteristics of the incident and other background information' (Stevens, 1995: 10), and this definition is adopted in the UK by the Association of Chief Police Officers' Behavioural Science Investigative Support Sub-committee (Ainsworth, 2000). Although the actual process of profiling differs from one profiler to another, the aim remains the same: to deduce the behaviour, personality, and physical characteristics of the perpetrator (Muller, 2000). According to Holmes and Holmes (1996), profiling has the following three main goals: the social and psychological assessment of the offender, the psychological evaluation of relevant possessions found with suspected offenders, and consultation with law enforcement officials about some strategies that should be used in interviewing offenders. The process of constructing a profile of an unknown offender typically includes three stages (Snook et al., 2007). Firstly, collecting crime scene data by police officers is needed and then the data will be forwarded to a profiler; secondly, the profiler will start the analysing of data which from the crime scene; and the last step is the predictions about the personality, behavioural, and demographic characteristics of the likely criminal (Snook et al., 2007). Snook et al (2007) also describe that the processes of analysing crime scene data can be classified two types: clinical and statistical in nature. Clinically oriented techniques are based on the aspects of the profilers' intuition, knowledge, experience, and training to generate predictions. Comparing these with statistically oriented techniques, the latter predictions are based on descriptive and inferential statistical models which derive from the 'analysis of characteristics of offenders who have previously committed similar types of crime' (Snook et al., 2007: 438).

It would seem that profiling appears to be more appropriate for certain types of offence than others (Stevens, 1995). Hazelwood and Burgess (1995) claim that a series of rapes, serial murders, child molesting, ritualistic crimes, threat communications, violence in the workplace, and serial arson are particularly appropriate for profiling. Ainsworth (2000) suggests that murder and more serious sexual offences especially those series of connected crimes are the most common crimes for using offender profiling. Ainsworth (2001) comments that such serious, personal contact crimes involve attacks on strangers are the most difficult cases to solve which are concerned by the police. Wilson et al. (1997) also point out that profiling is most useful in serial offences, profilers can extrapolate and compare data from the multiple crime scenes. However, the FBI holds the point that property crimes and robberies are not particularly suitable for profiling because 'such offences are unlikely to reveal many clues about an offender's underlying personality' (Ainsworth, 2000: 105).

Police forces are always required to focus their investigative efforts to identify crimes which committed by the same offender because the majority of the crimes are committed by the minority of offenders (Woodhams and Toye, 2007). Woodhams and Toye (2007) believe that case linkage can be used to examine the likelihood of a series of offenses being committed by the same unidentified offender in the case of lacking suitable physical evidence, such as DNA evidence. Crime analysts analyze the detailed criminals' crime scene actions to determine whether there is a sufficient degree of similarity in criminal behaviours which committed by a common offender (Woodhams and Toye, 2007). In addition, Holmes and Holmes (2002) suggest that linkage analysis can identify connections between similar crimes committed by different offenders. Nowadays, several computerized systems are used widely at the state or national level to analyze a series of crimes, such as the Federal Bureau of Investigation Violent Criminal Apprehension Program (VICAP), the Royal Canadian Mounted Police Violent Crime Linkage Analysis System (VICLAS), the New York State Police Homicide Assessment and Lead Tracking Project (HALT), and the Washington State Attorney General's Office Homicide Investigation Tracking System (HITS). (Holmes and Holmes, 2002)

Alison, Bennell, Mokros and Ormerod (2002) state that offender profiling rests on two key assumptions in order for profiling to be possible. The first one is the behavioural consistency assumption, which means if serial offenders commit similar offences, they must exhibit behavioural consistency. According to Alison et al. (2002), the variation in behaviour an offender shows must be less than the variation in behaviour by different offenders. The second assumption relies on what Mokros and Alison (2002) have termed the 'homology assumption', which requires that similar offence behaviour of two offenders will match similar characteristics (Goodwill and Alison, 2007). In addition, the process of case linkage also rests on two key assumptions. The first one is the offender consistency hypothesis, the same with the first assumption of profiling. The second assumption of case linkage is that there is variation in the way different criminals commit crimes (Woodhams, Bull and Hollin, 2007). Thus, for it to be possible to link crimes which committed by the same offender, criminals must behave in a stable but distinctive manner (Woodhams et al., 2007).

In terms of the behavioural consistency assumption, it has been hypothesized that each person has a cognitive-affective personality system which would affect the behaviour produced in a given situation (Mischel and Shoda, 1995 as cited in Woodhams and Toye, 2007). This theory implies that when people encounter situations which have a similar psychological meaning to them, they will produce similar behaviour (Woodhams and Toye, 2007). Salfati and Bateman (2005) studied 94 variables relating to serial homicide offences which were obtained from police case files of the Homicide Investigation and Tracking System (HITS) database in Seattle, Washington of USA. They state that serial homicide offenders are consistent across the series of homicides in their crime scene behaviours. Bennell and Canter (2002) analyzed 86 solved commercial burglaries committed by 43 offenders, they demonstrated that commercial burglary offenders are consistent in their burglary behaviours. Moreover, Santtila, Junkkila and Sandnabba (2005) studied 43 serial stranger rape cases which occurred in Finland during the years 1983-2001, they confirm that rape 'has a consistent thematic structure' (Santtila et al. 2005: 102) instead of being a haphazard collection of behaviours.

Whether offenders show more consistency in some criminal behaviour than in others also has received great scrutiny. Researchers group the specific offender behaviours into domains comparing with others in order to investigate whether offenders show greater behavioural consistency across their series of crimes (Woodhams and Toye, 2007). Grubin et al. (2001 as cited in Woodhams and Toye, 2007) imply that behaviours within the domains of control and escape are less dependent on the situation and the victim's behaviour, thus, the control and escape behavioural domains show greater behavioural consistency comparing with the sex and style behavioural domains. Besides that, Bennell and Canter (2002 as cited in Woodhams and Toye, 2007) found that target selection and entry behaviours showed relatively consistent comparing with property stolen by studying the sample of commercial burglaries. However, Goodwill and Alison (2007) stress that the situational determinants of an offense can cause enormous variation in how an offender commits the offense. In addition, Goodwill and Alison (2007) also hold the point that 'the behavioural inferences made about an offender across a crime series are especially vulnerable to violating' (Goodwill and Alison, 2007: 824) the consistency condition. Similarly, Snook, Cullen, Bennell, Taylor and Gendreau (2008) emphasize that offender profiling approaches are based on the lacking empirical support typologies and are often based on an outdated understanding of human behaviour.

In terms of the homology assumption, Mokros and Alison (2002) studied a sample of 100 British male stranger rapists which were indexed with respect to the similarity in the crime scene actions. Mokros and Alison (2002) tested whether increased similarity in offence behaviour coincided with higher resemblance in socio-demographic features and previous convictions. The characteristics they examined including age, ethnicity, employment, education, marital status, and criminal record. They concluded that no evidence for the assumption of a homology between crime scene actions and background characteristics for the rapists in their study. Goodwill and Alison (2007) argue that in the examination of stranger rape which taken by Mokros and Alison, they did not find the evidence for the assumption when examining the joint interplay between behavioural themes. Consequently, Goodwill and Alison (2007) declare that the homology assumption may hold in some cases and not others. Furthermore, they argue that the homology assumption may be dependent on the extent to the behaviours which influenced by situational, psychological or interpersonal factors.

In terms of the second assumption of case linkage, some studies have investigated that crimes committed by the same offender can be differentiated from crimes by different criminals. Bennell and Canter (2002) studied 86 solved commercial burglaries, they found that 43 offenders had distinct behavioural features. Bennell and Jones (2005) reported that various linking features exist in different burglaries, this research also supports the assumption of inter-perpetrator behavioural variation. However, the above studies also indicate that the process of case linkage is not perfect and the linkage accuracy appears to vary with crime type (Woodhams et al., 2007). In contrast, Woodhams and Toye (2007) used measures of predictive accuracy which called areas under the curve (AUCs), and they found that there is high predictive accuracy in their study of burglary.

It tends to be the case that both the findings of offender profiling and case linkage will be greatly useful for solving the offenses in criminal investigations. Offender profiling can 'inform the prioritization of suspects possessing specified characteristics' (Oldfield, 1997 as cited in Woodhams and Toye, 2007: 60), and case linkage can combine police investigative efforts and information from different crime scenes (Grubin, Kelly and Brunsdon, 2001). Besides that, profiles can also be used in providing interviewing skills or approaches for detectives when a potential suspect has been apprehended (Gudjonsson, 1992), and it has important implications when the case goes to trial, because profiles can offer useful strategies for prosecutors to pursue by the personality assessment of the accused, witnesses or indeed juries under voir dire (Wilson, 1997). Furthermore, Holmes and Holmes (2002) stress that linkage analysis systems not only can locate possible suspects from records of similar past offenses, but also provide maximum information for psychological and geographic profiling efforts through the identification of similar crimes.

In spite of the usefulness of profiling and case linkage, Ainsworth (2000) is worried about that the layperson may have an over-optimistic vision of profiling because it has attracted such widespread public interest. Wilson and Soothill (1996) hold the point that a profile will rarely solve a crime or catch a criminal by itself, but is designed to be an aid to the investigating police. Profiling experts also state openly that offender profiles are merely another investigative aid, they 'have never meant to lead exclusively to the apprehension of offenders' (Ressler and Schactman, 1992 as cited in Wilson et al., 1997: 8). Furthermore, Jackson and Bekerian (1997 as cited in Ainsworth, 2000) stress that offender profiles do not solve crimes and the answers they are offered are not solutions, accordingly, profiling should be viewed as a tool which can be extremely useful in guiding strategy development, supporting information management, and improving case understanding. Similarly, Gerberth (1995 as cited in Holmes and Holmes, 2002: 14) asserted that 'Criminal profiling is an excellent law enforcement tool. However, it is just one of many tools and does not replace good investigative techniques.'

Although psychologists have offered very detailed and accurate profiles in a number of famous cases (Canter, 1994 as cited in Ainsworth, 2000), profiles do not always have dramatic and successful results (Ainsworth, 2000). To date, there have been few scientific and systematic studies to test the exact usefulness of profiling even though some profiles have been proved to be accurate and have leaded to the conviction of perpetrators (Ainsworth, 2000). Studies suggest that although criminal profiling is being utilized by police agencies around the world, there is no compelling scientific evidence shows that the profiling is reliable, valid, or useful (Snook et al., 2007). Accordingly, many researchers are reluctant to accept criminal profiling is a reliable and valuable tool. For example, Godwin (1978 as cited in Holmes and Holmes, 2002) asserts that profiling has little effect in solving crimes, and he even describes profiles themselves are dull and tedious. Similarly, Levin and Fox claim that profiles are of little use in identifying the murderers, 'unfortunately, this tool, no matter how expertly implemented, is inherently limited in its ability to help solve crimes' (Levin and Fox, 1985 as cited in Holmes and Holmes, 2002: 275). Snook et al. (2007) conducted a narrative review and a 2-part meta-analysis of the published literature, they concluded that the criminal profiling relied on weak standards of proof and profilers could not decisively outperform other groups in predicting the characteristics of an unknown criminal, they even declared that the profiling was extraneous and redundant in using in criminal investigations. Similarly, Snook et al. (2008) argue that criminal profiling has the potential to mislead criminal investigators, hinder the apprehension of guilty criminals and lead to wrongful convictions.

It would seem that profilers can provide more accurate profiles than nonprofilers even though some of the researchers are reluctant to see profiling as a useful tool. Pinizzotto and Finkel (1990) examined profiles which conducted by professional profilers, detectives, psychologists, and students for a series of cases. Their study found that the profiles offered by the profilers were more accurate than by all of the other groups in most cases. In the sex offender case, the profilers significantly offered more accurate items such as the gender, age, and education of the offender. However, with regard to the homicide case, the detectives were significantly more accurate than the profilers in the items such as the offender's employment and residence. In addition, the study also found that the profilers wrote richer, more detailed reports than the nonprofilers (Pinizzotto and Finkel, 1990 as cited in Muller, 2000). Kocsis and his research team compared the accuracy of professional profilers, psychologists, self-identified psychics, college students, and various groups of law enforcement officers. They found that the profilers provided the actual perpetrators in the largest number of correct predictions (Kocsis, 2003), with the accuracy rates ranging from 46 per cent to 70 per cent (Kocsis, 2004 as cited in Torres et al., 2006). However, there was a notable amount of variability within the profiler group, Kocsis observed that some profilers were much more accurate than others, the cause of the variation was still unclear, whether it was due to overall differences in the profilers' skills or to specific aspects of the cases (Kocsis, 2003 as cited in Torres et al., 2006).

## Table 1: Effect of profiling advice:

## Did the advice…

## YES

## NO

Assist in solving the case?

14. 1%

78. 3%

Open new lines of enquiry?

16. 3%

82. 1%

Add anything to information supplied?

53. 8%

38. 6%

Prove operationally useful?

82. 6%

17. 4%Source: Copson, G. (1995: 21) Coals to Newcastle? Part 1: a study of offender profiling, Special Interest Series: Paper 7, London: Home Office Police Department.

The popularity of profiling is often seen as a measure of its success (Wilson et al., 1997). Pinizzotto (1984) states that in the United States, the FBI has provided profiling assistance on 192 occasions during the years 1971 to 1981. Moreover, Copson (1995) shows that in the United Kingdom, 29 profilers have been responsible for providing 242 instances of profiling advice between 1981 and 1994. However, Snook et al. (2008) claim that profilers always overemphasize the number of correct predictions rather than the proportion of correct predictions. Although there have been very few pieces of research which have tested both the accuracy and usefulness of profiles in live criminal cases, 'Coals to Newcastle? Part 1: a study of offender profiling' is one of the few studies (Ainsworth, 2001). The above table from that study demonstrates that 82. 6% of respondents reported that the advice they received had been operationally useful, though only 14. 1% of officers reported the profiling advice had assisted in solving the case and only 16. 3% of respondents reported that the profiling advice had opened new lines of enquiry. Besides that, there are more than 50 per cent of respondents said that the advice had added new information for the case.

## Table 2: Would you seek profiling advice/use the same profiler again?

## Seek profiling advice again?

## Use the same profiler again?

Yes definitely

126 (68. 5%)

91 (49. 5%)

Yes probably

44 (23. 9%)

48 (26. 1%)

Probably not

10 (5. 4%)

32 (17. 4%)

No

4 (2. 2%)

13 (7. 1%)

Source: Copson, G. (1995: 25) Coals to Newcastle? Part 1: a study of offender profiling, Special Interest Series: Paper 7, London: Home Office Police Department.

The above table shows 126 officers (68. 5%) reported that they would seek profiling advice again definitely in similar circumstances, though less than 50 per cent officers reported that they would definitely use the same profiler again in similar circumstances. In addition, Pinizzotto (1984 as cited in Wilson et al., 1997) found that from 192 requests for profiles, actually only 17 per cent were used to help identify the suspect, however, 77 per cent of the respondents reported that the profiles had helped to focus on the investigation. Furthermore, in the earlier survey, Douglas (as cited in Snook et al., 2008) demonstrated that in the United States, 46 per cent solved cases of the 192 instances were attributed to the offender profiling which provided by the FBI. Similarly, Jackson, van Koppen, and Herbrink (1993 as cited in Snook et al., 2008) showed that in the Netherlands, five sixths surveyed police officers reported some degree of usefulness about the profiling advice which provided by an FBI trained profiler. Another research shows that in the United States, a significant portion of police officers hold the point that offender profiling has its value (Trager and Brewster, 2001 as cited in Snook et al., 2008). Similarly, Torres, Boccaccini and Miller (2006) surveyed forensic psychologists and psychiatrists through the Internet in order to examine their experiences and opinions about profiling. They found that approximately 40 per cent of these professionals feel the criminal investigative analysis is scientifically reliable or valid, and 86 per cent believe that offender profiling is a useful law enforcement tool (Torres et al., 2006).

Ainsworth (2000) points out that many senior detectives have somewhat negative views as to the usefulness of offender profiling which provided by profilers. Copson (1995) explains that the negative views taken by senior detectives may stem from a misunderstanding of what profiling can actually achieve. Copson and Holloway (1997 as cited in Ainsworth, 2000) show that profiling helped to solve only 16 per cent of the crimes in which it was used, and identified the offender in less than 3 per cent of cases. In contrast, Ainsworth (2001) emphasises that we should look into these figures in a little more detail because normally profiling would only be considered when the case was too difficult to be solved. Another reason is that organizations such as the FBI are reluctant to release the figures about the successes and failures of the profiles they provide (Muller, 2000). Britton's implication that a large number of cases continue to be solved by routine police work, not by offender profiling (Britton, 1997 as cited in Ainsworth, 2000). However, Canter (1994) argues that profiling has advantages in terms of the resources which needed to solve any particular crime comparing with that the police throw more and more resources at the crime in the hope that 'something will turn up' (Canter, 1994: 21). When evaluating the usefulness of profiling, it is necessary to consider whether 'the profile is seen in isolation or merely as one part of more general guidance which a psychologist might provide to investigators' (Ainsworth, 2000: 119). Muller (2000) also emphasizes that although 'an incorrect profile has the potential to mislead the investigation' (Muller, 2000: 259), 'this may only be a problem if the police place a greater amount of faith in the profile than they do in their own investigative skills' (Muller, 2000: 259).

Another problem should be concerned is that when evaluating the accuracy of a profile, police officers are excessively subjective (Kocsis, 2003). Smith and Alison (2001 as cited in Kocsis, 2003) found that police officers were unable to discern the difference in the amount of accurate information in two profiles that differed substantially in the descriptions of the offender, police officers tended to interpret ambiguous statements by their own subjective intentions. Kocsis and Hayes (2003) investigated the perceptions of police officers with regard to the utility and accuracy of the profile, also found that 'perception of the accuracy of a profile is quite likely to be associated with the reader's perception regarding the identity of its author'(Kocsis and Hayes, 2003 as cited in Kocsis, 2003: 129). Kocsis and Middledorp (2004) examined a sample of 353 participants in order to explore Kocsis and Heller's findings that the relationship between one's belief and the perceived accuracy of a profile. Kocsis and Middledorp (2004) found that there is a positive relationship between belief and perceived accuracy, they point out that the more an individual believes in profiling, the more likely he or she perceives a profile to be accurate. Ainsworth (2001) also suggests that the dangers of the self-fulfilling prophecy should be concerned because police officers have the cognizant sense that any one psychological profile may fit some individuals, which leads to the impossible totally accuracy. Psychologists will tend to work on the probabilities of offence, in contrast, the police officers tend to operate in terms of guilt or innocence (Ainsworth, 2001).

It would seem that it is difficult to assess the accuracy and the value of profiles. One important question which is always raised is whether profiling can produce new information to an enquiry or whether the profiling can confirm what the police already suspected (Ainsworth, 2001). Ainsworth (2001) implies that in many cases, it is difficult to discern the new material because there may be an overlap between the information that the profiler offers and that which has already been accumulated by the police. In some cases, although the profiler's advice may not be seem as the new information, profiler's input may help police prioritize the different avenues when police identifying a number of different lines of enquiry which they are considering (Ainsworth, 2001). Moreover, the value of profiling may depend on the case on which an opinion is sought (Ainsworth, 2001). For example, profilers can offer deeper insights of some more serious forms of mental illness and some sexual assault cases than non-experts and some police who have little previous experience about those cases.

In conclusion, the future of psychological profiling and case linkage appear promising, research seems to be supporting the underling assumptions of these practices even though there have been few scientific and systematic studies to test the exact usefulness of offender profiling and case linkage. Profiling as an additional tool plays an important role in criminal investigations, especially in serial offences and studies suggest that profilers can provide more accurate profiles than nonprofilers. Case linkage provides a good way to collate and compare the information between related cases, thus, investigative efforts can be combined and can avoid the repetition of investigations. Most police officers would seek profiling advice and case linkage because of the agreement of their usefulness. However, over-optimistic vision of profiling and case linkage should be concerned because they do not always have dramatic and successful results even though many solved cases were attributed to offender profiling and case linkage. Finally, profiling and case linkage are useful tools and cannot replace the other good investigative techniques.