3

PROBLEMS WITH NONSCIENTIFIC PROFILING MODELS

Despite the logic and authoritativeness of the nonscientific models of profiling, these models suffer from seven significant limitations: (a) a lack of goals and standards, (b) use of unclear terms and definitions, (c) misuse of typologies, (d) reliance on intuition and professional knowledge, (e) lack of clear procedures, (f) lack of evidence of investigative value, and (g) misrepresentation of science. These problems are present to varying degrees in each of the models reviewed in chapter 2. Because any model that is to be considered viable as a criminal profiling tool will ultimately need to remedy these limitations, each of the first six limitations is addressed in this chapter. The seventh limitation, misrepresentation of science, is addressed in chapter 5, following an evaluation of the only current scientific model of profiling.

LACK OF GOALS AND STANDARDS

The most fundamental problem plaguing the nonscientific profiling models as a whole is the failure to identify and agree on clear goals and standards for profiling. Goals are vital because they represent the aspirations of the profiling endeavor. Standards are necessary to provide the limits and

guidelines to ensure that profiling moves effectively in the direction of those aspirations.

Goals

Across models, the authors state at least 10 general goals for profiling. However, as can be seen in Table 3.1, the representation of these goals across models is quite variable. In Turvey's (1999) model, a separate chapter (pp. 33–39) addresses goals and lists them clearly for the reader (i.e., to reduce the viable suspect pool in a criminal investigation, to prioritize the investigation into those suspects, to help keep the overall investigation on track and undistracted, to assist in the process of developing interview or interrogative strategy). Holmes and Holmes (1996, p. 3) also included a specific section on their major goals for profiling (i.e., social and psychological assessment of offenders, psychological evaluations of belongings found in the possession of suspected offenders, and suggestions and strategies for interviewing suspected offenders when they are apprehended). In contrast, Turco (1990) did not address goals for profiling at all in his model. Douglas, Ressler, Burgess, and Hartman (1986) and Keppel and Walter (1999) also did not include clear sections in their models that discuss goals, but they did implicitly address goals by referring to intents or uses for profiling (i.e., developing techniques and strategies for interviewing, identifying the major personality and behavioral characteristics of an individual on the basis of an analysis of the crimes, identifying the key crime scene and behavioral factors related to the killer).

To the extent that nonscientific models make reference to goals or intents for profiling, they still offer no consensus on what the appropriate goals for profiling are. For example, should profiling provide an investigative benefit of some kind? Does profiling have a role once a suspect has been apprehended? Turvey (1999), for example, advocated for the use of profiling in all phases of criminal investigation, up to and including the trial phase. At the opposite end of the spectrum, Keppel and Walter (1999) limited their discussion of profiling to the investigation phase.

The specification of goals is also lacking in the area of profiling applications. Although each model conceptualizes profiling as an applied art, there is no clear consensus among the models for discerning which types of crimes are the appropriate subject matter of profiling. Table 3.2 describes the various types of offenses for which the nonscientific models suggest applications. As can be seen in this table, there are some commonalities among models as well as a notable amount of variation. For example, with the exception of the Turco (1990) model, which does not include recommendations about specific crimes for profiling, there is support in all models for the use of profiling in cases of rape and sexual murder. At the same time, this indicates

TABLE 3.1
Nonscientific Models' Stated Goals for Profiling

Model	Analyze crime scene	Provide offender characteristics	Provide leads	Reduce suspect pool	Link crimes	Assess potential for escalation	Evaluate suspect belongings	Interview strategy	Testify at trial
Douglas et al. (1986)	X	X	X					X	X
Holmes and Holmes (1996)		X					X	X	
Keppel and Walter (1999)	X		X					X	
Turco (1990)	No goals stated								
Turvey (1999)	X	X	X	X	X	X		X	X

TABLE 3.2
Types of Offenses Suitable for Profiling

Model	Rape	Child molestation	Nonsexual murder	Serial murder	Sexual murder	Arson	Threats	Hostage taking	Internet crime
Douglas et al. (1986)	X		X	X	X	X	X	X	
Holmes and Holmes (1996)	X	X		X	X	X			
Keppel and Walter (1999)	X				X				
Turco (1990)	No offenses specified								
Turvey (1999)	X		X	X	X	X			X

that there are only two of nine categories of crime for which there is unanimous agreement among models. Part of the difficulty in interpreting this variation is that the models do not provide any explanation or justification for why their choice of applications is appropriate, whether the crimes they suggest are the only crimes that are appropriate for profiling, or why other crimes are not appropriate. For example, Keppel and Walter (1999) limited their suggestions for profiling to rape and rape–murder; however, they did not discuss whether profiling can and should be used for other types of crime as well. The techniques offered by Douglas et al.'s (1986) model also appear to be specific to profiling sexually violent crimes, yet these authors suggested that profiling also has a wide range of other applications, including investigating individuals who write threatening letters. No further explanation is provided to justify such a broad approach. Similarly, Turvey (1999), in his behavior–motivational typology, broadened Groth, Burgess, and Holmstrom's (1977) typology of rapists to include other types of offense on the basis of his assertion that all criminal motives are "essentially the same" (Turvey, 1999, p. 170). Unfortunately, he did not offer any support for such an assertion.

Although the nonscientific models are vague about how narrow or broad the goals for applying profiling should be, they do stop short of explicitly claiming that their profiling processes can be applied to all types of crime. It seems, then, that there must be limitations, but these limitations are not adequately explained to the reader.

Standards for Profiling

There are no standards for evaluating whether profiling accomplishes any of the various goals that are proposed within the models. For example, how would one determine whether profiling is helpful to an investigation? One could ask law enforcement agents about their subjective experiences of profiling, or one could look at multiple cases in which profiling was used and determine how many of those cases were solved. One also could look at cases that did and did not use profiling and determine which group of cases were more likely to have been solved. Because these models are nonscientific, they do not include a formal consideration of reliability, validity, and utility.

However, even within this nonscientific framework there should be some attempt to specify the indicators of success relative to various stages of the criminal justice process. For example, the use of profiling techniques to brainstorm leads early in an investigation could be relatively liberal. It would not seem necessary to place severe constraints on profiling during a stage in which investigators are merely trying to generate ideas. However, one would expect more rigorous standards for the use of profiling during

the trial stage of an offense. Here, there should be a specification of limits to the kind of profiling work that could potentially affect a suspect's life or liberty.

The lack of clear goals and standards evidenced by these models sets the stage for conceptual inconsistencies and a general lack of coherence. Without clear aspirations provided by goals, and a road map for the profiling endeavor provided by standards, it is not surprising that these models are unable to be conceptually precise.

USE OF UNCLEAR TERMS AND DEFINITIONS

A second basic element that is problematic in the nonscientific models is vocabulary. Although easily taken for granted, terms are the starting point from which procedures and concepts are built. Unfortunately, there are problems with terminology both within and among the nonscientific profiling models.

First, the terminology used to describe profiling techniques and various elements of crimes is not consistent among models. For example, the Douglas et al. (1986) model describes serial killers as individuals who have three or more victims, with an emotional cooling-off period between each victim. Holmes and Holmes (1996) also described serial killers as having three or more victims, but they did not include an emotional cooling-off period component in their definition. Turvey (1999) used the term *serial homicide* (p. 287), rather than *serial killer* or *serial murder*, and defined this as "two or more related cases involving homicide behavior" (p. 287). Another example is the definition of *modus operandi* (MO). Turco (1990), Douglas et al. (1986), and Turvey (1999) all described MO as an element of criminal behavior that changes over time. In contrast, Holmes and Holmes (1996) described MO as remaining similar and being repeated many times during a series of crimes. In discussing the aspect of signature, Turvey (1999) and Douglas et al. (1986) both highlighted that signature behaviors are those that fulfill psychological needs for the offender. Holmes and Holmes (1996) simply defined *signature* as "the unique manner in which [the offender] commits crimes" (p. 42). Turco did not include signature in his discussion of MO. Although this lack of consistent terminology among models is disappointing, it is not surprising. It reflects the reality that there is still considerable disagreement within this field about what the important terms are and how best to define them.

Second, although disagreement about terminology among models is somewhat palatable as long as the field is still evolving and moving toward a consolidation of vocabulary, within models authors must define terms clearly if their models are to be valid and reliable. This basic require-

ment is unfortunately lacking in the nonscientific models. Some, such as the Turco (1990) model, simply introduce terms such as "dyscontrol syndrome" (p. 151) or "pre-Oedipal matrix" (p. 151) and leave them with no further definition or explanation. Other models present novel terms (often coined by the authors) with vague definitions. Examples of this include Turvey's (1999) "scientification" (p. 257) and Douglas et al.'s (1986) "organized/ disorganized offenders" (p. 412). Such catchphrases seem to serve the purpose of allowing the authors to claim that they have invented something new in the realm of profiling. However, without clear definitions it is impossible to evaluate the meaning of these words, to differentiate them from ideas that have been considered before, and to evaluate whether they incrementally add value to the profiling process.

Third, in some models there is a failure to distinguish between the terms presented. For example, in Douglas et al.'s (1986) model, the distinction between *spree murders* and *serial murders* is left unclear. Similarly, in Holmes and Holmes's (1996) model the authors use the terms *pedophile* and *child molester* interchangeably, even though they initially discuss them as separate concepts.

Because of this failure to define terms, explain their meanings clearly, and distinguish them from similar terms, assessing the validity of each model is impossible. The problems with profiling vocabulary also indicate that these models will likely be used inconsistently by different profilers. Finally, the reviewed models establish a weak foundation for their profiling concepts.

MISUSE OF TYPOLOGIES

With the exception of Turco's (1990) model, each of the nonscientific models of profiling uses at least one typology. Unfortunately, these models are limited by their failure to adequately address the appropriate use of typologies, present consistent typological categories, and present sufficiently distinct typological categories. The failure to address these issues compromises the conceptual clarity of the models.

Appropriate Use of Typologies

By clustering crimes or offenders according to general similarities among them, typologies can provide profilers with a general picture of an offender. As would be expected, typological categories are often somewhat general, and an individual may not match every element of a category, or may match elements of more than one category. Unfortunately, some of the authors, such as Holmes and Holmes (1996) and Keppel and Walter (1999), misuse typologies by advocating that offenders be matched to

typological categories as if they were working with taxonomies. This is conceptually confusing because it creates the expectation of certainty in the assignment of an offender to a specific category, even though there is only a limited amount of behavioral information available. In addition, these authors provided no supportive arguments for using typologies in such a manner.

Inconsistent Presentation Within Typologies

The typologies discussed in the reviewed models are themselves problematic. The Holmes and Holmes model (1996) contains numerous examples of inconsistencies within typologies because of its exclusive reliance on typology matching (i.e., trying to match offenders to typologies). First, in their serial killer typology, the authors began with an "initial distinction" (Holmes & Holmes, 1996, p. 63) whereby they divided serial killers into those who are geographically stable and those who are geographically transient. They then leave this distinction and proceed to separate serial killers into various categories according to motive, with no further mention of their geographic stability or transience and no explanation as to how these geographic categories are related to motivational type. Second, in the arson typology, the authors presented three ways to approach the categorization of arsonists: Two of these approaches are based on motive, and the third is based on the organized–disorganized offender dichotomy. No information is provided on the relationship of these three typologies to each other, or whether they are to be used separately or in combination. Third, in the child molester typology, Holmes and Holmes (1996) used the terms *pedophile* and *child molester* interchangeably. In addition to being problematic for definitional reasons, once the authors combined these terms into one concept they then separated them again under the headings of *situational* and *preferential* child molesters—with preferential child molesters being pedophiles. This is problematic because Holmes and Holmes (1996) did not consistently present pedophiles and child molesters as either a singular entity or a combined concept. The reader is left without a clear understanding of whether these two terms represent one or two concepts. Fourth, in the rapist typology, the authors defined the motive of the power-assertive rapist as an "impulsive act of predation" (Holmes & Holmes, 1996, p. 125). However, they then report that this type of rapist commits his offenses in "a 20–25 day cycle, a time span strangely similar to the length of a menstrual cycle" (Holmes & Holmes, 1996, p. 127). Not only is the rationale for comparing the rapist's MO to a menstrual cycle unclear but, more important, the implication that this type of rapist offends cyclically belies the earlier statement that he is impulsive. Fifth, in discussing geographic profiling, Holmes and Holmes (1996) asserted that crime scenes, dumping sites, and other

crime locations represent "choices on the part of the offender [and] should not be considered to be mere accident" (p. 154). This typology is incongruent with their assertion that many criminals are disorganized offenders. If certain individuals are disorganized, it would seem difficult to apply a geographic profile that shows organization—at least in the location of the crimes. This lack of coherence also applies to other categories of individuals who assault victims impulsively or out of opportunity (e.g., various types of situational child molesters, and the "visionary" serial killers, who are described as being "truly out of touch with reality"; Holmes & Holmes, 1996, p. 64). Because impulsivity implies a lack of preplanning, a location or geographic profile would also seem difficult to establish for these offenders.

Other models also evidence similar problems. Turvey (1999), for example, claimed that his adapted behavior–motivational typology applies to many types of criminal motives, yet each typological category specifically addresses sexual behavior. Keppel and Walter (1999) provided information about the kinds of statements each category of offender in their rape–murder typology would make to their victims during the assault. Unfortunately, these statements are unlikely to be a source of assessment, because the victim will be deceased and therefore unable to report what was said to her.

In order for these typologies to be useful, they must be constructed in a manner that is conceptually coherent. It is unfortunate that in the nonscientific profiling models there is very little cohesion among concepts within individual typologies, making them theoretically problematic and difficult to use.

Overlap Among Typological Categories

When there is significant overlap among categories in a typology, the same crime information could be consistent with more than one type of offender. This is a problem inherent to all typologies. In the area of profiling, this makes it difficult not only to identify the correct category for a particular offender but also to justify the existence of distinct categories of offenders when large numbers of characteristics are present across the various types. Although this does not render typologies completely useless, it does necessitate that models using typologies consider the implications of this problem and make every attempt to clarify categories to the extent possible.

The nonscientific models of criminal profiling do not address this problem. For example, in the Douglas et al. (1986) model, whose relevant typology is the Crime Classification Manual (Douglas, Burgess, Burgess, & Ressler, 1992), there is potential overlap between the categories of spree murder and serial murder. With regard to the definitions of these terms, there appear to be two primary differences between these two types of killings. The first is described as an emotional "cooling-off period" (Douglas

et al., 1986, p. 410) that is present only between serial murders. What is the difference between the serial and spree murders if there is a long-duration spree murder that continues from one evening until the following afternoon, with breaks between each victim? How long must a pause in killing last to constitute emotional cooling off? If the difference lies in the thought processes of the offender rather than the length of time, how is a profiler to ascertain this difference on the basis of crime scene evidence? The second difference between serial and spree murderers is a deliberate selection of victims characterized only by serial murderers. Although the general picture of the spree murderer provided by the authors is of a person who typically kills random people who cross his path, the possibility remains that a spree murderer might target certain individuals more than others. For example, a disgruntled employee might go to various locations of a chain restaurant and kill employees at each location. In this case, victims would be deliberately selected, even though the general picture would otherwise be that of a spree murder rather than a serial murder. Douglas et al. (1986) did not make these finer distinctions or address situations in which a killing overlaps two different categories.

Similar problems can be found in Holmes and Holmes's (1986) model. Their child molester typology contains considerable overlap in terms of behavioral and personality characteristics. For example, both sadistic and fixated child molesters prefer child victims, use computer bulletin boards, and victimize in large numbers. Immature, regressed, and fixated child molesters are all likely to molest children they know, have a nonaggressive personality, refrain from abducting or harming the child victim, and tend not to be antisocial. There is also conceptual overlap between categories in the arsonist typology. For example, both the crime-concealment arsonist and the profit-motivated arsonist are likely to be single adults with arrest records, commit their crimes in the evening without accomplices, use alcohol or drugs, live more than 1 mile from the crime scene, and flee the scene after the fire is set. The vandalism and excitement types of arsonists are both likely to be unemployed, middle-class juveniles with arrest histories, who set their fires in the afternoon, live less than 1 mile from the crime scene, remain at the crime scene after the fire is set, and do not use alcohol or drugs.

Keppel and Walter's (1999) typology also contains considerable overlap among categories. For example, at least two different types of offenders are likely to leave a disorganized crime scene; three types of offenders are likely to take souvenirs, have a previous criminal history, and have had previous contact with the mental health system; and all four types of offenders may have served in the military and are likely to plan their assaults, use a weapon, leave bruises on the victim's body, view pornography, and have emotional and relational problems.

In Turvey's (1999) behavior–motivational typology, four of the five categories include using surprise as a likely method of approach, all five categories include attack with a weapon, and three of the five categories are described as containing an attack of short duration. In addition, it is difficult to fully evaluate the extent to which Turvey's categories overlap, because the types of information he included in his typology are not consistent across categories. For example, he did not address signature behaviors in the power-assertive category, he did not address the duration of the attack in every category, and he did not address the use of foreplay with victims in every category. It may be that these elements are not present in the categories for which they are not addressed, but this is not made clear to the reader.

Value of a Typology

Even if an unidentified offender could be correctly matched to a typological category, it is unclear how that classification would be useful to investigators in terms of identifying and apprehending that offender. For example, how would it be helpful for a law enforcement agency to be told, even with certainty, that the unidentified suspect is an anger-exploitive rapist—that he is a macho sociopath who picks victims up in bars and drives a flashy car? This same information could be obtained from a surviving victim, eliminating any incremental investigative value of consulting a profiler. If there is no surviving victim, should detectives conduct sweeps of bars and interview all men therein who drive "flashy" cars? What constitutes "macho" or "flashy"? It does not seem that the classification of an unidentified offender into a typological category, which essentially resembles the generalities of a horoscope, provides any useful information that could not also be provided by a lay observer. Providing such information is therefore unlikely to advance a criminal investigation.

RELIANCE ON INTUITION AND PROFESSIONAL KNOWLEDGE

Whether the authors condemn it or embrace it, each of the nonscientific models entails some use of intuition. Holmes and Holmes (1996) advocated maximizing the use of intuition, stating that profilers are "aided by an intuitive sense, that is . . . a 'feel' for certain kinds of crime" (p. 7). At the other end of the spectrum, Turvey (1999) stated that intuitive judgments "should be left out of investigative strategy, suggestions, or final profiles unless reasonable articulable arguments for their inclusion exist" (p. 38).

Although one could say that all psychological evaluations and assessments use some degree of intuition, or at least judgment, the use of intuition

in profiling is limiting for two reasons. First, using intuition reduces the profile's reliability. It seems unlikely that multiple profilers would have the same subjective experience, given the same set of information. It also seems unlikely that judgments based on intuition could be repeated consistently, given the same set of information. If profiling outcomes cannot be accomplished reliably because of the use of intuition, the result is that investigative decisions will be made haphazardly. But for the intuition of a particular profiler, an innocent suspect might not be made the target of an investigation, whereas another profiler could lead the investigation in a different direction with a focus on a different suspect.

Second, none of the nonscientific models attempt to validate their recommendations. If different profilers have different intuitions about the same case, only one can be correct. In addition, because there is no way to determine in advance which intuitive judgments are correct and which ones are wrong, the potential consequences become more dire, the longer it takes an investigative agency to verify the accuracy of profiler intuition in a particular case. At the very least, an investigation could momentarily be steered in the wrong direction if the profiler speculates incorrectly that an offender is of a certain age or physical type. A moderate consequence might be that a serial offender, for example, is able to kill more victims while an investigation focuses away from him and toward the wrong type of perpetrator, on the basis of a profiler's intuitive recommendation. Perhaps the most severe outcome might be that a law enforcement agency never realizes that the profiler's intuitive judgments were incorrect and pursues, apprehends, and brings to trial an innocent suspect while the real perpetrator remains free. Therefore, although these models characterize intuition in various ways, ranging from an ideal method to a necessary evil, the risk of making mistakes is increased with intuition, and the consequences are significant.

LACK OF CLEAR PROCEDURES

For numerous reasons, all of the models fall short of providing the reader with clear procedures to create an offender profile. First, if one of the basic goals of profiling is to identify an unknown offender from crime information, it would seem appropriate to focus the most attention in a model on explaining exactly how offender characteristics are to be determined from the crime scene evidence. Unfortunately, none of the reviewed models provides this information. For example, the Douglas et al. (1986) model advises the reader to include the offender's physical characteristics (height, weight, eye color, etc.), hobbies, and interests in the finished profile, yet there is no mention of how these characteristics are to be ascertained. Holmes and Holmes (1996) advised the reader that "The profiler must take

into account the total crime scene in order to form a mental image of the personality of the offender" (p. 39), but this instruction is hardly sufficient for determining how this mental image is to be derived, what parts of the offender's personality are being imagined, and how this translates into accurate offender characteristics. Turvey (1999) explained that offender characteristics are to be "deduced" from crime scene evidence, but his deductive method is an ill-defined process that is never adequately operationalized in his book. Turco (1990) limited his procedural instructions for determining offender characteristics to suggesting that the reader "consider the crime scene" (p. 150) and use "understanding . . . and . . . appreciation" of psychodynamic principles (p. 151). He discussed four key dimensions of profiling (i.e., a projective consideration of the crime scene in its entirety, integrating knowledge about neurological behavior, taking a psychodynamic perspective, and studying the demographic characteristics of the crime) that seem to bear no clear relationship to each other, except for the first and third, which are sufficiently vague that they appear to represent the same concept (see chap. 2), and Turco provided no procedures for transforming these dimensions into a profile of offender characteristics. Keppel and Walter (1999) made reference to the kinds of offender characteristics that typify the different categories of their typology, but they provided no information on how to arrive at such characteristics.

This failure on the part of all the reviewed models to clearly explain how to derive offender characteristics from crime scene evidence is problematic because in most cases these characteristics are required as part of the output of a profile. Furthermore, it is this absence of procedures that opens the door for the use of intuition in profiling practice. Indeed, some authors (Holmes & Holmes, 1996; Turvey, 1999) consider the determination of offender characteristics to be an artful skill. As discussed in the previous section, the use of such intuition in criminal profiling is problematic.

Second, given that four of the five nonscientific profiling models reviewed advocate for the use of typologies, it is troubling that none of these models explains how to use one. How does one select a typological category for a particular offender? This is a basic procedural issue, which none of the models using typologies explicitly addresses. It would seem that there are at least three possibilities for selecting a typological category for a particular unidentified offender. First, one could look at the descriptions of each category separately and, on the basis of some threshold of fit, determine whether the unidentified offender matches that category. This process would be repeated for each subsequent category in the typology, which could result in the offender fitting into all of the categories, some of the categories, or none of the categories. Alternatively, one could look at the four categories collectively and determine which category is most similar to the hypothesized characteristics of the unidentified offender. If none of the categories seemed

appropriate, then the offender would not be matched. In this process, either no category or only one category would be selected, on the basis of the closest fit with the offender. Finally, one could force the assignment of the offender into a typological category; that is, similar to the second method, the categories would be evaluated together to determine which category is the closest match for the unidentified offender. However, rather than having the option of leaving the offender unmatched to a category, the profiler would be required to select the best of the available options. A potential consequence of this process is that two different offenders, one of whom matched very closely the description of a category and one of whom was a poor match but who was an even poorer match to the other categories, could be placed into the same category.

Despite these various options, none of the models advises the reader as to which of these three methods, if any, should be used in selecting a typological category. Keppel and Walter (1999), in their model and accompanying study, seemed to endorse the method of forcing an offender into a typological category, because they used this method themselves. Unfortunately, because they did not explicitly address the issue of procedures, it is not possible to infer that they would necessarily recommend this method for the practice of profiling. Likewise, Douglas et al. (1986), by providing choice points in their model, seemed to indicate that only one category should be selected at a given time (crime classification, motive/intent, etc.), but again, because no explicit directions are provided, this inference may not reflect the authors' true recommendations. Turvey (1999) wrote that one should not use his behavior-motivational typology as a diagnostic tool for offenders and should not force an individual into a particular category, but he did not clearly explain what one should do in order to use this typology. Finally, Holmes and Holmes (1996) provided no procedural instructions for any of their numerous typologies.

Third, part of the difficulty in attempting to match an unidentified offender to a category is that in cases in which the typological categories contain some conceptual overlap, no procedures are provided to aid the profiler in choosing one category over the other. Where there are conceptual weaknesses in the distinctions among categories, clear procedures could serve as a moderator explaining how to make investigative decisions in the face of ambiguous data. For example, procedures could be introduced to create a hierarchy of the elements within typological categories. If a category contained information about sexual interests, employment history, and personality, then procedures could be implemented to prioritize these pieces of information according to importance. In such an organization, sexual interests might be the most important element, followed by employment history, followed by personality. Thus, if an unidentified offender matched the sexual interests pattern of one category, but the personality pattern of

another category, the procedures could require that he be assigned to the category that most closely matched his sexual interest pattern, because sexual interests would have been designated as the most important element. Likewise, procedures could be implemented to aid the profiler in the case that the unidentified offender matched the sexual interests pattern of one category and both the employment history and personality elements of another category. Here, a model could dictate that the number of matched elements should override the priorities of those elements in the hierarchy. Thus, the offender would be matched to the category that most closely matched these multiple elements. None of the models that use typologies specifies methods to use in making distinctions between typological categories. Perhaps these models' authors rely on intuition or professional judgment in deciding which category is appropriate for a particular offender. However, if this is the case, there are still no instructions to the reader directing him or her to apply intuition at this stage of the profiling process or explaining how one should develop appropriate intuitive strategies for profiling.

Fourth, clear procedures are also lacking in the area of assessing offender motive, MO, and signature. Douglas et al.'s (1986) model and Keppel and Walter's (1999) model explicitly discuss the importance of inferring offender motive. Turco (1990), Holmes and Holmes (1996), and Turvey (1999) did not explicitly discuss motive; however, these models do embed the consideration of motive in the assessment of an offender's MO and signature. Turvey further implied the importance of assessing motive by including the behavior–motivational typology in his model.

Despite the seeming importance of offender motive, or intent, to the profiling process, procedures for this assessment are lacking. Douglas et al. (1986) and Keppel and Walter (1999), while directly instructing the reader to consider offender motive, did not actually provide any information about how to accomplish this. For example, Douglas et al. (1986) recommended that profilers determine whether a crime scene has been staged. Recall that in staging, the crime scene is altered in an attempt to mislead the police, making it an issue of offender intent. The profiler must distinguish between a crime scene that might have been altered for other reasons, or out of disorganization, and a crime scene in which the intent of the offender was to mislead. No guidelines are provided to aid in making this decision. Keppel and Walter (1999) discussed many types of offender motive (e.g., expressing dominance, acting out sexual fantasies, expressing revenge) in their typological categories, but they provided no procedures for determining the motive of a given offender or translating behaviors and crime scene features into motives. Turvey first organized motives into a typology and then asserted that an offender's behaviors can actually be "suggestive of more than one motivation" (p. 181). He did not provide procedures to assist in determining the correct motive from a set of behaviors and instead referred the reader

to the artful component of profiling and encouraged a reliance on professional expertise. In the absence of clear procedures linking evidence to offender motive or intent, a profiler would essentially need to know or have access to the offender to establish his intent. If this were possible, it would render the profiling process useless; investigators could instead apprehend the offender and commence without the assistance of a profiler.

Fifth, a related problem is that all of the nonscientific profiling models that discuss both MO and signature include them together, as related concepts. As mentioned previously, part of the difficulty with understanding how to assess MO and signature is that the authors of the nonscientific profiling models are not in agreement as to the definitions of these terms. Nonetheless, it would still be possible for the authors to provide clear procedures for the determination of these concepts, as defined by their particular model. Unfortunately, this has not been done.

Part of the problem is that there is insufficient information to allow the reader to determine which pieces of evidence or behavior should be attended to as reflecting MO or signature and which kinds of information are not indicators of these concepts. For example, if an offender snatches a child from a playground in broad daylight, is this indicative of the offender's MO, or is it indicative of an impulse-control disorder that is unrelated to the successful commission of a child abduction? How does one determine the difference? Similarly, how does one determine whether a body discovered in an awkward position was posed in a manner symbolic to the offender (signature) or whether it simply fell into that position upon death?

In addition, there are no procedures provided to assist in the differentiation of these two concepts in practice. Even if the authors could agree on definitional criteria that distinguished between MO and signature, how is the reader to use these criteria to ascertain which concept is represented by a particular act or piece of evidence? For example, if a victim reports that her assailant wore a mask, is this reflective of that offender's MO? What if the victim reports that the offender wore a Halloween mask? Is this still an indicator of MO, or is this now an element of signature? If the difference is the reasoning behind the offender's choice of mask (e.g., convenience vs. a desire to masquerade as a Halloween monster), how is the reader to determine this from the victim's report? Likewise, how does one determine from the presence of elaborate bindings on a victim whether the purpose was to prevent escape (MO) or whether the offender had a fantasy-related reason for binding the victim in this manner (signature)? Without clear procedures, the task of determining elements of MO and signature from crime scene evidence becomes quite confusing.

Sixth, more generally, the authors provide varying degrees of detail concerning what kinds of information to collect and what to do with that

information. For example, Douglas et al. (1986) and Turvey (1999) provided detailed information about what pieces of evidence to collect, but they did not provide precise information on how to weight the various pieces of information or combine them to reach a correct profile. In contrast, Keppel and Walter (1999) provided no basic guidelines about what evidence to collect and what to do with that evidence once it has been collected.

Seventh, there is insufficient guidance in these models to arrive at the output characteristics of a profile. Table 3.3 outlines the determinations that each author suggests should be made in a finished profile. As can be seen from the items marked by footnotes, in very few cases are sufficient procedures provided to allow the determination of these characteristics (also see the examples provided in the preceding paragraph).

Eighth, as demonstrated in Table 3.4, in only two cases are there sufficient procedures provided to achieve at least one of the stated goals for the models. For example, the Douglas et al. (1986) model provides sufficient procedures for analyzing a crime scene but not for providing offender characteristics and leads, conducting interviews, or testifying at trial. Likewise, the Turvey (1999) model also provides sufficient procedures to analyze a crime scene but does not provide enough information to allow the reader to provide leads, reduce a suspect pool, link crimes together, assess an offender's potential for escalation, conduct interviews, or testify at trial.

Ninth, the data in Table 3.5 make evident not only that there are few procedures offered but also that these procedures come at the beginning of a crime analysis, with no additional procedures provided as determinations become more difficult. For example, both the Douglas et al. (1986) model and the Turvey (1999) model offer procedures for collecting evidence and analyzing crime scenes but do not offer procedures for reconstructing a crime, linking evidence to offender characteristics, linking offenses, using typologies, or determining MO and signature.

LACK OF EVIDENCE OF INVESTIGATIVE VALUE

One remaining possibility for redeeming the nonscientific profiling models is that despite the criticisms discussed in this chapter, the practice of profiling through one or more of these models somehow works. It is certainly not unreasonable to think that one might first identify a useful phenomenon, such as profiling, and then struggle to build a model that adequately explains it. Unfortunately, this is not the case with the nonscientific models of criminal profiling. None of the models has provided any evidence that profiling, as currently practiced, has any substantial investigative value.

TABLE 3.3
Nonscientific Profiling Models: Output Characteristics

Model	Output characteristics	
Douglas et al. (1986)	Demographic characteristics Physical characteristics Habits Beliefs/values Preoffense behavior	Postoffense behavior Motivation Staging Investigative recommendations
Holmes and Holmes (1996)	Social/psychological core variables of personality Race Age Employment status/type Religion Education Interview suggestions/strategies	Intelligence Family Residence Vehicle Psychosexual development Psychological evaluation of suspect belongings
Keppel and Walter (1999)	Crime dynamics Homicidal pattern Suspect profile	
Turco (1990)	Neurological behavior Psychodynamic characteristics Demographic features	

Turvey (1999)	Crime reconstruction
	Wound pattern analysis
	Profile of victim:
	  Timeline[a]
	  Psychological autopsy
	  Risk assessment
	  Offender risk
	Method of approach[a] (if living victim)
	Method of attack[a] (if living victim)
	Method of control[a] (if living victim)
	Victim resistance[a] (if living victim)
		Nature/sequence of sexual acts[a] (if living victim)
		Precautionary acts
		Modus operandi
		Signature
		Trial strategy
		Psychopathy
		Sadism
		Case linkage
		Offender state of mind
		Malice aforethought (premeditation)

Note. [a]Sufficient procedures are provided to achieve this goal.

TABLE 3.4
Stated Profiling Goals

Model	Analyze crime scene	Provide offender characteristics	Provide leads	Reduce suspect pool	Link crimes	Assess potential for escalation	Evaluate suspect belongings	Interview strategy	Testify at trial
Douglas et al. (1986)	X[a]	X	X					X	X
Holmes and Holmes (1996)		X					X	X	
Keppel and Walter (1999)	X		X					X	
Turco (1990)	No goals stated								
Turvey (1999)	X[a]	X	X	X	X	X		X	X

Note. [a]Sufficient procedures are provided to achieve this goal.

TABLE 3.5
General Categories of Procedures Provided by Nonscientific Profiling Models

Models	What types of evidence/information to collect	How to analyze crime scenes	How to reconstruct a crime	Linking evidence to offender characteristics	Linking offenses	Using typologies	Determining modus operandi and signature
Douglas et al. (1986)	X	X					
Holmes and Holmes (1996)							
Keppel and Walter (1999)							
Turco (1990)							
Turvey (1999)	X	X					

According to Holmes and Holmes's own discussion of a study conducted by the FBI (Holmes & Holmes, 1996, p. 44, who did not cite the original study), of 192 cases in which profiling was used, only 88 were solved. Of those 88 cases, profiles resulted in identifying the offender in 17% of cases. If these figures are accurate, this actually indicates that profiling was successful in approximately 8% of cases in which it was used. Copson (1995, as cited in Canter, 2000) found that the use of profiling was successful in only 3% of cases in which it was used. Although it may be the case that profilers are typically consulted in cases in which traditional law enforcement techniques have already failed, 3% to 8% is still a rather modest success rate.

This failure to provide convincing evidence for the investigative value of nonscientific profiling does not prevent some authors from claiming that profiling is effective. Douglas and Olshaker have written a series of books in the popular media (Douglas & Olshaker, 1995, 1997, 1998, 1999, 2000) describing Douglas' profiling success stories, without spending equal time discussing the limitations to his endeavors. Holmes and Holmes (1996), while conceding that profiles should not be the sole tools used in investigations, nonetheless provided personal opinions and anecdotal examples to suggest that profiles are incrementally useful to, and accurate for, law enforcement. Rather than providing evidence to corroborate these claims, they simply argued that on the basis of the (unspecified) education and training of profilers, it is "reasonable to expect that [they] will be of value to law enforcement" (Holmes & Holmes, 1996, p. 6).

CONCLUSION

The nonscientific models of profiling suffer from several problems that render their concepts unclear and their procedures mysterious. As described in this chapter, these difficulties stem from a basic lack of goals and standards and manifest themselves in imprecise terminology, confusing approaches to categorizing information, a reliance on intuition, and a lack of procedures. Because of these problems, it is not surprising that these models have neither the scientific evidence to support the investigative value of profiling nor the tools to even explore the question of whether profiling is valuable.

It is interesting that each model makes some reference to being scientific, even though none of these models contains sufficient science to support any such reference. What is promising is that these references imply an awareness that there is a contribution to be made by using science. Certain questions about profiling—such as whether profiling helps law enforcement solve cases and, if it does, how profiling actually works—simply cannot be answered without stepping into a scientific framework. The nonscientific models of profiling may contain important insights about profiling, but if

any useful information is to be gleaned from them, there must be some systematic attempt to verify their claims. Without scientific inquiry, models of profiling provide only speculation. Science is needed to help the profiling field move from the realm of conjecture to the possibility of truths.